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Perspectives on e-HRM in the Multinational Setting

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Kieli
Englanti

Julkaisun nimike
Näkökulmia HR-tietojärjestelmiin monikansallisessa kontekstissa

Tiivistelmä

Informaatioteknologian (IT) käyttö korporaatioissa on lisääntynyt voimakkaasti viime vuosina. Henkilöstöhallinnan (HR) tietojärjestelmät eivät ole poikkeus. Käytön kasvusta huolimatta akateeminen tutkimus HR-tietojärjestelmistä (E-HR), etenkin monikansallisessa toimintaympäristössä, on hyvin puutteellista.

Tieteellisen tiedon puutteen vuoksi tämän tutkimuksen tavoitteena on tutkia: *(i) Mitkä tekijät vaikuttavat HR-tietojärjestelmien hyväksyntään ja käyttöön korporaatioiden tytäryrityksissä? (ii) Miten nämä tekijät vaikuttavat HR-tietojärjestelmien strategiseen potentiaaliin (iii) Mitkä tulevaisuuden IT-trendit vaikuttavat henkilöstöhallintaan ja mitä seurauksia näistä trendeistä syntyy?*

Tutkimus koostuu neljästä empiirisestä artikkelista. Ensimmäinen artikkeli selvittää konflikteja E-HR:n käyttöönoton aikana sekä tunnistaa neuvotteluissa käytettyjä resursseja. Toinen artikkeli keskittyy standardoidun kielen käyttöön tietojärjestelmissä ja selvittää miten kielen standardointi vaikuttaa järjestelmien käyttöön. Kolmas artikkeli tutkii millä tavoin Kiinan institutionaalinen ympäristö vaikuttaa E-HR:n strategiseen potentiaaliin. Neljäs artikkeli tunnistaa tulevaisuuden IT-trendejä ja tutkii niiden aiheuttamia seurauksia HR:lle.

Tutkimusten tulosten mukaan organisaatiopolitiikalla, standardoidulla kielellä sekä instituutioilla on merkittävä rooli E-HR:n käyttöönotossa ja käytössä sekä niillä on suuri vaikutus HR:n strategisen potentiaalin toteutumiseen. Lisäksi on tärkeää ennustaa mikä merkitys tulevaisuuden IT-trendeillä on henkilöstöhallintoon.

Asiasanat
henkilöstönhallinta, HR-tietojärjestelmä, informaatioteknologia, korporaatio, tytäryritys

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Abstract

The use of technology in multinational corporations (MNCs) has increased rapidly in recent years. Electronic human resource management (e-HRM) systems are no exception, however, literature in this area is still at an early stage. This issue is especially apparent when discussing the literature of e-HRM in MNCs. With the lack of research and theoretical discussion in mind, this cross-disciplinary dissertation seeks to answer the following research questions: *(i) What factors affect the acceptance and use of e-HRM in MNC subsidiaries? (ii) How do these factors influence e-HRM's strategic potential and other outcomes? (iii) What are the likely future trends in ICT and what implications will these trends have for HRM and e-HRM?*

The dissertation comprises four empirical articles. The first article sheds light on issues that cause conflicts during e-HRM implementation. The second article focuses on the effects of language on the acceptance and use of e-HRM systems. The third article investigates how institutional factors affect Western-origin e-HRM practices in MNC subsidiaries in China, and studies the extent to which these factors influence e-HRM's strategic potential. The fourth article focuses on the future of e-HRM and identifies IT trends and their implications for HRM.

As a body of work, the findings add to our understanding of a view that holds that organizational politics, language issues and institution matter in e-HRM implementation and use, and how those factors have an impact on the realization of e-HRM's strategic potential. Finally, the dissertation supports the view that it is important to predict the future implications of IT for HR.

Keywords
human resource management, electronic human resource management, information technology, multinational corporation, subsidiary

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Jukka-Pekka Heikkilä

Helsinki, 20.8.2013

Sisällys

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Abbreviations

MNC	Multinational Corporation
HRM	Human Resource Management
IHRM	International Human Resource Management
IS	Information Systems
ICT	Information and Communication Technology
UTAUT	Unified Theory of Acceptance and Use of Technology
ERP	Enterprise Resource Planning
ESS	Employee Self-Service
MSS	Manager Self-Service
HRIS	Human Resource Information System
E-HRM	Electronic Human Resource Management

PART II: ARTICLES

1 INTRODUCTION

1.1 Background

Since the early 1980s there has been a shift towards more information technology (IT) focused business processes. Multinational corporations (MNCs) seek to automate their practices and processes with the use of IT while looking for cost savings and to improve efficiency by streamlining processes and practices. Indeed, in recent years advanced IT systems have become prerequisites for MNCs and they are investing ever more in them accordingly (Bondarouk & Ruël 2009). However, in reality the business world does not seem to be more streamlined and simple; it seems to be becoming more difficult and complex; or perhaps we are being forced to recognize its complexity (Lane et al. 2004).

Technology develops rapidly and keeping pace with the developments and demands for organizational structures is challenging. Being a winner in the new, more complex economy requires MNCs to deploy the right mix of information, people, and IT capabilities (Marchand 2004). This kind of mix is concerned with using information and knowledge effectively, and necessitates an appropriate enabling of IT services and infrastructure. Understanding how people use information and knowledge is essential for MNCs and key to their strategy development. According to Marchand (2004), an MNC requires its managers to establish an 'information orientated' view of the industry in which the MNC is competing, based on how their employees use information and IT to achieve business results. This is a key strategic priority. Moreover, achieving the right balance between business flexibility and standardization cannot be achieved without a corresponding transformation of how IT, and especially that part addressing HRM, is deployed across the MNC.

In practical terms, Probst et al. (2011: 23) suggest that current contradictory tensions prompt the need for global integration while remaining locally adaptive. Organizations must simultaneously undertake an eternal quest for differentiation in the face of increasing cost pressures while business leaders constantly reevaluate human resource management issues. Managing people in an international context with the assistance of IT-based management systems is the setting of this cross-disciplinary dissertation.

IT-based human resource management (HRM), or electronic-HRM (e-HRM), is defined as "the planning, implementation, and application of information systems (IS) for both networking and supporting actors in their shared performing of HR activities" (Strohmeier 2007: 20). Its adoption in MNCs is undoubtedly increasing, and the areas in which it is applied will continue to grow in future (Bondarouk & Ruël 2009). According to consultancy company CedarCrestone's (2010) survey, three application categories grew by 90% or more in recent years: talent manage-ment, social media, and workforce optimization, the last of which includes work-force planning and workforce analytics.

The increasing use of technology is a result of HR departments in MNCs facing greater efficiency and cost-effectiveness pressures than ever before. In response to these pressures, the main motivation to adopt e-HRM systems is based on the 'transformation of HR', which means that e-HRM may improve efficiency, cut costs and ultimately facilitate a shift in the HR role to a more strategic level (Parry & Tyson 2011). In other words, e-HRM, in theory, enables the HR departments of MNCs to analyze and store data to increase the flow of workforce information as well as enabling the devolution of many routine administrative and compliance functions traditionally performed by corporate HR departments (Bondarouk et al. 2009; Tansley 2001). Therefore, e-HRM systems in general have the potential to enhance the contribution HR makes to the company's strategic aims (Kavanagh et al. 2012).

The e-HRM literature on HR transformation has discussed a range of goals that can be associated with the introduction of e-HRM such as cost savings, strategic aims, and improvements in efficiency (Ruël et al. 2004; Marler 2009). However, Marler and Fisher (2012) suggest that companies believe the advertising from vendors and fail to independently realize the real impact of e-HRM. Therefore there is an urgent need for empirical evidence regarding the impact of e-HRM on MNCs, particularly given the size of investments in e-HRM that are currently being undertaken by many MNCs.

With these issues in mind, an academic field that combines HRM and IT is a new and interesting area of research that has attracted growing attention in recent years. However, IT issues in HRM research are not well-structured (Hoobler& Johnson 2004), and the e-HRM research field is still in its infancy and is supported by only limited empirical evidence. Most importantly, the field suffers from limited theoretical contributions (Strohmeier, 2007), and the main critique leveled at existing research in this dissertation is that e-HRM suffers from limited empirical evidence and theoretical contributions, above all in an international setting.

> *Without good theory, research in the field of e-HRM will produce a plenitude of statements regarding some observed relationships and/or prescriptions for practice that fail to explain why such relationships exist and/or when, if ever, and why such prescriptions will work. (Strohmeier 2007: 28)*

1.2 Research gaps

In general, e-HRM literature is still at an early stage when compared to either the general IT/IS literature or strategy literature (Marler & Fisher 2012). This issue is especially apparent when discussing the extant literature of e-HRM in MNCs. Firstly, research has neglected important features of MNC headquarter (HQ)–subsidiary relations during e-HRM implementation. For instance, Sheu et al. (2003) suggest these relations are even stronger when ERP is implemented across multiple facilities with national differences. Multisite ERP implementation costs more, takes longer, and fails more often due to the emergent technical issues and also organizational and individual elements.

Regarding the organizational politics between HQ and subsidiary, Kostova and Roth (2002) argue that the MNC subsidiary faces pressure from HQ to adopt a particular set of practices, but on the other hand is pressurized by the demands of its operational context to follow local practice. This leads to a state of institutional duality and a legitimacy crisis in terms of whether the subsidiary should legitimize its operations in the HQ or the local context. The political aspect is apparent when the MNC HQ's drive for isomorphism is undermined by the ability of the local actors to pursue divergent interests. According to Mense-Petermann (2006), in such negotiations the actors' advantage often derives from exploiting differences between the national business systems in which the multinational operates. This in turn can result in a range of functional or dysfunctional outcomes for HR (Stone et al. 2003). However, e-HRM research remains silent on this issue.

Secondly, MNCs seek to maximize both the possibility of meeting local needs and simultaneously try to maintain their global structure. In the 1990s, Hannon et al. (1996) emphasized that global and domestic HR applications present different requirements as a result of cultural and national differences. While domestic applications have to deal with only one culture and nation, global applications have to balance local issues against the requirements of global coordination. Indeed, the oldest debates in the literature on MNCs – those around the benefits of standardization versus localization – are also relevant to the e-HRM field of research. However, discussion in the HRM field about the theoretical foundations of this dilemma, and the roles of the actors involved, has not been extended to research into e-HRM.

Rupidara and McGraw (2011) suggest that HRM researchers should accept the position that places subsidiary HR actors at the heart of the HR process, while at the same time acknowledging the central influence of institutions on the actors during the whole process of configuring HR systems. This means that the interactions both between the relevant actors and between the actors and institutions during the process of HR configuration should be examined. Rupidara and McGraw (2011) stress the importance of discovering the institutional mechanisms and sources that facilitate the interactions that lead to the diffusion and adoption of ideas, models, and tools that in turn influence the configuration of HR systems within subsidiaries of MNCs.

In addition to limited theoretical developments, there is very little empirical evidence of the implications that either standardization or local adaptation of e-HRM practices have for MNC subsidiaries (Ruël et al. 2004). The paucity of evidence encourages the local adaptation of e-HRM systems to fit the local culture (Ruta 2005); e-HRM standardization being common phenomenon (Ruël et al. 2004), it seems that e-HRM literature generally assumes that e-HRM practices are implemented and used by subsidiaries for strategic purposes in the same way they were intended by the MNC HQ. The research of Tixier (2004), Beulen (2008) and Burbach and Royle (2010) suggests that this is not in fact the case and that this is a fundamentally under-explored area. Few studies are explicit about both which aspects of a host country's institutional characteristics are likely to affect e-HRM system implementation and use and how (Strohmeier 2007), or what effects the institutional environment has on strategic e-HRM. The overall evidence of e-HRM's strategic impact and e-HRM outcomes is still very limited (Marler & Fisher 2012) and the 'transformation of HR' warrants further research.

Finally, we are living in an era of rapid technological development, and therefore research needs to keep pace with and help inform practice in advance. With this in mind, research needs to be proactive in order to understand and follow the developments in IT that influence HRM. Compared to IT developments, publishing academic research is a slow process, and so research, in the field of e-HRM at least, often lags behind what is actually happening in companies.

1.3 Objectives of the dissertation

By drawing from the various scientific disciplines such as HRM, IS and Future Studies, the aim of this cross-disciplinary dissertation is to contribute to the existing e-HRM literature in an international context. In summary, this dissertation extends the theoretical foundations from the fields of HRM and IS to the e-HRM field, and the dissertation concludes by combining these theories with a discussion of what constitutes truly international e-HRM.

In order to address existing research gaps and meet its own objectives, this thesis aims to answer the following research questions:

1) *What factors affect the acceptance and use of e-HRM in MNC subsidiaries?*

2) *How do these factors influence e-HRM's strategic potential and other outcomes?*

3) *What are the likely future trends in ICT and what implications will these trends have for HRM and e-HRM?*

A summary of the four empirical articles that comprise this dissertation and how they address the objectives is provided in Table 1.

Table 1. Summary of the articles

	Article 1	**Article 2**	**Article 3**	**Article 4**
Activity	E-HRM implementation	E-HRM acceptance and use	E-HRM use	Future implications
Theory / perspective	Micro-political	Unified Theory of Acceptance and Use of Technology	New institutional	Futures Studies
Method	Single case study	Interview study	Multiple case study	Delphi method
Research question addressed	1 & 2	1 & 2	1 & 2	3

Article 1 is co-authored by Heikkilä and Smale. Heikkilä's responsibilities were to assist in data analysis and writing. Article 2 is also co-authored by Heikkilä and Smale. Heikkilä is lead author in Article 2 and was the main person responsible for data collection, analysis, and composing the article. Heikkilä is the sole author of Articles 3 and 4.

1.4 Structure of the dissertation

This dissertation is organized into five chapters, which are followed by reprints of the four individual articles in the second part of the dissertation. The introduction presents the research background, followed by identification of gaps in current research, which in turn leads to the presentation of the objectives of the dissertation. The second chapter presents definitions of e-HRM alongside milestones in e-HRM research to establish the status of the research field. This is followed by a discussion of e-HRM in the literature of MNCs and the chapter concludes with a discussion of the theoretical approaches used in the associated articles.

The third chapter presents the methodological choices made in the four studies, describes the data collection process of each study, and then discusses issues around validity and reliability. The fourth chapter summarizes the articles and the fifth chapter summarizes the contributions of each article and the dissertation as a whole. The final chapter concludes with a discussion of the limitations of the work, future research suggestions, and managerial implications.

2 LITERATURE REVIEW

The review is presented in three parts. First, definitions of E-HRM are introduced alongside an overview of the most cited studies. The second part discusses e-HRM in MNCs with the inclusion of the international dimension, following the definition by Bondarouk and Ruël (2009), and presents previous research that has addressed the issues discussed in this dissertation. The third part of the review is a discussion of the theoretical approaches used in the articles.

2.1 e-HRM as a scientific area of inquiry

This section introduces the definitions of e-HRM and presents the most cited studies as academic milestones. In other words, this is a systematic review of the field and the articles that have had most impact in shaping traditions in the field. Additionally this review positions the present dissertation in terms of existing knowledge in the field. Regarding the importance of defining this phenomenon, Bondarouk and Ruël (2009) argue that we need to understand how researchers define e-HRM because minor alterations in terminology might result in different directions of research or in diverse subsets of the e-HRM target population.

2.1.1 Definitions of e-HRM

A number of labels have been proposed by researchers when studying what is becoming commonly known as e-HRM. e-HRM has been somewhat interchangeably used with HR Information System (HRIS) (DeSanctis 1986; Haines & Petit 1997; Ngai & Wat 2006), virtual HRM (Lepak & Snell 1998), web-based HRM (Ruël, Bondarouk & Looise 2004), intranet-based HRM (Bondarouk & Ruël 2009), HRM e-service (Ehrhart & Chung-Herrera 2008), business-to-employee systems B2E (Huang, Jin & Yang 2004), and HRIT (Florkowski & Olivas-Lujan 2006). In order to clarify the terminology used and due to the lack of e-HRM studies in an MNC context, this dissertation draws on some of the findings and discussions from the enterprise resource planning (ERP) field of studies. ERP applications are software suites that help organizations integrate their information flow and business processes and typically support the different departments and functions in the organization by using a single database that collects and stores data in real time (Abdinour-Helm et al. 2003).

Since its inception, e-HRM has often been labeled HRIS. Walker (2001:3) defines HRIS as “a systematic procedure for collecting, storing, maintaining, retrieving, and validating data needed by an organization about its human resources, personnel activities, and organization unit characteristics." DeSanctis (1986:6) defined the HRIS of the 1980s as a "specialized information system within the traditional functional areas of the organization, designed to support the planning, administration, decision-making, and control activities of human resource management." To support this view, Tannenbaum (1990:29) defined HRIS as: "a system used to acquire, store, manipulate, analyze, retrieve, and distribute pertinent information about an organization's human resources".

As we continue defining the terminology, it is necessary to analyze the concept of HRIS in more detail, because this dissertation distinguishes the concepts of e-HRM and HRIS. First of all, HRIS refers to the automation of systems for the sole benefit of the HR function, whereas e-HRM is concerned with the application of Internet and Web-based systems, and more recently mobile communications technologies, to change the nature of interactions among HR personnel, line managers and employees from a face-to-face relationship to one that is increasingly mediated by such technologies (Martin et al. 2008). However, in many published articles scholars apply the term HRIS when actually referring to e-HRM (e.g., Teo et al. 2001, 2007; Ngai & Wat 2006). This problem has been discussed by Ruël et al. (2004), who noted that there are authors who write about HRIS, or write from an HRIS perspective, but who cross the divide with e-HRM when they begin developing their ideas. According to Ruël et al. (2004) e-HRM is actually the technical unlocking of HRIS to all employees of an organization. Indeed, one could argue that the challenges encountered in applying a common definition of e-HRM reflect just how immature the field of e-HRM is.

In general, e-HRM has been defined as an enterprise-wide strategy that uses scalable, flexible, and integrated technology to link internal processes and knowledge workers directly to the business objectives of the organization (Marler 2007). In addition, Olivas-Lujan, Ramirez, & Zapata-Cantu (2007) define e-HRM as the application of any technology that enables managers and employees to have direct access to HR and other workplace services for communication, performance appraisal, reporting, team management, knowledge management, and learning of administrative applications. Originally, this definition was developed by the consultancy company Watson Wyatt, which also owns the copyright on the widely used term 'e-HR' (Florkowski & Olivas-Lujan, 2006). Ruël et al. (2004) define e-HRM as a way of implementing HR policies, practices and strategies in organizations through a conscious and directed support and/or with the full use of Web-technology based channels. There is no common agreement on the definition, but the definitions suggested by Strohmeier (2007) and Bondarouk and Ruël (2009) are the most exhaustive and broadest definitions in use at the time of this study and encourage more focused discussion of e-HRM.

According to Strohmeier (2007:20), e-HRM is 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*." This approach encapsulates several essential aspects of e-HRM. At the outset, e-HRM uses information technology in two ways: First, technology is necessary to connect actors who are usually segregated spatially and enable interactions between them; meaning technology is serving as a medium with the aim of connection and integration. Second, technology supports actors by partially, and sometimes even completely, replacing them in the execution of HR activities. Hence, information technology also serves as a tool for task fulfillment. Thirdly, the planning aspect of the definition accentuates the systematic and anticipated way of applying information technology. Fourthly, the sharing of tasks by at least two actors suggests that the sharing of HR activities is an additional feature and underlines the aspect of interaction and networking. Finally, the consideration of individual and collective actors takes into account that e-HRM is a multilevel phenomenon; besides individual actors, there are collective actors like groups, organizational units, and even whole organizations that interact in order to perform HR activities. However, this definition does not include an international dimension.

Although the articles in this dissertation adopt Strohmeier's (2007) definition, this dissertation suggests that the definition from Bondarouk and Ruël (2009: 507), who define e-HRM 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*", is the most exhaustive version available at the time of writing and facilitates the discussion on the nature of international e-HRM in the next section. More specifically, Bondarouk and Ruël (2009) suggest an integration of four aspects and recommendations for researchers:

Content of e-HRM: concerns any type of HR practices that can be supported with IT, either administrative or transformational; it also concerns any type of IT that can offer support for HRM, either Inter-net, intranet, or complicated ERP systems. Researchers are expected to clarify the match between a type of IT and the type of HR practices.

Implementation of e-HRM: involves the process of adoption and appropriation of e-HRM by organizational members. Researchers should anticipate the ways they judge the success of e-HRM implementation.

Targeted employees and managers: HRIS was primarily directed towards the HR department, yet by the turn of the century, line man-agement and employees were actively involved in using e-HRM ap-plications. Modern e-

HRM broadens its target and goes beyond the organization's borders to address the needs of all stakeholders. At this point, researchers are supposed to focus on a specific stakeholder group as the e-HRM target in their studies.

Consequences of e-HRM: alongside the discussion on value creation and value capture (Lepak, Smith & Taylor 2007), Bondarouk and Ruël (2009) stress a multilevel perspective which means that either an indi-vidual employee or an HR professional, the whole HR department, or-ganization, or a net of several organizations is willing to exchange money for the value received from e-HRM. Lepak et al. (2007) also note that the monetary amount exchanged must exceed the producer's costs (time, training, effort, money, meetings dedicated to e-HRM projects); and it is approximated as a delta between new value (like freedom from HR administration or less paper work) and the users' al-ternative.

The main reason to adopt the definition from Strohmeier (2007) instead of that of Bondarouk and Ruël (2009) is based on the assumption that the terms "umbrella" and "across organisations" present e-HRM as a rather too broad concept lacking a description of any particular process, such as planning or implementation. Despite this issue, the inclusion of an international dimension in the definition of e-HRM by Bondarouk and Ruël (2009) will be presented in chapter 2 section 1.3 when discussing e-HRM studies with an international focus. To shed light on the issue of what has been the overall focus of e-HRM research, the following section presents a systematic review of the relevant literature and discusses the articles that seem to have played a significant role in shaping the development of the field.

2.1.2 Milestones in e-HRM research

The reasons for conducting a systematic review of the most cited studies were that citations are good indicators of developments in and influences behind a certain field of studies, and also that this kind of review offers an opportunity to view theoretical developments in the field of e-HRM with a critical eye.

The search for the most cited studies was conducted according to the following criteria: Articles were manually searched for on Google Scholar and from the Web of Science (ISI), focusing only on academic journals and peer-reviewed articles. I searched for articles using e-HRM as a keyword as well as commonly associated terms such as HRIS, Web-based HRM, and HRIT. To establish the status of the field, the ten most cited articles are analyzed in some detail, as they have had the biggest influence on the field of research. They are listed in Table 2 below, which also lists the next 15 most cited studies.

Table 2. Most cited articles in the field of e-HRM

Top10 Author	**Journal**	**Title**	Citations **ISI**	**Google Scholar**
Lepak & Snell (1998)	Human Resource Management Review	Virtual HR: Strategic human resource management in the 21st century	47	153
Ball(2001)	Personnel Review	The use of human resource information systems: a survey	23	73
Lepak et al (2006)	Research in Personnel and HRM	A Conceptual Review of Human Resource Management Systems in Strategic Human Resource Management Research	22	42
Chapman & Webster (2003)	International Journal of Selection	The use of technologies in the recruiting, screening, and selection processes for job candidates	22	63
Chiena & Chen (2008)	Expert Systems with Applications	Data mining to improve personnel selection and enhance human capital: A case study in high-technology industry	19	57
Strohmeier (2007)	Human Resource Management Review	Research in e-HRM: Review and implications	19	49
Haines & Petit(1997)	Human Resource Management	Conditions for successful human resource information systems	17	52
Feldman (2002)	Human Resource Management	Internet job hunting: A field study of applicant experiences with on-line recruiting	17	55
Martinsons (1994)	Information & Management	Benchmarking human resource information systems in Canada and Hong Kong	15	37
Ruël, Bondarouk & Looise (2004)	Management Revue	E-HRM: Innovation or Irritation: An Explorative Empirical Study in Five Large Companies on Web-based HRM.	13	52
Other relevant				
Cober, Brown & Levy (2004)	Human Resource Management	Form, content, and function: An evaluative methodology for corporate employment websites	13	33
Hannon; Jelf; Brandes (1996)	IJHRM	Human resource information systems: operational issues and strategic considerations in a global environment	12	24
Ruta (2005)	Human Resource Management	The application of change management theory to HR portal implementation in subsidiaries of multinational corporations	12	34
Gardner, Lepak & Bartol (2003)	Journal of Vocational Behavior	Virtual HR: The impact of information technology on the human resource professional	12	24
Florkowski & Olivas-Luján (2006)	Personnel Review	The diffusion of human resource information technology innovations in US and non-US firms	11	18
Kovach & Cathcar (1999)	Public Personnel Management	HRIS: Providing business with rapid data access, information exchange, and strategic advantage.	11	42
Desanctis (1986)	MIS Quarterly	Human Resource Information Systems: A current assessment	11	60
Kovach, Hughes & Fagan (2002)	Employment Relations Today	Administrative and strategic advantages of HRIS	8	22
Stone, Stone-Romero (2006)	Human Resource Management Review	Factors affecting the acceptance and effectiveness of electronic human resource systems	7	15
Buckley, Minette & Michaelis (2004)	Human Resource Management	The use of an automated employment recruiting and screening system for temporary professional employees	7	20
Tansley & Watson (2000)	New Technology, Work and Employment	Strategic exchange in the development of human resource information systems (HRIS)	6	19
Tansley, Newell, Williams (2001)	Personnel Review	Effecting HRM-style practices through an integrated human resource information system: An e-greenfield site?	6	28
Olivas-Luján et al. (2007)	International Journal of Manpower	e-HRM in Mexico: adapting innovations for global competitiveness	6	9

The most cited study (Lepak & Snell 1998) originates in the USA and introduced the concept of virtual HR. It also examines the motives for implementing e-HRM and presents an architectural framework grounded on transaction cost economics and the resource based view of the firm. This model has since been developed by, for example, Shrivastava and Shaw (2003), who have introduced a model that describes the technology implementation process based on Lepak and Snell's (1998) assumptions. The second most cited study, by Ball (2001), investigated the use of HRIS by surveying small-sized organizations, and found they were less likely to adopt HRIS than larger organizations. In addition, HRIS was mainly used for administrative work and there did not seem to be any sector differences in the usage levels in the small organization context. Haines and Petit (1997) also surveyed HRIS users, concluding that system conditions were the most important antecedents of success and that the availability of internal support for users was also critical. The authors presented a model of HRIS and a basis for planning, designing, and implementing systems based on their findings.

The growing recognition of e-HRM has caused academics to begin to review its progress as a distinct field of research, theory development, and practice (Bondarouk & Ruël 2009). The third most cited study is a conceptual review from Lepak et al. (2006), who try to build a consensus on what HR systems are or what they should be. The study examines what systems are measuring in the first place, in other words, the conceptual content of e-HRM systems. The study reviews existing conceptualizations of HR systems in the literature and discusses possible reasons for variations in them.

In addition, Lepak et al. (2006) propose a shift towards strategically anchored HR systems and argue that a theory-driven approach to conceptualizing and measuring HR systems would consider HR systems for a specific organizational objective and only include HR practices relevant for achieving that objective. Finally, the study argues that HR systems should be targeted at some strategic objective and operate by influencing (1) employee knowledge, skills, and abilities, (2) employee motivation and effort, and (3) opportunities for employees to contribute. Methodologically, the study explores issues related to the relationships among policies and practices, sampling issues, identifying the appropriate referent group(s), and who should serve as key informants for HR system studies.

Other reviews have focused on published academic research in peer-reviewed journals (Strohmeier 2007; De Wit 2011), the international e-HRM literature (Bondarouk & Ruël 2009), and HRIS (Ngai & Wat 2006). A review of citations reveals the review from Strohmeier (2007) to be the most notable, and shows that e-HRM research being conducted in several disciplines is mainly non-theoretical, employs diverse empirical methods, and refers to several levels of analysis and to diverse focal topics within e-HRM. Finally, based on the review, some initial theoretical, methodological, and topical implications are discussed in order to support a future research program in e-HRM. Among the most cited studies, it seems only Martinsons (1994) suggests that different cultural and political aspects are a complicating factor in HRIS. The findings of that study will be discussed in the next section.

Four recruitment-focused studies are among the ten most cited articles, which indicates that recruitment is the e-practice that has had the greatest impact in the field. For instance, Cober et al. (2004) provided insight into how the form, content, and function of employment websites affect job seekers' decisions. Feldman (2002) examined the experiences of professionals looking for jobs. The use of an e-recruitment method when applying significantly correlated with the total amount of all job searching, particularly for those who initially want to explore job options in private without fear of retribution from supervisors. Chiena and Chen (2008) developed a data-mining framework for personnel selection and outlined potential recruitment and human resource management strategies following input from domain experts and a data miner. Chapman and Webster (2003) surveyed managers' goals when using e-recruitment technology, the extent to which those goals were being met, and what organizational factors led to adopting certain technologies in e-recruitment.

Finally, Ruël et al. (2004) studied e-HRM in MNCs and found evidence that efficiency and improved service delivery as being goals and realized consequences of e-HRM use. Study also suggests that e-HRM in MNCs can serves as a means to standardize HRM practices. In addition, Ruël et al. (2004) suggest that e-HRM goals in MNCs are often accompanied by standardization of HRM processes, where differences in cultures and languages between countries are experienced as obstacles.

Combining the results of the analysis of the most cited articles, it can be stated that research is US-biased, does not cover sufficient different approaches, has non-specified levels of analysis, and focuses mainly on e-recruitment. Strohmeier (2007) highlights an additional characteristic of the current status of the field, namely a lack of studies in the international context. Indeed, analysis of additional reviews authored by Ngai and Wat (2006), Bondarouk and Ruël (2009) and De Wit (2011) reveals that there have been attempts to design theoretical frameworks and models consistent with a mature scientific area of research.

In summary, it seems that the findings of e-HRM studies cannot be generalized; rather, the research field is fragmented and there are various research designs that often produce contradictory findings. There is a need to establish a more solid scientific foundation because currently the findings are not sufficiently clear to establish causalities, for example, in the strategic implications of e-HRM. Most importantly, the e-HRM field, almost completely lacks any extension into the international MNC context, a topic to which this research now turns.

2.2 e-HRM in multinational corporations

This section reviews studies relevant to the research questions in this dissertation. More precisely, it discusses previous research on the implementation of e-HRM and its impact on HR. The section concludes with a discussion of the future of e-HRM.

As mentioned previously, this dissertation focuses on international e-HRM. However, neither the extant definition by Bondarouk and Rüel (2009) nor any other e-HRM definition supports international e-HRM processes or presents the idea of international e-HRM for researchers. Therefore, this dissertation suggests adding a fifth, international aspect to this definition:

> **The international aspect of e-HRM:** When e-HRM acquires an international aspect, this dissertation suggests that a broader perspective will be necessary to assess multiple, complex e-HRM activities. Ac-cording to Dowling (1988), the key variable that differentiates domes-tic and international HRM is the complexity of operating in different countries and employing and developing different nationalities as em-ployees. For e-HRM 'going international' means paying attention to political, legal, cultural, linguistic and economic forces that have im-plications for e-HRM practices across countries and also to interna-tional e-HRM implementation and use in MNCs.

2.2.1 e-HRM implementation in MNCs

According to Bondarouk and Looise (2007), IT implementation is widely acknowledged to create conflicts in organizations when developments demand the implementation of various technical and social changes. With regard to the IS literature in general, the effects of increased globalization in business processes and the application of common information systems seem to be widely discussed. By making various business processes international, organizations try to generate benefits from IT coordination and standardization across geographical boundaries. However, implementing IT to support global processes can influence the organizational structure and can be a struggle (Hellström et al. 2000).

To date research on e-HRM implementation in MNCs has presented a variety of barriers and challenges that affect the implementation process. Beamish et al. (2002) identify cultural resistance and individual end-user motivation as barriers, while Vaughan and MacVicar (2004) propose that the major challenges are a low level of awareness and the lack of training to use the implemented system. Moreover, Voermans and van Veldhoven (2007) found that knowledge of IT did not significantly influence attitudes towards e-HRM implementation.

Tansley et al. (2001) demonstrated that e-HRM had a limited impact when those involved in the implementation had a limited view of the potential of e-HRM. Challenges recognized included the silo mentality of the process owners, mapping each HR process independently (causing issues with synergy across different business areas), and the lack of support available to the HR team responsible for implementation.

Olivas-Luján et al. (2007) studied implementation challenges among domestic companies and MNCs in Mexico and found they faced more challenges with e-HRM than companies operating in more developed countries did. This was attributed to Mexican companies being mainly production oriented and therefore having difficulty in justifying the investment. On the other hand, Rao (2009a) addressed the challenges of e-recruitment in the emerging economies of India and Mexico. The challenges to e-recruitment in both countries were an undeveloped infrastructure and the importance of personal interactions in the collectivist cultures.

Olivas-Luján et al (2007) conducted two studies in MNCs that examined national infrastructure and how various cultural factors affected the implementation of e-HRM. The study found that a global business environment creates an external pressure to improve HR cost efficiency and that the strategic role "trumped cultural preferences for HR's activities" (2007:22). The study's findings align with similar case studies by Ruël et al. (2004).

According to Deans and Karwan (1997), IT-process standardization in MNCs is generally perceived to be beneficial by the IT community; it minimizes the duplication of software development, increases the connectivity of systems and the ability to exchange data, helps achieve economies of scale, and reduces the support headcount. Indeed, IT/IS literature tends to consider the MNC as a homogeneous mass rather than a heterogeneous group of subsidiaries. It seems studies of e-HRM implementation in MNCs also adopt this view, as Burbach and Royle (2010) argue that few articles in the ERP implementation literature allow the combination of culture, organizational environment and established IS success models, however these studies focus predominantly on user-acceptance issues.

In this regard, Tixier (2004) examines e-HRM implementation and concludes that e-HRM supports the standardization of practices in an MNC, the study does not shed light on what factors might constrain the goal of e-HRM standardization. Ruta's (2005) case study describes the transnational challenges that arise when an MNC attempts to implement an HR portal and illustrates the ways in which change management plans may need to be locally adapted to be effective in various subsidiaries. The Ruta study demonstrates that local adaptation affects the ultimate use of HR employee portals in subsidiaries, even if there is a strongly aligned corporate culture. Ruta (2005) acknowledges that implementing an HR portal in an MNC is a complex process, requiring firms to manage both significant changes for the employees and technical challenges for the organization's project installation team. Although technical installation challenges can arise, it is the human challenges associated with change that cannot be ignored during the implementation phase of e-HRM.

Nevertheless, in the light of the literature analysis, it seems that none of the e-HRM studies addresses what in reality are the key areas in decision making, the key challenges, or identifies the key actors for MNCs during the e-HRM implementation process. In summary, extant e-HRM implementation literature adopts a rather un-rational approach. Article 1 of this thesis contributes to the discussion by exploring the ways in which e-HRM implementation is negotiated, identifying the key conflict areas, the key actors and the resources used by those actors during negotiations. As e-HRM implementation projects represent a useful platform on which to study how the global versus local dilemma plays out, Article 1 highlights the significant role of micro-politics in the process, and reveals that one surprising finding was the role of standardized language—a topic that will be discussed next.

2.2.2 Language issues in MNCs

It is necessary to discuss the role of language in MNCs as it is an issue raised in three of the articles associated with this dissertation. It seems that language is the forgotten factor in IS and HRM literature, and non-existent in e-HRM literature. Two research streams have focused on questions associated with using English as a lingua franca in MNCs; one in international management and the other in international business communication. Scholars in international management have looked at the use of a common corporate language in international management processes (Andersen & Rasmussen 2004; Barner-Rasmussen 2003; Feely & Harzing 2003; Marschan-Piekkari et al. 1999). These works are concerned with language proficiency and its implications for social exclusion / inclusion, communication, and power and control in relationships between headquarters and subsidiaries and between different subsidiaries of the relevant MNC. The level of these analyses ranges from the individual MNC employee to cross-cultural teams, subsidiary units and the MNC as a whole.

A parallel stream in the field of international business communication has adopted an explicit focus on English as a *lingua franca* (Nickerson 2005). This research has examined the role of English in the internal communications of global firms (Kankaanranta 2005; Louhiala-Salminen et al. 2005; Nickerson 2005 Sørensen 2005). In addition, the overall language strategy of the firm has received some attention (Janssens et al. 2004). On the other hand, the multilingual character of the MNC has been highlighted by several scholars (Barner-Rasmussen & Björkman 2007; Janssens et al. 2004). For example, Barner-Rasmussen and Björkman (2007) argue that MNCs are unusual organizations in that they are multilingual almost by definition. Introducing a common corporate language will not render the firm monolingual, as language diversity within a global firm is likely to persist (Andersen & Rasmussen 2004; Marschan-Piekkari et al. 1999; Sørensen 2005). Some MNCs have more than one corporate language, or use multiple languages for designated communication purposes in internal exchanges (Bruntse 2003). The common corporate language is often then supplemented with company jargon, the use of particular abbreviations and expressions reflecting the culture of the company in question and its way of operating (Welch et al. 2005), for example in e-mail communications.

Communication in MNCs via IT, obviously something of interest to e-HRM scholars as well, has attracted ongoing and increasing interest in the last decade. For example, studies by Nickerson (2005) and Gimenez (2002) focus on the use of English in the Netherlands and Argentina. Both studies investigate the strategic nature of the discourse and the production of e-mail texts as a construction of the corporate context. A study from Louhiala-Salminen et al. (2005) looks not only at e-mail and other forms of written communication within two large Nordic corporations, but also illustrates how the same discourse characteristics are present both in written and spoken English *lingua franca* communication. To sum up, these empirical studies clearly show that language is almost the essence of international business and as Piekkari and Zander (2006) argue, language issues are at the core of international management processes.

In a rare piece of evidence on standardized language issues arising during global ERP implementation in MNCs, Sheu et al. (2003) found language differences affecting the implementation practices in both technical and managerial respects. In cases where systems only supported one language, the use of standardized

English, increased employee resistance to ERP implementation in non-English speaking countries. This technical limitation forced data entry into the ERP system to be primarily in English, so all overseas facilities had to be able to at least use the English required by the system, which limited their use of it. The use of English as a *lingua franca* in ERP systems resulted in technical problems with entering data, created communication barriers between units, localized implementations and added implementation costs associated with actions like altering training programs because of translation requirements.

On a more general note, Sørensen's (2005) survey of 70 MNCs operating in Denmark provides further support for the previous translation argument. The study found that practically all documents were generated in the local language alongside English as the common corporate language. Findings concerning the use of English as the 'transit language' of written communication presented a very critical view of the corporate *lingua franca*:

> *Thus, paradoxically, the opposite of the intended has been achieved: the cost of translation has been doubled, the dissemination of communication has become laborious and has been delayed. Moreover, an element of misinterpretation has been added as there is a risk of altering the sense of a text each time it is translated. (2005: 76)*

The more extensive use of English is unlikely to remove the language barrier in light of the persisting need to use the local language for most local operations (Welch et al. 2001). Senior management may reinforce the use and adoption of a common language through strict policies, but internal language diversity in the form of home and host-country languages remains in MNCs (Fredriksson et al. 2006). Despite the increased research interest in international business communication and international management, it seems that the issue of language remains neglected, particularly in the field of international HRM (Piekkari 2006), and indeed it does not feature in the field of international e-HRM research. Instead, language has been viewed as a medium of communication, aggregated under the umbrella concept of culture, and not subjected to theoretical investigation (Welch & Welch 2005; Piekkari et al. 2006). Harzing and Feely (2008) suggest that one of the most serious obstacles to research on language in business has been the lack of systematic analysis concerning the problems associated with language differences and inadequate answers to the question of what in language exactly creates the problem?

Article 2 in this dissertation seeks to address the gap in research into language in MNCs and e-HRM by applying UTAUT to investigate the effects of introducing English language e-HRM systems in foreign subsidiaries. The article provides insights into negative and positive effects of language standardization, and how this is influencing e-HRM implementation and having an impact in MNC subsidiaries.

2.2.3 *The impact of e-HRM*

The impact of HR at least partly results from the drivers of e-HRM systems (Stone et al 2003; Reddington & Martin 2007). First, e-HRM systems can reduce HR transaction costs and headcount. Second, e-HRM can substitute physical capability by leveraging digital assets; following standardization, HR information can be used flexibly on an infinite number of occasions at little or no marginal cost. Third, the effective use of integrated e-HRM systems can transform the HR business model by enabling the HR function to provide strategic value to the business that it previously could not.

There is a research stream on the strategic value of e-HRM. That strategic value may be unleashed by delegating routine HR tasks to line management, so e-HRM can free time needed for tasks which are more strategic, such as talent management and identifying training programs, thereby potentially increasing MNC profitability (Lawler et al. 2004). Tansley et al. (2001) conducted a longitudinal case study that studied e-HRM implementation in a UK-based MNC. One goal was to delegate responsibilities to line managers to add strategic value to HR, but these expectations were not met over a 10-month period. However, Haines and Lafleur (2008) found a positive relationship between e-HRM and HR manager perceptions of the strategic effectiveness of the company's HR in their study.

The earliest evidence of e-HRM having a strategic impact in MNCs is from Martinsons (1994), who surveyed HRIS adoption in Canada and Hong Kong. Results showed that HRIS usage led to HR resources being freed for more strategic tasks. Martinsons (1994) also investigated what factors accounted for differences in HRIS adoption, and found that political and cultural issues played a major role. For instance, acknowledged shortages of technical expertise, familiarity with good information management practices and knowledge of developments in technology were associated with the adoption of more strategic IS solutions. These findings are also supported by Hannon et al. (1996), who argued that companies with a high technology level and those who keep up with technology changes have more sophisticated e-HRM.

In their multiple case study, Parry and Tyson (2011) report that only three out of eight MNCs included strategic HR orientation among their implementation goals and that these goals were not achieved. However, the other companies in the study displayed a transformational e-HRM impact as an unintended outcome. However, in line with Parry and Tyson (2011) and Marler and Fisher (2012), it should be noted that 'strategic orientation' might not necessarily mean an increased involvement in implementing business strategy. In their study, Parry & Tyson (2011) noticed that HR departments in MNCs were providing a better service to their internal customers and reducing headcount, but there was little evidence that they were actually contributing more to business decisions. Therefore the introduction of e-HRM seems not to be sufficient on its own for an HR function to become strategic as suggested by Marler (2009).

Marler and Fisher's (2012) review of the strategic e-HRM literature criticizes the rhetoric of the popular press and vendor advertising which claims that e-HRM adoption enables HR to become more strategic and to do so without issue. Empirical evidence supporting this strategic role is scarce and unconvincing and, as mentioned in the literature review above, research on strategic e-HRM is either absent or limited to how different factors influence the ability of companies to realize their strategic e-HRM potential.

Moreover, in their case study, Dery and Wailes (2005) found that each of the different HR departments they studied reacted differently to e-HRM and that strategic outcomes depended on the cultural norms of end users. The study also concluded that the implementation of e-HRM alone does not make HR strategic. Rather, the intended strategic outcomes depended on the cultural norms of the end user: the HR staff. Stone, Stone-Romero and Lukaszewski (2003, 2006) refer to these kinds of intended outcomes as functional consequences, and unintended outcomes as dysfunctional consequences. Stone et al. (2005) present four major variables influencing the consequences of e-HRM systems. These variables are information flows, social interaction patterns, the perceived control of individuals and system acceptance.

First, the use of e-HRM may change information flows. It may increase an organization's ability to access, collect, and disseminate information about certain HR processes such as recruiting or performance management. In addition, such systems may provide individuals with rapid access to certain process data. Second, e-HRM systems may modify social interaction patterns in organizations. In particular, e-HRM systems substitute electronic communication for face-to-face interactions. The changes may negatively affect the attainment of goals. One reason for this is that face-to-face interaction is used for purposes such as clarifying roles or coordinating actions. As a consequence, role requirements might be less understood and there also might be less trust between the people communicating.

Thirdly, control is one the major drivers behind the adoption of e-HRM. However, control via e-HRM might be perceived as limiting the freedom of individuals, which might then bring unwanted consequences. In addition, e-HRM may decrease the degree of perceived control exercised by the current staff and increase the degree to which the systems are viewed as invading privacy. As a result, system acceptance may suffer, leading to reduced effectiveness. Finally, acceptance of e-HRM systems is a joint function of the nature of the systems and the attitudes, intentions and behaviors of the individuals who use them. For example, individuals are unlikely to use such systems in the ways intended if their attitude to the system itself is negative.

In terms of standardization, Hannon et al. (1996) surveyed 11 US-based MNCs and suggested that standardization of HR processes should play an important role when implementing e-HRM. This was found to improve the accuracy of administrative tasks, reduce costs, and standardize data. However, Hannon et al. (1996) were the first to suggest that process standardization should not be pursued at the expense of losing responsiveness to local business unit needs, similarly to Ruta's (2005) study. Hannon et al (1996) also acknowledged a negative outcome, namely the dependence on outside vendors, which remains an under-researched area. Morris et al. (2009), in their case studies of 263 HR unit managers across 20 MNCs, investigated whether informal adjustments by staff, or in the IS, helped subsidiaries to standardize and replicate formal HR processes. Their study found that adjustments in the IS helped the process significantly, and made the need for informal adjustments by staff less necessary.

As regards control in MNCs, e-HRM has been identified as facilitating greater standardization of HRM practices in foreign subsidiaries in three main ways (Smale, 2008). First, e-HRM can serve as a form of bureaucratic control by establishing procedural standards governing how the system is used (Clemmons & Simon, 2001), and thus how HRM processes are carried out. Second, e-HRM presents an opportunity for output control in its role of communicating goals and monitoring them through an array of management reporting functions. Third, e-HRM can accommodate varying degrees of control via centralization by restricting access rights and introducing layers of transaction authorization.

Ruël et al. (2004) explored the impact of e-HRM on MNCs and concluded that e-HRM can reduce costs and improve both client satisfaction with HR services and the quality of communication. Institutional differences were not directly addressed; however the study did shed light on some cultural issues such as the role of language in e-HRM adoption by end users in foreign subsidiaries and differences in communication styles between the USA and Europe. Interestingly, in a study on the implementation of a talent management system, Beulen (2008) briefly outlined that national culture is a determining factor in the way an organization is able to organize its retention management activities. Since employees working in different cultures had different preferences regarding e-HRM, it was important for the organization to respond to those needs in order to retain talented employees and thus increasing the strategic potential of HR.

The literature review above reveals that the institutional factors that affect the strategic potential of e-HRM in MNCs have not been rigorously researched. Article 3 contributes to this discussion by shedding light on how institutional factors influence MNC subsidiary practices and what impact these factors have on e-HRM realizing its strategic potential. Article 4 focuses on the future implications for e-HRM, which are discussed next.

2.2.4 The future of e-HRM

Due to the absence of relevant literature, the discussion on the future impact of e-HRM begins with assumptions about what impact technology will have on business in general. For instance, the Economist Intelligence Unit (EIU 2011) listed three 'megatrends' that are shaping future business: the first is the accelerating shift in economic power from West to East; the second is financial instability and recession in more developed economies; and the third is technological progress. According to EIU (2011), technological progress is likely to have the most direct impact on how businesses operate and how they are organized.

As regards technology, the EIU (2011) study reports that five developments are taking place. First, few industries will remain unaffected by technology disruption. Second, companies that can master 'big data' will gain competitive benefits, and data might become a business of its own. Third, the importance of middle managers will diminish; lower level line managers and employees will be given decision-making authority through the efficient adaptation of technology. Fourth, customer co-creation will become a major source of innovation. Finally, organizations will become more transparent, since technological developments, particularly adaptations of social media, will make it increasingly difficult to hide poor management processes and practices. The potential of social media and social technology will be discussed later in this section.

As a more general prediction, Gratton (2011) identifies a number of trends that executives around the world believe are currently shaping their business and how work is done. These trends are a combination of three forces: technology, globalization, and carbon. Gratton (2011) suggests that communications and connectivity trends are joined by a more advanced relationship between technology and work. For instance, rapidly developing cloud-computing technology is under development, and the view is that this will create a global infrastructure that can provide services, applications and resources. The idea of frugal innovation, innovations that are developed around the world and focus on low-cost solutions, will be increasingly critical to the strategy of MNCs.

There are various approaches to the subject of the future of HRM research, ranging from the field of strategic HRM (Lepak & Shaw, 2008) to developing new tools for analyzing the future of HRM (Robinson et al. 2007). There are future HRM perspectives, and research ideas (Roehling et al. 2005), scenarios of Web 2.0 technology adaptation for HR personnel (Martin et al. 2009) and linking work/life policies and practices to future trends (Lobel, Bradley, & Bankert 1999).

Moreover, future studies that applied the Delphi method to the HRM field include human resource development (HRD) (McGuire & Cheh 2006), country-specific studies (Lin 1997), and a workplace stress study among HR professionals (Loo 1996). A search, however, of scholarly databases, published books, various e-HRM conference proceedings, HRIS reviews (Ngai & Wat 2006), e-HRM reviews (Strohmeier 2007), reviews of e-HRM in MNCs (Ruël & Bondarouk 2010) and reviews of Delphi studies (Nevo & Chan 2007), reveals that Delphi studies have been non-existent in the field of e-HRM before Heikkilä (2010) research.

This is somewhat surprising, as the Delphi method has been used extensively and successfully in other disciplines. Studies using the Delphi method would help researchers identify future developments and make their research more proactive. With this in mind, Girard et al. (2012) applied Delphi method and shed light on the disagreement and agreement areas of social media in recruitment strategies. Study highlights the different points of view about social media approaches and concludes social media presenting an opportunity to raise the strategic role of HR professionals.

In regards of social media, Guetal and Stone (2005) suggests technological changes influencing e-HRM toward the end of this decade will include intelligent self-service systems and the convergence of the web and wireless technology communication into a vibrant network. Indeed, social media, often generically labeled Web 2.0, a vibrant network, has been suggested as a technology that could have a great impact on HRM (Girard & Fallery 2009; Kluemper & Rosen 2009; Martin et al. 2009).

Research into social media and HRM seems to be lagging behind what is currently happening in organizations. There are exceptions in the form of a few preliminary studies focusing on social media and recruiting (Girard & Fallery 2009; Kluemper & Rosen 2009; Girard et al. 2012), innovations (Martin & Reddington, 2009), the ethics of firing employees who blog (Valentine et al. 2010) and a framework of Web 2.0 strategies for HR professionals (Martin et al. 2009). The lack of research regarding social media is surprising as, in line with the report from CedarCrestone (2010) and the work of Martin et al. (2009), I would argue that use of social media tools is becoming mainstream in the corporate world, and this will have many implications for HRM and affect the skills HR personnel will require.

In fact, the relative importance of the skills and knowledge of HR personnel changes over time (Ulrich et al. 1997) and, according to Bell et al. (2006), the introduction of e-HRM requires HR professionals to achieve a greater understanding of their business and an ability to consult and work closely with management in solving business problems. Gratton (2011) concludes that HR competencies will evolve alongside technological developments. The traditional array of competencies focuses on the technical ability to design and implement HR programs, and the capability to understand and mitigate risks in areas such as legal and contract compliance. The expansion of these competencies will include elements such as analytics, measurement and project management.

With regard to international e-HRM, Sparrow (2009) presents four ICT developments that affect the successful delivery of HRM and thus can potentially offer companies unique competitive advantages. Those developments are: the advent of shared service thinking; the removal of various intermediaries in the delivery of HR services; the ongoing adoption of ERP systems; and finally, the e-enablement of HR service delivery and moves towards self-service models. Sparrow et al. (2004) and Sparrow (2009) argue that these developments will have a significant impact on existing international HR functions and HR personnel's work, and suggest that e-enablement of HR in MNCs could divide the HR function.

To sum up, history has shown that the role of e-HRM in companies has changed over time; from being primarily concerned with routine transactional HR activities to dealing with complex transformational ones (Kavanagh et al. 2012). These transactional and transformational activities have resulted in a variety of effects and, as the use of ICT in HRM continues to grow in the future, these are likely to create more complex implications which research has so far completely neglected. Article 4 addresses this gap in the research.

2.3 Theoretical approaches

Drawing on theories used in various disciplines, the purpose of this section is to present and discuss the theories used in this cross-disciplinary dissertation – micro-politics, unified theory of acceptance and use of technology, institutional theory, and futures studies. The purpose of this section is therefore not to list all possible theoretical approaches to HRM, IS and e-HRM research. This section explains why and how the theories used contribute to our understanding of international e-HRM issues.

Since the empirical studies in Articles 1, 2 and 3 are exploratory, this section presents those theoretical approaches I found useful in interpreting the data. These mixed use of theories enabled a cross-disciplinary approach where, for example, micro-political approach has been more used in HRM field and UTAUT has been more widely adopted in IS field of research. Overall themes and their theoretical foundations were largely emergent in Articles 1 and 2. Articles 3 and 4 were more theoretical extensions from the HRM field into the e-HRM field.

2.3.1 Micro-politics

According to Forsgren (1990) MNCs are political systems where power games and political influence over decision making are useful in explaining the nature of internal processes. Compared to the dominant economic and deterministic approaches to studies on MNCs, this kind of socio-political dimension of managing MNCs has been largely neglected in the international business literature (Ferner 2000; Geppert & Williams 2006) and especially in the e-HRM literature where I can find no evidence of the use of this approach. With regard to HRM, Edwards, Colling and Ferner (2007) criticize studies in the field of HRM in MNCs for not focusing clearly enough on how HRM practices become established in foreign subsidiaries and the roles played by the various actors in the integration process.

The micro-political approach focuses on “how actors seek to protect or advance their own interests, the resources they use, and the resolution of conflicts” (Edwards et al. 2007: 203). Organizational micro-politics has been defined in general terms as “an attempt to exert a formative influence on social structures and human relations” (Dörrenbächer & Geppert 2006:255), but is suggested more specifically to focus on “bringing back the actors and examining the conflicts that emerge when powerful actors with different goals, interests and identities interact with each other locally and across national and functional borders” (Dörrenbächer & Geppert 2006: 256).

Mense-Petermann (2006) claims studies that place power in a central position and apply a micro-political perspective on globalization and transnationalization processes mainly focus on the changing relationship between corporate headquarters and local subsidiaries (Doz & Prahalad 1993) in terms of power struggles or concerning centralization versus decentralization (Ferner et al. 2004) or standardization versus local adaptation.

The question of where decisions on organizational structure, production policies, work organization are made is of primary importance to this perspective (e.g., Becker-Ritterspach 2005). MNC processes are no longer considered as homogeneous social systems or hierarchies, but are seen as 'political arenas'. The merit of this research stream is that it contributes to knowledge of internal MNC processes which are connected with local strategies. The research stream rejects simple 'convergence theses' and explains when and why organizational structure and the strategies of local subsidiaries diverge from the master plans emerging from corporate headquarters (Mense-Petermann 2006). Burbach and Royle (2010) state that only the work of Smale and Heikkilä (2009) acknowledges that the introduction of an e-HRM system may give rise to conflict and micro-political behavior, which necessitates negotiation and local adaptation of e-HRM practices to resolve implementation related issues.

This dissertation illustrates that an exploratory micro-political approach is appropriate in e-HRM for the following reasons. First, by following the arguments of Geppert and Mayer (2006), this dissertation suggests that e-HRM literature does not acknowledge how the actors shape the reality of corporate mechanisms and does not define how the adoption of e-HRM practices proceeds throughout the MNC. Second, e-HRM implementation in an MNC presents an opportunity to study what must be standardized versus what must be locally adapted and why in a short period of time. Finally, as e-HRM implementation in MNCs requires the parties involved to negotiate the system content and processes, which might encapsulate the full range of the MNC's HRM, this presents a unique opportunity to study and understand how the parties charged with an e-HRM system implementation promote their interests, and shows the resources deployed during negotiations.

A critique of the micro-political view, a review from Mense-Petermann, suggests literature on "conflicts in MNCs may foster the impression that micro-political conflicts are conflicts between headquarters and subsidiaries while inter-cultural conflicts are conflicts that occur in face-to-face situations between local employees and expatriates" (2006:33). As Mense-Petermann goes on to point out, actors, as well as their power resources, are socially constructed, that is, constructed by their embeddedness in specific institutional contexts (Ibid.). Thus, culture plays an important role in its institutionalized form in international e-HRM activities as well.

2.3.2 The unified theory of acceptance and use of technology (UTAUT)

Existing literature on IT acknowledges the importance of the system user and emphasizes the importance of considering user reactions, typically in the context of predicting system acceptance and usage. Several models and theories have been used in recent years to examine user reactions, including the Technology Acceptance Model (TAM), Social Cognitive Theory (SCT), and the Theory of Planned Behavior (TPB) (Fisher & Howell 2004).

One of the main models used in the IT literature to examine user reactions to new systems is the TAM (Davis 1989; Davis, Bagozzi & Warshaw 1989). In a TAM, user acceptance of a new system is based on perceived ease of use and usefulness. For example, if end users feel that the system is easy to use and will help them get their jobs done, they are more likely to accept and use it. TAM includes self-efficacy in the prediction of user acceptance in that individuals with high self-efficacy are expected to perceive that a system is easier to use. According to Fisher and Howell (2004), researchers have replicated the basic findings of TAM in many situations and have extended the model to consider concepts such as social exchange and gender (Venkatesh & Morris 2000).

According to King and He (2006:741): "The most comprehensive narrative review of the TAM literature may be that provided by Venkatesh and colleagues, who selectively reviewed studies centered around eight models that have been developed to explain user acceptance of new technology; a total of 32 constructs were identified which resulted in a UTAUT."

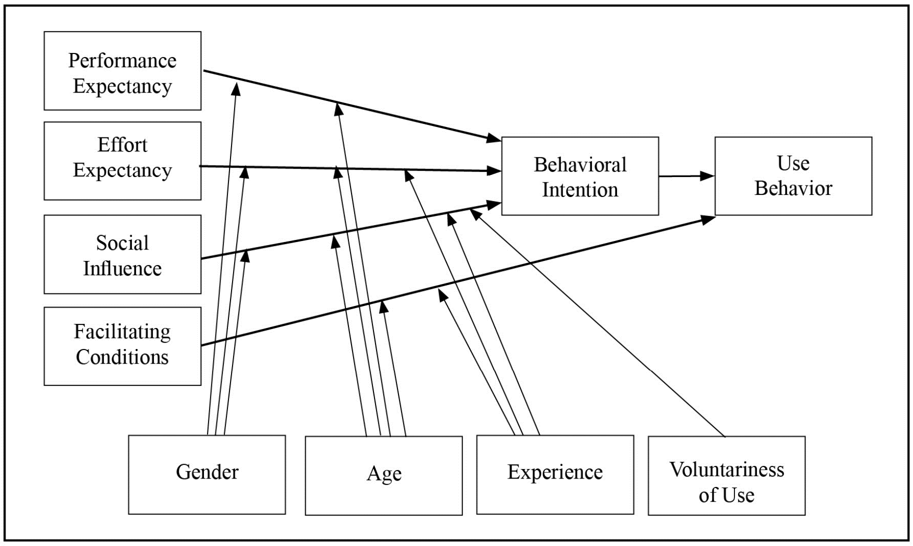

Figure 1. UTAUT constructs (Venkatesh et al. 2003)

In UTAUT, Venkatesh et al. (2003) conducted a meta-analysis that identified four main constructs as prerequisites of actual system usage: effort expectancy (i.e., perceived ease of use), performance expectancy (i.e., perceived usefulness), social influence (i.e., subjective norms), and facilitating conditions (i.e., compatibility). Effort expectancy is grounded on the following theories; *perceived ease of use* (Davis 1989) being the degree to which a person believes that using a system would be free of effort; *complexity* (Thompson et al. 1994) or the degree to which a system is perceived as relatively difficult to understand and use, and finally ease of use (Moore & Benhasat 1996), the degree to which using an innovation is perceived as being difficult.

Performance expectancy is grounded on theories of extrinsic motivation, that is, the perception that users will perform an activity because they consider it to be instrumental in achieving valued outcomes that are distinct from the activity itself (Davis et al. 1989*); perceived usefulness*, or the degree to which a person believes that using a particular system would enhance his or her job performance (Davis 1989); *job-fit*, that is, how the capabilities of a system enhance an individual's job performance (Thompson et al. 1994); *relative advantage*, that is, the degree to which using an innovation is considered an improvement on using its predecessor (Moore & Benhasat 1996); and finally outcome expectations, expectations related to the consequences of the behavior (Compeau, Higgins & Huff 1995).

Social influence is grounded on the theory of the *subjective norm* (Ajzen 1991), that is, the perception that most people important to the subject support or do not support the behavior in question, and that of *social factors* (Thompson et al.

1993) in other words, the individual's internalization of the reference group's culture and specific interpersonal compacts that the individual has made with others, in specific social situations. The final construct is image (Moore & Benhasat 1996), or, the degree to which use of an innovation is perceived to enhance personal image or status in a social system.

Finally, we find the facilitating conditions construct of perceived behavioral control (Ajzen 1991), that is, the subject's perceptions of internal and external constraints on behavior. *Perceived behavioral control* encompasses self-efficacy, resource facilitating, and technology facilitating conditions. *Facilitating conditions* (Thompson et al. 1991) are the objective factors in the environment that observers agree make an act easy to perform, including the provision of computer support. Finally, there is *compatibility* (Moore & Benbasat 1991), the degree to which an innovation is perceived as being consistent with the existing values, needs, and experiences of its prospective adopters.

In the field of e-HRM it seems that the work of Ruta (2005) is the only study adopting this model in the MNC context. Article 2 contributes to this discussion by examining how language standardization affects user acceptance and use of e-HRM in MNCs. UTAUT can help us understand e-HRM in MNCs by offering a holistic view of subsidiaries with a simultaneous focus on reactions (perceptions) and use (behavior).

2.3.3 Institutional theory

In HRM literature, the term 'institutional issues' refers to the global standardization and localization debate. According to Parry et al. (2008) HRM may be standardized in an MNC for any of several reasons. The MNC might have had positive experiences of certain HR processes, and be inclined to standardize them globally (Dickmann & Müller-Camen 2006). The decision may be motivated by available economies of scale, increased coordination, or higher service quality (Bartlett & Ghoshal, 1989) which are similar to typical goals for e-HRM adoption. Secondly, Parry et al. (2008) suggest an ethical dimension which may lead to the international standardization of practices that are a legislative requirement in a national jurisdiction where the firm operates. This can be the case for example with the establishment of systems that guarantee employees' minimum labor rights and ban the use of child labor. Thirdly, MNCs may seek to integrate all policies around a specific set of HR policies and practices in order to support their overall business strategy (Schuler & Jackson 1987).

Regarding the IS literature, Hustad and Munkvold (2005) conducted a case study on the implementation of an IT-supported competence management system in the Ericsson corporation. Ericsson was implementing standardized processes throughout the organization to stimulate global competence sharing and communities of knowledge to support the organization's long term strategy. However, there was a certain degree of resistance to standardization from different subsidiaries since they were used to making their own choices regarding these practices:

> *The implementation of a global competence management process thus requires a careful balancing of attention to local culture and traditions of HRM practices in each unit against the need for centralized coordination and standardization. Differences in labor law and work policies (e.g., regarding compensation, employee selection, or career development) may pose further requirements to the adaptation of the global competence management process to local practices. (Hustad & Munkvold 2005:86)*

With these issues in mind, institutional theory assumes that organizations are influenced by socially constructed beliefs, rules, and norms. According to DiMaggio & Powell (1983) organizations are pressured by their institutional environment, which demands they seek the legitimacy and recognition achieved by adopting structures and practices defined in the specific environment.

Scott (2001) has proposed that there are three institutional pillars influencing organizational practices: the regulatory, the cognitive, and the normative. Kostova (1999) has found that an MNC subsidiary's institutional profile will vary because the three pillars (regulatory, cognitive, and normative dimensions) will exert different effects according to the country where the subsidiary is located. The regulatory dimension reflects the existing laws, regulations, and rules in a particular national environment that promote certain types of behavior and constrain others. In addition, the cognitive dimension (e.g., interpretations and frames of thought) constitutes the nature of reality and the frameworks establishing meaning. Finally, the normative dimension (e.g., values and norms) focuses on the values and norms held by individuals in a given country. One should note that normative and cognitive dimensions are related to culture and might therefore overlap in some areas.

In addition, Björkman et al. (2008) argue local labor laws and regulations can limit the range and depth of possible HRM practices and local managers have ingrained views of what constitutes good management practice. In addition, strong local professional norms may exist, and processes of institutionalization might take place among MNCs in the focal country. Therefore cognitive and normative institutional processes unfolding in the local context may play important roles in explaining the patterns of HRM practices (DiMaggio & Powell 1983, Levitt & March 1988, Björkman et al. 2008). For instance, normative barriers to practice standardization may exist in the form of increasing professionalization of occupations and their institutional bodies. Ferner and Edwards (1995) and Parry et al (2008) describe 'channels of influence' for organizational change citing control over power resources, authority structures, and organizational culture as influencing standardization.

The institutional approach has been criticized by Ferner and Quintanilla (1998) amongst others, who suggest that it mainly focuses on host-country factors and neglects the complex conditions affecting home- and host-country factors. Nevertheless, institutional theory has been tested in a range of empirical studies on HRM in MNCs in a variety of geographic contexts including the USA, Europe and China (Smale 2008) and can make a significant contribution to the debate on standardization versus localization in general (Smale 2008).

In general terms, this discussion has suggested that institutional factors may compel a MNC to adapt its e-HRM practices locally, however there seems to be no discussion on the standardization and local adaptation of e-HRM in subsidiaries of an MNC, an omission this dissertation partly aims to address. Based upon the arguments previously presented, it seems reasonable to assume that e-HRM practices in MNC subsidiaries are influenced by various institutional factors. Indeed, we might assume that similar institutional forces known to affect HRM in MNC subsidiaries will also affect e-HRM. However, such factors will likely include those that shape the social context for IT as well as HRM, therefore the inclusion of a micro-political perspective in the institutional approach will be discussed in the conclusion section.

To date the e-HRM literature has mostly assumed that unilaterally imposed e-HRM practices will be adopted by subsidiaries in the same manner in which they were intended by an MNC HQ, even though, as the above discussion illustrates, this is unlikely to be the case. In the field of e-HRM, only Burbach and Royle's (2010) study acknowledges directly the institutional issues surrounding e-HRM in MNCs and to date there is no peer-reviewed research published in this area.

There is generally little understanding of how institutional forces affect e-HRM or of how these forces might affect MNCs' (and MNC subsidiaries') ability to exploit the strategic potential of e-HRM. Article 3 in this dissertation contributes to this discussion by shedding light on how institutional factors affect Western-origin e-HRM practices in MNC subsidiaries in China and investigates how and to what extent these factors influence e-HRM's strategic potential.

2.3.4 Futures Studies

The aim of Futures Studies is to map out alternative futures, assess their desirability and discover ways to follow a desirable future path. In addition, the purpose of future research is to "add tools and knowledge that help people design and shape the future, to help them achieve good futures for themselves, and for all humankind" (Bell 1997:22). A typical feature of futures research is that it adopts a multidisciplinary approach and a wide scope and also aims to achieve a deep understanding of a phenomenon by combining different scientific approaches (Kamppinen et al. 2002).

Bell (2003) posits that the Future Studies field is an identifiable sphere of intellectualism that has made important contributions to the knowledge base of modern society and its research now constitutes a body of coherent empirical results. Bell encourages specialists from other disciplines to

> *[...] spend more time looking forward than they have in the past, to discover the alternative options for the future in the present and forecast the consequences of future actions. (2003:10)*

According to Masini (2001) there is a strong need for Future Studies; a need driven by the rapidly changing elements of Society and the need to foresee the possible future consequences of present actions, events and trends:

> *The reason for all this rethinking in future terms also within the framework of social sciences, has to be traced to the evident overall inability for decision-making at various levels, to understand the rapidity and the interconnectedness of changes as well as the lack of will for concerted future oriented choices. (2001:641)*

When compared to social sciences in general, Wallerstein (1996) suggests that because of the disciplinarization of knowledge with institutional structures designed both to create new knowledge and to reproduce knowledge, social sciences are lacking to understand change because approaches might be elusive to new knowledge which is in the future. The usefulness of Futures Studies lies in trying to understand change, in this dissertation that is technological change.

Futures Studies strives to be interdisciplinary, to dare to challenge niches, but risks having insufficient rigor. With this rigor in mind, Masini (2001) contends that the Futures Studies discipline is part of social sciences because, first and foremost, it aims to understand social change and, hence, it needs to use, update and challenge the tools of social sciences. Bell (2001) suggests that the field of Future Studies has made considerable progress since the 1990s and that Future Studies researchers have created a variety of methods and a body of knowledge of use in many disciplines. However, there is no Future Studies influence in the field of e-HRM using any commonly accepted method. This is strange when the field of e-HRM with its turbulent nature dominated by rapid technological progress seems so suitable for the attention of Future Studies.

Since research lags behind practice, adopting future perspectives can be a fruitful approach to seeking out new and important research areas for e-HRM academics. The challenge to academic research in Future Studies is to demystify the future, make methods explicit, to be systematic and rational and base results on empirical observation and to extend the scope of intellectual debate (Bell 2001). In addition, future perspectives help practitioners to prepare themselves for routine business challenges that lie ahead. Indeed, the important contribution to the practitioner field of e-HRM that a Future Studies approach could make is to assist in decision making, in terms of criticizing and developing existing practices and processes. In e-HRM systems those include the major financial investments made in HR budgets. Furthermore, Future Studies could support practitioners in the field of technology, where companies suffer from realizing the strategic benefits of IS and are therefore vulnerable to 'shadow IT', in other words, their employees are using more advanced technology than is mandated by the company. When companies are not aware of technological developments or do not acknowledge them, the impact of e-HRM might be severely limited.

With this in mind, Article 4 pioneers the adoption of a future perspective in the field of e-HRM in order to understand various future e-HRM implications using the Delphi method, which is argued to be the most scientific of Future Studies tools (Kuusi 1999). The Delphi method directs anonymous expert opinion onto issues and is argued to fit well with multidisciplinary questions and to produce valid results when implemented in a rigorous manner (Mannermaa 1999).

3 METHODS

This chapter presents the methodology of the dissertation and describes the research settings. The chapter begins with a discussion of the chosen paradigms and research strategy and proceeds to outline the qualitative research approach adopted in Articles 1, 2 and 3. In addition, this chapter presents an in-depth discussion of the Delphi method, which was applied first time in the e-HRM field of studies in Article 4. The limitations of methods are synthesized in section 5.3 and reported individually in articles.

3.1 Research strategy

Before describing the methodology of the four articles, this section introduces the philosophical views that led to the methodological choices informing them. This is necessary as the philosophical views of the researcher give rise to assumptions regarding the basis of knowledge, that is, epistemology. Andersen and Skaates (2004) suggest that research validity is increased when the choice of research strategy is closely related to the researcher's epistemological view, which in turn is influenced by the researcher's beliefs.

Epistemology refers to what does and does not constitute acceptable knowledge in a given field of study. The basic epistemological research philosophies include positivism, realism, and interpretivism (Saunders, Lewis, & Thornhill 2007) Studies in this dissertation can be described as drawing on positivism, which is a philosophy of science based on the view that the social sciences data derived from experience and the mathematical treatments of such data, together form the exclusive source of all authoritative knowledge. Obtaining and verifying data that has been received produces empirical evidence (Macionis & Gerber 2011).

A strategy of focusing on a single MNC in Article 1 is to minimize the challenges of getting and negotiation the access. In addition, doing research within one MNC can alleviate the hermeneutical problem of interpreting findings, in-depth knowledge of one MNC can increase sensitivity to the context and precision in interpretations (Lervik 2011). When interpreting the findings, the underlying assumption in Article 1 is that organization is a less rational entity where few powerful key actors get actively involved in micro-political strategizing and their power-play can have far-reaching consequences for all members of the organization (Burns, 1961). On the other hand, Articles 2 and 3 assume that organizations and the people that work for them are rational entities.

The strategy for methodological choices to divide the interviews and other data conducted at TECHNOCOM was following. The focus in Article 1 was on micro-politics. Article 1 is inductive, where Article 2 was more abductive and broader with another MNC and another e-HRM system added for investigation. For me this was a journey which accumulated learning from a single case study in Article 1 to an interview study in Article 2 which then inspired conducting a multiple case study in Article 3.

In multiple case study in Article 3, researcher followed strategy from Tan and Nojonen (2011) who argue researchers in China need to pay great attention of the data and how to collect it because the high risk of misunderstanding. Therefore, contacting respondents in workshops (i.e. not use e-mail) was proven to be fruitful approach to ensure that both the researcher and respondents speak the same language and understand the concepts during interview.

In addition, the researcher acknowledges in Articles 1, 2 and 3 the need to maintain a distance from that which is researched to avoid disturbing the research process, and has followed well-established research processes suitable for MNC context (e.g., Yin 2009; Piekkari and Welch, 2011). Finally, by following Alasuutari (1995) and the 'factist' approach, verbal and written evidence is checked for truth in order to gain as objective a view as possible.

Regarding the futures approach in Article 4, Bhaskar (1986) argues that social sciences must be involved in making better futures. Therefore anticipation of futures is a necessary part of all social actions. This is particularly so in the world of modern MNCs and if a particular discipline, such as e-HRM, wants to be relevant it should also be able to say something about possible and likely futures. Critical realist ontology explains that there are multiple possible future paths where the actual is only a part of the real world, which also consists of non-actualized possibilities and unexercised powers of the existing structures. Furthermore, emergence is also real where it is possible that new structures, powers and mechanisms emerge and existing ones may disappear (Bhaskar 1986).

The theoretical basis of the Delphi method has developed over time and includes various views. The approaches can be categorized according to whether they are based on Lockean, Leibzinian, Kantian, Hegelian or Singerian philosophy (Mitroff & Turoff 1975). Article 4 followed Kantian philosophy, which suggests that the expert group should include people with different perspectives on the studied phenomenon. In addition, this philosophy suggests the best way to anticipate the future is to map out several alternative directions (Mitroff & Turoff 1975), which was done in Article 4 through ranking.

3.2 Qualitative methods

As mentioned, e-HRM is at an early stage of development as a discipline and there have been calls for more qualitative and theory building research (Strohmeier 2007). Therefore, it seemed appropriate to adopt an exploratory approach in Articles 1, 2 and 3 as "exploratory research is a methodological approach that is primarily concerned with discovery and with generating or building theory" (Davies 2006: 111). With regard to emergent findings such as language, Davies (2006) notes that exploration refers to the overall approach to data collection, not only at the beginning but also throughout the research. Those engaged in exploratory research are concerned with the development of theory from data in a process of continuous discovery from new research venues.

According to Piekkari and Welch (2011) the case study is well suited to international business research since it can capture the complexity of cross-border and – cultural settings and contribute to the emerging areas of research. Similarly, Eisenhardt (1989) argues that case studies are particularly well suited to new research areas where existing theories are not well established, as was the case in all articles of this dissertation. In addition, the purpose of those empirical case studies was first to gain understanding of and ascribe meaning to a given phenomenon, rather than to test a certain set of variables (Merriam 1998). The main argument for using case studies in this dissertation is that they are:

> *[...] particularly well-suited to new research areas or research areas which existing theory seems inadequate. This type of work is highly complementary to incremental theory building from normal science re-search. The former is useful in early stages of research on a topic or when a fresh perspective is needed while the latter is useful in later stages of knowledge development. (Eisenhardt 1989:548)*

Indeed, the case study approach fits particularly well to the study of international business (and by extension to the study of international e-HRM) because the method provides excellent opportunities for respondents and researchers to check their understanding and continue to ask questions until they obtain sufficient answers and clarify interpretations. In-depth interviews are particularly suitable when a researcher wants to understand the behavior of decision-makers in different cultures (Ghauri 2004; Piekkari and Welch 2011).

In addition, case studies have the potential to build our understanding of the research phenomenon, first because they allow us to take a longitudinal approach. Each case investigated also allows for theory building, not just theory testing. Finally, case studies are holistic, permitting the investigation of a phenomenon from a variety of angles, covering a period of time and crossing the boundaries between different factors (Ghauri 2004).

Although there are several advantages to using the case study method, there are also limitations that should be examined. The limitation most often advanced in the literature on case study research is the lack of statistical generalization available from the results. With this is mind it should be noted that Articles 1 and 3 do not target statistical generalization, but understanding and presenting a comprehensive picture of the studied phenomenon. The approach is thus in line with Eskola and Suoranta (2005:61) who added that the aim should be to describe phenomena and explore the use of previously known theoretical foundations in new research arenas, something referred to as theoretical generalization (Yin 2009).

Eisenhardt (1989) suggests two additional weaknesses in case study research. The first is the intensive use of empirical data that can lead to overly complex theories that try to capture everything. Second, building a theory from a case study can lead to a narrow and idiosyncratic theory. Finally, Patton (2002:570) raises the issue of the trustworthiness of a case study since the trustworthiness of the data is tied directly to the trustworthiness of the researcher who collects and analyzes those data. These limitations have been taken into account when conducting the current research. Dissertation now turns to present justification, data collection and data analysis of articles. More in-depth discussion is available in the papers themselves.

3.2.1 Single case study (Article 1)

Justification

When justifying a partly empirical and partly conceptual approach as adopted in Article 1, Yin (2003) offered some circumstances justifying the use of a single case study approach. Article 1 adopts the rationale of the longitudinal case which presents how a studied phenomenon changes over time to allow deeper understanding of the studied object. Second, Article 1 resembles a representative case in acknowledging that e-HRM implementation has become commonplace in MNC subsidiaries (Ruël et al. 2004), however the key actors influencing it and the negotiation process remains an under-researched area. Indeed, the justification for the explorative qualitative case study was also grounded in the literature, where this kind of approach has been encouraged because of the infancy of the e-HRM field' (Hoobler & Johnson 2004; Strohmeier 2007). Thirdly, conducting research within one MNC, where one engages in field over a longer time period, allows the research to develop sensitivity to issues of sampling and to identify the units of analysis and, with greater precision, when focusing on efforts on one MNC. (Lervik 2011)

Moreover, the single case study approach is justified by the inclusion of how and why questions in the study (Yin 2003), where Article 1 directed its attention to the process of negotiation. In addition, Ferner et al. (2005) argue that an emphasis on processual issues favors an in-depth case-study approach, especially when the aim is to unravel the dynamics of bargaining processes involving an HQ and its subsidiary. Moreover, the single case-study method is instructive when the issue of contextuality, crucial to studies on subsidiary-headquarters relations, is of key importance in interpreting the data (Yin 2003).

In summary, this kind of approach is appropriate because the dissertation involves an in-depth investigation of a relatively little known phenomenon and the micro-political approach acknowledging key actors and the power-game of bargaining had not previously been adopted. The background for Article 1 was a project funded by TEKES (the Finnish Funding Agency for Technology and Innovation). The project, which focused on international knowledge transfers, had seven sub-projects involving company participation.

Data collection

The third sub-project focused on the global integration of an SAP HR system from the viewpoint of the Finnish subsidiary unit. Its overall purpose was to analyze why the SAP HR system was adopted and what challenges this presented from the point of view of the subsidiary. The case company in Article 1 is a well-known European MNC, operating in over 100 countries and employing more than 100,000 people. Its subsidiary in Finland employed around 350 people at the time of the study. The data for Article 1 consisted of interviews from five persons, three of whom were interviewed twice. This kind of approach that could be termed the view from below enabled more accurate identification (Ferner et al. 2004) of conflict areas and key actors.

Data collection took place between 2006 and 2008 and involved interviewing a Country HR Manager, the HR Account Manager and the HR Advisor annually for two years. In addition, the Nordic HR Manager and one of the e-HRM third-party consultants were also interviewed. Interviews included general questions on issues around e-HRM implementation and global IT-integration. Responses to more open-ended questions prompted the research team to delve deeper into the issues to isolate the conflicts, the parties involved and how the conflicts were resolved. The interview language was English and each interview lasted for around one hour. Interview data were supported with company documentation that included presentations on the integration process, minutes of the project meetings, as well as communications on the main problem areas and subsequent actions taken.

Data analysis

Interview data together with company documentation was content analyzed and then codified into categories. Analysis revealed micro-political issues and further analysis within these groups enabled the detailed identification of the nature of conflicts, the parties involved and the resources used in negotiation.

Collecting data from multiple sources within the Finnish subsidiaries facilitated the comparison of personal experiences and the identification of where responses converged and diverged, thus enhancing the validity of the research via informant triangulation (Denzin 1978; Piekkari and Welch 2011). Interview transcripts were sent to interviewees for a additional review. Furthermore, both authors acted as data evaluators and verifiers of data in Article 1 in order to create investigator triangulation. In other words, the findings including interview transcripts and company documents from both researchers were compared and discussed in order to develop a broader and deeper understanding of how both investigators viewed the studied issues.

3.2.2 Interview study (Article 2)

Justification

A qualitative approach was selected based on the need to contextualize the research and draw on individuals' personal experiences (Gummesson 2006). In terms of external validity, the purpose was not to generalize findings statistically, but to pursue theoretical generalization by using previously developed theory as a template with which to investigate cause–effect relationships (Yin 2009); in this case UTAUT and its four constructs, to assess the effect of language standardization. Article 2 can be classified as an interview study where the unit of analysis is an HR manager of an MNC subsidiary. The focus in Article 2 was on the subsidiaries' HR managers who interact with e-HRM systems. The number of interviewees was limited because it has been argued that the data from a few knowledgeable respondents is more accurate than a summary of data from a larger group of less knowledgeable respondents (Huber & Power 1985).

Both companies featured in Article 2 are involved in the same TEKES-project. The original purpose was to analyze the implementation of an online recruiting system in a Finnish MNC and also SAP HR implementation (Article 1). When the language issue emerged in the course of the Article 1 project, the researcher team decided to focus more directly on language in this project. This TEKES sub-project was a longitudinal study with several stages such as system piloting, overall user-acceptance issues and its influence on corporate image. In the final stage, the focus was on the system implementation and use in the foreign subsidiaries of MNCs, which is the focus of Article 2.

Data collection

The empirical data for Article 2 was collected via semi-structured interviews, a valuable method when the interview situation does not permit it to proceed in logical steps (Easterby-Smith et al. 1991: 74). Data were collected via semi-structured interviews conducted either in person or by telephone. The interview data was supplemented with company documentation on e-HRM implementation plans. There were a total of 18 interviews, 13 from the first case company and 5 from the second case company (Article 1).

Interview questions included issues on the implementation process, functionality of the system and training. During the first interviews the issue of language emerged as a dominant and recurring theme. In subsequent interviews language-specific questions were therefore added, for example: "What are your feelings on the system functioning in English?" and "How do you cope with language related challenges?"

Although interviewing in a respondent's native language is suggested to produce more authentic answers that capture "subtle nuances" (Welch & Piekkari 2006: 428), all interviews were conducted in English. It was assumed that senior managers in MNCs who work in English on a daily basis would have sufficient English language skills to offer detailed answers to questions and the responses received would be more easily comparable. The choice of English also negated potential cost issues arising from the use of interpreters and translation agencies. All interviewees received information about the study, interview topics and likely time commitment required by e-mail before the interview. The issue of confidentiality was also addressed and discussed further after the interview.

Data analysis

The interview data was transcribed and content analyzed. In the analysis of effects on user reactions the data was categorized into groups using the four constructs of the UTAUT framework as coding anchors (Ezzy 2002). After several rounds of analysis it was apparent that the four categories were sufficient to capture the main effects identifiable from the data and therefore no additional categories were deemed necessary. A separate category was created, however, for the purpose of organizing the data on the actual responses (i.e., behaviors) of the HR managers to the challenges presented by language standardization.

3.2.3 The multiple case study (Article 3)

Justification

The exploratory multiple case study in Article 3 is built on interviews exploring the how and why questions that affect HR managers and e-HRM specialists working in Western MNC subsidiaries located in China, more precisely in Beijing and Shanghai. This approach is also justified by the need to contextualize the research and draw on personal experience of e-HRM implementation and a range of institutional pressures. This approach allows us to determine what is useful in explaining what influences e-HRM and its strategic potential in MNC subsidiaries. The method also tests whether institutional theory might offer a conceptual framework in future research.

Data collection

During the selection of cases, recommendations governing a multiple-case study were followed in that the cases allow for literal or theoretical replication (Yin 2003). With regard to these issues, I was careful to ensure that the subsidiaries met the overall criteria of e-HRM system use which dictated that units shared similar key characteristics to facilitate generalization about the institutional effects (e.g., they were wholly-owned subsidiaries of Western MNCs) and also that the e-HRM system used was similar in all units and was capable of making the strategic impact discussed in section 2.

More specifically, the criteria included the units using e-HRM systems for more than 2 years, and the e-HRM systems being used for similar purposes such as recruiting, training, performance management, talent management and compensation. In addition, the systems in question were standardized ESS and MSS portals used in Western organizations and finally, the systems were intranet-based with HR data communicated back to MNC headquarters. Using this kind of strict logic enhanced the external validity, which will be discussed later.

The data for Article 3 consisted of interviews with 14 respondents from ten different wholly-owned MNC subsidiaries in China. The data in this study was collected between 2010 and 2011 and all interviews were conducted in China in person by the researcher. The interviewees had worked with HR systems for between two and ten years and the respondents were very familiar with Chinese institutional arrangements (i.e., they were Chinese nationals or expatriates who had lived in China for at least two years). Nine Chinese managers were interviewed in English, as were two Finns, one Swede, one American and one Dutch manager.

Data analysis

All interviews were recorded and transcribed. The data was content analyzed, coded, and categorized into groups. First, a close reading of the data was carried out to sort important from unimportant data and analysis followed the research purpose and questions (Saunders, Lewis, & Thornhill 2007). Written data were re-read several times before the content analysis which first involved coding the data according to the interview framework and then to the theoretical framework used.

Once data were collected, it was coded and categorized into three themes using Scott's (2001) 'three pillars' as coding anchors, and for e-HRM's strategic potential data was coded under issues such as cost reduction and service delivery. The final stage of analysis used 'featured syntheses' (Hart 1998), whereby all the data are synthesized in one table under topics related to the research questions. All relevant interview data related to the regulatory dimension were listed under column headings and each response to the conditions was then compiled against the heading for further examination. This synthesizing process revealed the extent to which institutional dimensions were seen to affect e-HRM's strategic potential. The data that did not fit under certain criteria were subjected to additional rounds of analysis.

3.2.4 Reliability and validity in qualitative methods

A qualitative project dealing with MNCs can be sensitive in terms of gaining access, convincing and getting respondents to talk openly about research topics, which creates challenges in terms of research validation and generalization. According to Yin (2009), following criterias are common when evaluating the quality of research. These are internal validity, external validity and reliability.

To begin with, internal validity refers to causality and is applied to explanatory studies where the most critical component is the ability to explain that certain conditions lead to other conditions, that is, that they are not only spurious relationships. External validity indicates the extent to which a study can be generalized beyond its specific context toward either statistical generalization or theoretical generalization (Yin 2009). Finally, reliability refers to how the study's findings can be repeated and if the empirical process could be repeated and same results achieved. The above criteria will now be discussed in connection with Articles 1, 2 and 3. Article 4 will be discussed separately.

When evaluating the qualitative methods in Articles 1, 2 and 3 internal validity is addressed during the data analysis process (Yin 2003) and has also been labeled outcome validity (Andersen & Skaates 2004) which refers to how trustworthy findings are interpreted to be and how they are presented (Piekkari and Welch 2011). To establish the internal validity of Articles 1, 2 and 3 the data in each were first re-read before the data reduction phase. Subsequently a systematic search and comparison of patterns was conducted against the research template. Furthermore, interview data was compared to company documentation to find out whether they support each other. In other words, data analysis was performed in several stages and the data has been studied as much detail as possible and identified as much as felt possible. Investigator triangulation (Denzin 1978) was employed in the Articles 1 and 2, where both authors acted as data evaluators and verifiers.

To establish external validity in qualitative studies, one should follow the guiding principle that theoretical generalization to some broader theory is possible (Yin 2003). In terms of external validity in Article 1, the purpose of single case study was to generate contextualized insights into the investigated phenomenon and then enable theory construction. In addition, Articles 2 and 3, the purpose of the articles was not to generalize the findings statistically, but to pursue theoretical generalization by using previously developed theories (UTAUT and institutional theory) as heuristic devices (Yin 2009). In each article, validity of research was further increased through extensively reviewing the literature on relevant theories.

Finally, reliability is argued to be the ability to repeat the study, which necessitates efficient documentation of the research process (Yin 2009, Piekkari & Welch 2011). In all articles, research protocols were followed and processes were documented since the beginning of the research process. The central concepts used during interviews were formulated in a way that all respondents would understand them similarly. Each interview has been recorded and transcribed immediately after interview. Case study databases were also compiled; these were contact information, company materials such as presentations and interview transcripts. The reliability was further increased by personal visits to companies and field notes were generated whenever possible. In Article 3, researcher lived in China for 13 months to familiarize himself with the institutional context.

3.3 The Delphi method (Article 4)

Compared to others using qualitative approaches and methods, Article 4 was the first that validated the use of the Delphi approach in the e-HRM field and later it has applied by Girard et al. (2012). In order to further the use of the Delphi method in e-HRM, section now presents an in-depth analysis of this method and the research process.

Overall, the purpose of the 'forecasting Delphi' study is to obtain consensus from a panel of experts using repeated answers from questionnaires and controlled feedback. Delphi is also a method that has been said to fit well with multidisciplinary research (Hatcher & Colton 2007), such as e-HRM. Originally the Delphi method was developed by Olaf Helmer and Norman Dalkey in 1953 at the RAND Corporation with the aim of improving the use of expert opinion in policy-making. The essence of the Delphi technique is that a pool of experts deals with a certain problem situated in the future. For example, 'forecasting Delphi' could be used to forecast future economic, social, labor and organizational conditions to help organizations design HRM programs for the next five years or more (Loo 1996). There are also variations like 'policy Delphi' where only opposing views are debated and consensus is not necessarily the desired goal (Turoff 1970, 1975). During the forecasting Delphi process the experts do not have any contact with each other and their opinions are submitted via questionnaires. In evaluating the questionnaires, the goal is to achieve consensus from the diverse opinions (Helmer 2003).

In other words, the method used allows the grouping and subsequent analysis of the ideas of experts in order to gain a closer understanding of issues that would not be offered by other qualitative or quantitative studies. The reasons for conducting a Delphi study have been summarized by Dawson and Brucker (2001). First, there is no other group communication process than can elicit the same data; second, the researcher can identify and access experts to discuss the particular problem; and finally, the researcher can forecast the type of results that may be obtained from these experts through the Delphi method (Linstone & Turoff 1975; Ziglio 1996). In addition, Turoff (1970) identifies four possible research objectives that call for the use of Delphi studies. Firstly, Delphi studies can be used to explore or expose underlying assumptions or information leading to differing judgments. These can also be used to seek out information which may generate consensus on the part of the respondent group. The third use of Delphi studies relates to the correlation of informed judgments on a topic spanning a wide range of disciplines. Finally, Delphi studies are valuable in educating a respondent group on the diverse and interrelated aspects of a topic.

There are no set rules for Delphi studies (Evans 1997; Keeney et al. 2004); both qualitative and quantitative approaches and their combinations have been used in a Delphi process. A Delphi study typically has two or three rounds of contact with the experts in which comments are first elicited, then summarized and returned for further discussion. Ideally, they would circulate until the group reaches consensus, which, although the literature does not specify a consensus threshold, can range from 51 percent (Loughlin & Moore 1979) to 75 percent (McKenna et al. 2000). McKenna (1994) found that most statements achieved over 70 percent consensus. The reality is that most Delphi studies are completed by a third and final round because of time constraints, participant fatigue, funding for the research and the design of the study (Keeney, Hasson & McKenna 2006). As Nevo and Chan (2007) point out, Delphi studies can include follow-up telephone interviews with each panel member.

The multidisciplinary nature of e-HRM, the desire to use the e-HRM expert community and features such as flexibility and adaptability drove the choice of this method. This study included respondents from academia and practice to represent various interest groups and aspects of the research question in order to map out different aspects of studied future directions. These will be presented later in the collection of article summaries.

3.3.1 Expert panel participants

The expert panel members are selected for the expertise they can bring to bear on the research question. According to Schwarz (2008), panel members must be selected from stakeholders who will be directly affected, experts with relevant experience and facilitators in the field of study. In addition, Turoff (1975) suggests the panel composition relate to the validity of the research results. Panel size can range from a few to fifty or even a hundred (Schwarz 2008). Research on Delphi performance has suggested that groups of 10–20 have made more accurate predictions than larger groups with more than 50 members (Brockhoff 1975, Colton 2002). However, some studies have found error rates to decrease with larger groups (Linstone & Turoff 1975).

Panel members are always anonymous. The various reasons for this include: an expert making a commitment to a stand then being reluctant to change it; the different academic standings of the participants; not losing face; and elimination of the usual biases found in society such as those relating to gender, race and age. Respondent anonymity fosters consensus without the undue influence of rank, power, personality or persuasive speaking common in group meetings (Brockhoff 1975; Dawson & Brucker 2001).

There are no requirements in the literature regarding the choice of content and size of the Delphi panel, which are dependent on the situation and research interests (Kuusi 2002). Since the focus of this study is a multifaceted phenomenon, a panel representing a variety of complementary approaches to e-HRM from the academic and the practical perspective was considered necessary. An added influence was the recent call for research combining these two group interests (Strohmeier 2007).

The 24 experts on the panel were drawn from a pool of experienced researchers and e-HRM practitioners. The inclusion of the practitioners was considered necessary to the goals of this study. While the practitioners had many years of experience working in the field of e-HRM, they did not necessarily have a high level of formal education or theoretical expertise on e-HRM, they were considered as key respondents responsible for e-HRM at grassroots level, and so met the criterion of using panel members with practical, everyday knowledge of the research topic (Kennedy 2004).

The author and a small group of more experienced researchers met to choose the prospective members of the Delphi group. The criteria determining the choice of relevant and interesting members were set beforehand and the most important criterion was a proven understanding of e-HRM, which in practice means publishing academic papers in the field of e-HRM and years of work experience with e-HRM systems. It was also considered important that the invited participants be truly motivated to participate in the study (Kaivo-Oja & Kuusi 1999). Invitations were extended to attendees of an academic HRIS workshop and a Future HR workshop, leading to 24 of the 33 invitees agreeing to participate. Careful selection ensured the final panel comprised members with a deep understanding of e-HRM from different perspectives including relevant authorities from academia and representatives of well-respected system providers and independent consultants.

3.3.2 Delphi process

The process underlying this study is presented in Figure 2. The initial critical part was the development of the questionnaire through brainstorming. Validity being of primary importance in scientific research, it is important to pay careful attention to the construction of the questionnaire (Turoff & Linstone 1975). The questionnaire used in this study was carefully designed and reviewed by a small number of academics and piloted with certain practitioners. A lot of work was undertaken to identify appropriate questions that would provide information from the experts that was as accurate as possible. The study proceeded following the overall approach of Schmidt et al. (2003) and Zhang and Salaba (2009) who distinguished three separate stages in a Delphi study described in Figure 2. The first data collection stage is termed the brainstorming phase, where respondents generate lists of relevant items by replying to constructed research questions. In the present study, those who had volunteered at the academic seminar and professional e-HRM future workshop were sent an e-mail explaining the process. The e-mail also contained the Delphi instrument where respondents were asked to respond to the following six open-ended research questions.

> Q1: What development(s) in ICT will influence HRM between now and the year 2015?
>
> Q2: What implication(s) will these developments in ICT have for how HRM is orga-nized/ delivered in firms between now and the year 2015?
>
> Q3: What implication(s) will these developments in ICT have for the role played by HR between now and the year 2015?
>
> Q4: What implication(s) will these developments in ICT have for the kinds of knowledge and skills needed by HR professionals between now and the year 2015?
>
> Q5: What implication(s) will these developments in ICT have for HRM in the context of multinational corporations between now and the year 2015?

A three-week time frame was assigned to round one and a reminder letter was sent after two weeks. Final responses arrived five weeks after the invitation during December 2009 and 78 % of those invited responded to the first round. At this stage, data was analyzed by grouping similar items together. Duplicates were removed and data were reviewed by three independent researchers not involved as panel members.

The second round was conducted during January 2010. Schmidt et al. (2003) and Zhang and Salaba (2009) describe round two as the narrowing down phase, where respondents are asked to identify items which they consider to be most important from the responses received at stage one. The panel members were contacted individually by e-mail with a direct URL link to the round two survey site, an explanation of the procedure for responding, and the time line for this round. In round two, the issues raised in round one were presented and the participants were asked to rate the importance of these issues and introduce additional ones after reviewing the suggestions and rationales of their peers. For ratings, the participants were asked to rate each issue on a ten-point scale, with one representing the least important and ten the most important.

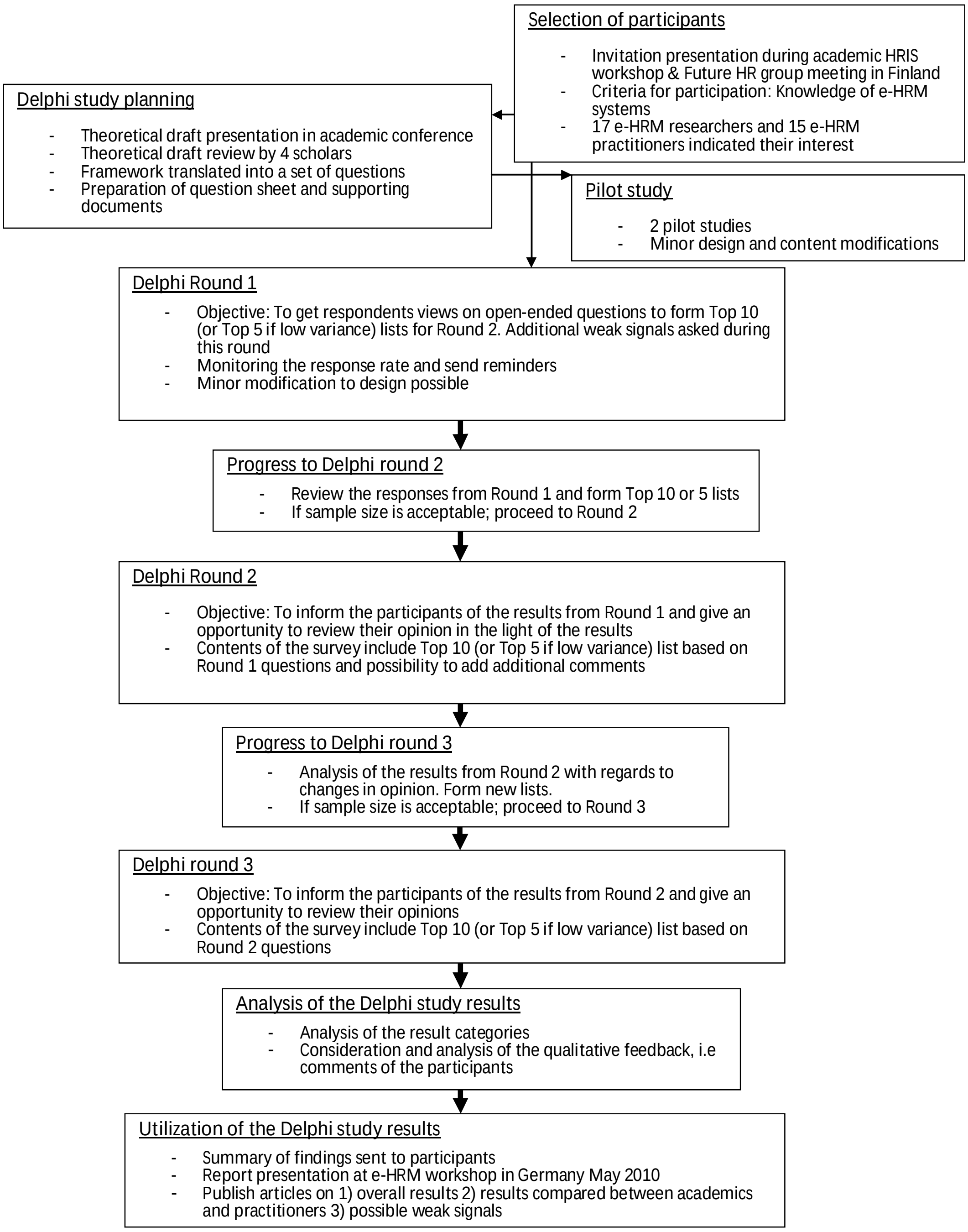

Figure 2. The Delphi process

In the present study, the relative importance of each of the items in the instrument was calculated according to the indications of the respondents, and the most important items then formed the basis for round three. Schmidt et al. (2003) and

Zhang & Salaba (2009) suggest categorizing the third stage as the ranking stage where respondents are asked to rank items in order of importance from the responses to stage two. In the present study, 22 respondents participated in the third stage and the analysis of this stage forms the basis of the results and findings section that follows. Kendall's coefficient of concordance is used to measure the degree of consensus among respondents.

Another challenge facing a method that deals with a multidisciplinary phenomenon is the construction of measurement methods and tools. The question of measurement was further complicated by the fact that the Delphi method combines both qualitative and quantitative approaches. In this study, the quantitative part was measured using a five-point scale ranking the answers from the brainstorming phase. The five-point scale has been confirmed suitable for this kind of research and permits the calculation of statistical parameters (Mead & Moseley 2001). The scale used was anchored with 1 (*most important*) and 5 (*least important*), and space was provided to expand on the answers, and those comments created the qualitative data used.

The quantitative data gathered during rounds 2 and 3 was further analyzed to obtain the traditional measurements such as ranking, means and standard deviations. Qualitative data was used to analyze, identify, examine, compare and interpret results in greater depth (Yin 2003). There was no need for data coding as panelists typed their comments into the system. However, there was a need for data reduction, which involved selecting, combining and simplifying the data into a form better suited for drawing conclusions (Hair et al. 2007). This process produced the final raw data quotations seen in Article 4. Regarding reaching consensus, the aim of Delphi-based research has increasingly shifted from reaching a consensus, to one of providing different perspectives on the studied phenomenon (Ovaskainen 2010). Despite this, consensus in this study was reached with a positive Kendall's tau coefficient.

3.3.3 Reliability and validity in the Delphi study

The Delphi method has gained acceptance across various disciplines mentioned earlier and those experienced with the Delphi technique report that *"the method produces accurate results which are accepted and supported by the majority of the expert community"* (Turoff 1975: 22). In the business field then, this method has been appreciated as a systematic thinking tool; however, there has been discussion on its ability to recognize strategic issues (Schoemaker 1993). Such discussion might be understandable during an era when effective quantification of analysis is admired by many.

Reliability refers to the degree to which research would be consistent if it were conducted by different researchers or observers at different times. It also refers to the concept of reproducibility which means a study should be capable of being replicated. However in social sciences, it is a commonly accepted fact that reproduction is extremely difficult since it is practically impossible to replicate the original data collecting conditions or to control all factors affecting the results (Strauss & Corbin 1998). According to Lincoln & Guba (1985) how easily research may be tracked is the main determinant of its reliability. Article 4 establishes trackability by recognizing the importance of auditing and documenting the research process so that other researchers might assess it.

This kind of reliability was taken into consideration from the beginning of the process as a whole (Figure 2), which was carefully planned and documented and which made data available for critical evaluation. Further, during the data gathering, the threat of participant bias was eliminated by choosing professors and consultants, who were so independent that their answers would not be affected by any third party and also by guaranteeing complete anonymity during the process.

Validity can be defined as the extent to which a finding accurately represents the phenomenon being examined (Hair et al. 2007). Validity can also be divided into two main parts. First, internal validity can be defined as referring to the logic and consistency of interpretation of results; meaning that results should follow logically from the research data and theories. It has been suggested that the internal validity of this kind of mixed method research may be improved by extended fieldwork (Ovaskainen 2010). That refers to the collection of data over an extended period and can be said to improve both data discovery and interpretation (Hair et al. 2007).

The data of this study was collected over a six-month period with three rounds of interactions. Similarly to the Delphi study process, each round was used to develop the next round, hence the interaction with data and the opportunity to comment on rounds of responses improved the validity of the study. Further, there were certain phases in the process that included external peer reviews by other researchers, which has also been suggested to improve the internal validity of a Delphi study (Hair et al. 2007; Ovaskainen 2010). Secondly, external validity, which refers to the extent to which interpretation can be generalized to cases other than those researched. The results of this study are generalizable to only a limited degree, however, the section on limitations offers ideas for further research which might integrate better external validity.

Finally, to evaluate the accuracy of the Delphi technique, Czinkota and Ronkainen (2005) compared existing Delphi studies in a similar discipline. That was not possible in this case with regard to Delphi studies forecasting e-HRM trends or focusing on similar issues in the field of HRM because of the lack of research applying this method. However, the findings of this first attempt to forecast trends are heavily dependent on the detailed thoughts and evaluations of authorities in the field. Therefore, as Czinkota and Ronkainen (2005) found, the trends and implications predicted are more likely to indicate future directions than the opinions of many uninformed survey participants.

To increase the reliability of these studies then, this paper suggests more research with the Delphi method in this area. In addition, this research will soon be overtaken by events, and could therefore be repeated over time with similar methods and sample sizes so as to provide a rolling benchmark of the issues and topics that contribute to the advance of e-HRM knowledge. Results could be tested by line managers with an ‘argument Delphi’ tool.

4 SUMMARY OF THE ARTICLES

The purpose of this chapter is to present summaries of the four articles that comprise this dissertation.

4.1 IT-based integration of HRM in a foreign MNC subsidiary: A micro-political perspective

Article 1 aimed to shed light on issues that cause conflict in the course of e-HRM implementation. A secondary aim was to determine the key actors involved in the process and the resources used during negotiations. The application of a micro-political perspective which seeks to know "how actors seek to protect or advance their own interests, the resources they use, and the resolution of conflicts" (Edwards, Colling, & Ferner 2007: 203), enables a deeper understanding of the complexities associated with transnational reorganization by concentrating on the strategies of subsidiary actors (Mense-Petermann 2006).

Previous research in HRM has argued that there is insufficient consideration of the role of organizational micro-politics when implementing new HR practices. The micro-political approach can prove particularly fruitful in the field of e-HRM then, because the negotiations around implementation involved reaching some form of agreement in a relatively short space of time on what must be standardized and what must be locally adapted, and why.

The study adopted a longitudinal, in-depth single case study design and followed the implementation of an e-HRM system in a Finnish subsidiary of a large European MNC. The study was conducted over a period of almost two years (2006–2008), approximately one year after the decision was made to implement the system. Qualitative data were collected via semi-structured interviews with key HR personnel from the subsidiary and were complemented with company documentation.

The study identified three main areas of conflict. The first was the standardized use of English, which meant system end users failed to understand what they were expected to do, caused a lack of clarity, consumed resources for translation and led to feelings of exclusion from Group HR. The second conflict area was system design because it represented the first genuine opportunity for parties to shape local HRM practices and processes. The final conflict area was around the grey areas of HR policy.

The study identified three key actors involved in the negotiation process: Group HR, country (Finland) HR and the third-party system consultants, whose role was particularly significant. These parties utilized a range of negotiation resources including business case logic, technical know-how, internal benchmarking, local constraints and feigning ignorance. The study confirms usefulness of the micro-political approach and, by identifying key actors, supports a deeper understanding of the implementation e-HRM in MNC subsidiaries.

4.2 The effects of 'language standardization' on the acceptance and use of e-HRM systems in foreign subsidiaries

Article 2 investigates the effects of language standardization on the acceptance and use of e-HRM systems in foreign subsidiaries. By adopting the UTAUT and its constructs of *effort expectancy, performance expectancy, social influence* and *facilitating conditions*, the study provides detailed insights into the positive and negative effects of language standardization and how they are likely to influence e-HRM acceptance and use.

Research has shown that MNCs commonly use English as a *lingua franca* in order to facilitate communication between headquarters and subsidiaries. Despite the increasing significance of language barriers as MNCs pursue greater levels of global coordination (Feely & Harzing 2003), the difficulties presented by language standardization and the implications for HR have not benefited from much scholarly inquiry (Marschan-Piekkari, Welch & Welch 1999). Indeed, I am not aware of any research on the subject of language in e-HRM literature.

Article 2 is an interview study with data drawn from 18 subsidiary managers from two MNCs. A qualitative approach was selected based on the need to contextualize the research and draw on individuals' personal experiences (Gummesson 2006). Data was collected via semi-structured interviews conducted either face-to-face or via telephone. The interview data was supplemented with company documentation on e-HRM implementation plans.

The findings show that in terms of the effect of language standardization on *effort expectancy*, user reactions and actual use will be heavily influenced by users' degree of language competence. Opinions about *performance expectancy* were positive to the extent that language standardization was perceived to lead to improvements in e-HRM. However, this was be influenced by perceptions of whether other end users possess the requisite language skills to use e-HRM as intended. In addition, *social influence* was seen in the form of a powerful headquarters, compliant peer subsidiaries and a strong host employee voice. In Article 2, social influence was affected by decision-makers who were unappreciative of others' multilingual abilities. In terms of the responses of the HR managers (i.e., use behavior), language standardization was often shown to produce what Stone, Stone-Romero, amd Lukaszewski (2006) refer to as dysfunctional consequences including the use of outdated systems in subsidiaries.

4.3 An institutional theory perspective on e-HRM's strategic potential in MNC subsidiaries

Article 3 aimed to shed light on how institutional factors affect Western-origin e-HRM practices in MNC subsidiaries in China, and also to study the extent to which these institutional factors influence e-HRM's strategic potential in this setting. The study uses Scott's (2001) institutional approach which suggests that regulatory (coercive), cultural-cognitive (mimetic) and normative pressures influence practices in subsidiaries of MNCs. Adopting this approach is particularly intriguing for the following reasons, Western MNCs are typically intent on transferring e-HRM to units in China; secondly, there are significant institutional differences between China and the EU and US; and thirdly, China's institutional context for e-HRM is undergoing significant change.

Some earlier e-HRM research has suggested that an MNC subsidiary's e-HRM practices, similar to HRM practices, are influenced by a broad range of external institutional factors and pressure from MNC headquarters. However, there exists no research on how these forces influence e-HRM's strategic potential. In a foreign setting, the strategic potential of e-HRM is generally considered to involve cost reductions, time savings, improved service delivery, and the collective impact these have by allowing the HR function to take on a more strategic HR role and improve its image among key stakeholders. Finally, e-HRM in MNCs can also serve as a means to standardize, or at least harmonize, HRM practices (Ruël et al. 2004), which can itself also be considered necessary if e-HRM is to realize its strategic potential.

Article 3 is a multiple case study where an explorative qualitative approach is justified by the need to contextualize the research and draw on individuals' personal experience of e-HRM and a range of institutional pressures. The data for the study were collected via in-depth, personal interviews with 14 respondents who were country managers, HR managers and e-HRM experts from ten different wholly-owned MNC subsidiaries in China. The data was collected between 2010 and 2011.The subsidiaries were selected based on the following general criteria: (a) units shared similar key characteristics to facilitate comparison and generalizations about the institutional effects (e.g., wholly-owned Western MNC subsidiaries), and (b) the e-HRM systems used were similar in all units and were capable of having a strategic impact in the ways the literature has surmised.

The findings confirm first, that e-HRM practices are subject to similar pressures for local adaptation as other HRM practices, since host-country institutions seem to present a clear counter-force to the drivers of standardization. Second, institutional factors influence the strategic potential of e-HRM. On the one hand, strong host-country institutional pressures put great emphasis on the local adaptation of e-HRM which is necessary not only in order to acquire local legitimacy, but also to increase the acceptance and use of e-HRM systems amongst host-country nationals (Ruta 2005). However, the findings also illustrate that local adaptation can jeopardize the ability of e-HRM to have a strategic impact in MNC subsidiaries. More specifically, tasks that are generated in response to external institutional pressures (e.g., translation, role conflict, system misuse and maintaining compliance with regulations) influence the standardized, Western-origin e-HRM delivery model and often act as barriers to e-HRM realizing its strategic potential.

4.4 Exploring future e-HRM trends: A Delphi study

Article 4 sheds light on future e-HRM trends. By adopting the Delphi method, the study identifies key ICT trends and their implications for how HRM is organized and delivered, the roles played by HR, the knowledge and skills needed by HR professionals and finally the implications for HRM in MNCs. The adoption of a Delphi approach with a Futures Studies perspective was motivated by the following reasons. First, based on the assumption that research lags behind the use of ICT in organizations, this research is proactive in predicting ICT implications for HRM. Second, positive implications are the foundations of e-HRM adoption and therefore an important topic to study. Third, this research offers a basis for the development of HRM strategies and policies for practice based on the future trends identified by expert academics and practitioners.

Previous research has acknowledged the gap existing around rapid changes occurring in HRM arising from the adoption of e-HRM. Studies generally examine single e-HRM applications, focusing on the changes in HRM processes and functions following automation (Bondarouk & Ruël 2009a; Strohmeier 2007) and reliable empirical data on the consequences of e-HRM are lacking. Strohmeier (2009) asserts that research is needed to provide a general understanding of e-

HRM implications that support practitioners' decisions and to shed light on the potential negative consequences of e-HRM adoption for various stakeholders. In addition, Sparrow (2009) calls for e-HRM research to look at the implications of technical developments and process streamlining for the design and conduct of international HRM activity in companies.

Article 4 uses a 'forecasting Delphi' method, as explained in section 3.3 above. The study brought together 11 practitioners from 11 different companies, and 13 academics from 11 universities around Europe to form a panel that considered data over three rounds.

The main finding was the identification of the importance of social media technology as a technological trend. This answer was the highest ranked of all answers in this study suggesting that we are about to enter the era of social media in terms of HRM technology. In addition, by combining the two answers on the topic ranked most highly, one could argue further that mobile social media will be the most significant technological trend in the near future. Other findings indicate that HR will become more decentralized and delivered via social media, HR departments open to technology will increase their roles, new skill requirements for HR professionals will be based on social networking skills and finally social media will have a strong influence on staffing and information sharing in MNCs.

5 BRINGING E-HRM INTO THE MNC SETTING

This dissertation contributes to the existing literature through addressing major gaps in the e-HRM literature by investigating the nature of e-HRM in subsidiaries of MNCs. As a body of work, the findings add to our understanding of a view that holds that organizational politics, language issues and institution matter in e-HRM implementation and use, and how those factors have an impact on the realization of e-HRM's strategic potential. Finally, the dissertation supports the view that it is important to predict the future implications of IT for HR.

Three research questions were presented at the beginning of this dissertation to focus our understanding of e-HRM in a MNC setting, and those questions will now be revisited, while the articles of the dissertation themselves contain a deeper discussion of individual findings and limitations. Based on the findings of the articles, this section also opens up the discussion on international e-HRM, and concludes by noting general limitations, offering suggestions for future research and outlining managerial implications.

5.1 Theoretical contributions of the articles

In general, one major critic in recent reviews has been that e-HRM suffers lack of theorization, especially within MNC context. By extending the micro-political, UTAUT, institutional and Delphi approaches from disciplines within HRM, IS and Futures Studies to the field of e-HRM, this cross-disciplinary research confirms the validity and usability of these theories in the field of international e-HRM. We now take a closer look at individual research questions and how the articles in this dissertation relate to each other and how they answered the research questions posed.

5.1.1 Factors affecting the acceptance and use of e-HRM

Articles 1, 2 and 3 offer the following view on the first research question, which addresses the factors influencing e-HRM implementation in MNC subsidiaries. Article 1 acknowledges that the implementation of e-HRM is influenced by how key actors negotiate over the implementation, and what are key decisions and, most importantly, the key areas of conflict that mark such negotiations. Article 1 makes an important contribution, as micro-politics in particular seem to characterize and reflect decision making in MNC subsidiaries. Understanding e-HRM implementation completely will not be possible unless we take into account the role of key actors, and the more general micro-political activities that key actors undertake.

The major conflict area among key actors in Article 1 was the standardized use of English, where the effects of language standardization is depending on how corporate HR, subsidiary HR managers and third party consultants perceive the issue of standardization. In Article 2 through the use of UTAUT also found that the acceptance and use of e-HRM in subsidiaries is affected by the use of standardized English. More precisely, implementation was heavily influenced by the language competence of system users and their opinion on the use of English as a corporate *lingua franca* in general. In addition, language standardization produced dysfunctional consequences (Guetal and Stone 2005) where end-users were using dual systems and translation load reduced work time for strategic activities which was also present in Article 3 also acknowledged the issue of language influencing e-HRM. Language might generally be referred to as the *forgotten issue* while Article 2 highlighted the significance of language and Articles 1 and 3 support it; this has major importance as an implication of e-HRM research in the MNC context.

This unknown multilingual character of e-HRM in MNCs has previously been highlighted by several scholars (Barner-Rasmussen & Björkman 2007; Janssens et al. 2004) in the field of international management. For example, Barner-Rasmussen and Björkman (2007) argue that MNCs are unusual organizations in that they are multilingual almost by definition. As highlighted in Chapter 2, section 2.2, introducing a common corporate language will not render the firm monolingual, as language diversity within a global firm is likely to persist (Marschan-Piekkari et al. 1999) and therefore the notion that standardized language issues play a major role during e-HRM acceptance and use and is one of the main findings of this dissertation and one of its major contributions to academic discussion.

Overall Article 1 is marked by a more intuitive perspective and emphasizes the role of key actors, in this case, individuals. This approach supports the institutional view in Article 3 where institutional pressures influence e-HRM. The use of both these perspectives when studying acceptance and use is especially fruitful as they complement each other. In line with Rupidara and McGraw (2011), this dissertation suggests blending the rational perspective exemplified in Article 1 with the institutional perspective of Article 3 makes a major theoretical contribution to the field. Using either perspective in isolation disregards the actual or potential influence of key factors that shape the implementation of e-HRM. Adopting only the rational view underestimates the effect of various institutional logics and mechanisms upon the actors. On the other hand, overemphasizing the deterministic power of institutions discounts the intentional actions of the actors involved.

5.1.2 Factors influencing e-HRM's strategic potential and other outcomes

Strategic potential can refer to cost reductions, time savings, improved service delivery, and the collective impact these have on allowing the HR function to step into more strategic HR roles and improve its image amongst key stakeholders. In order to achieve more strategic role, MNCs prefer to harmonize e-HRM practices, however they have to overcome the challenges regarding standardization and localization of e-HRM.

With this in mind, the main theoretical contribution of Article 2 is its application of Venkatesh and colleagues' (2003) UTAUT in explaining how the use of standardized corporate language affects the acceptance and use of e-HRM in MNC subsidiaries. Indeed, Article 2 helps us to explain functional and dysfunctional outcomes. For instance, the article presented the need for the use of a local language; however there is a need for a standardized language too. The debate over whether to standardize language when using e-HRM in subsidiaries should incorporate not only individual user reactions based on their own degree of language competence, but also user reactions based on their perceptions of the language competence of other users, and the overall institutional environment of the given subsidiary. This is a topic discussed in Articles 1 and 3.

With regard to the standardization and localization debate, Article 1 concluded that e-HRM systems have the potential to standardize some areas of HR practice such as the philosophy behind HR delivery and a range of transactional practices, but may be less successful in pursuing the global standardization of certain institutionally sensitive HR practices illuminated in Article 2 and especially in Article 3. With this in mind, the institutional setting and isomorphic pressures presented in Article 3 have not been studied in connection with e-HRM outcomes in an MNC setting.

This highlights the potential dilemma that local adaptation increases acceptance and use but may reduce the ability to capture benefits such as cost reduction, harmonization and shifts in roles. In other words, local adaptation, while necessary in order to confer legitimacy and increase user acceptance, has also been responsible for increases in costs, time consuming administrative tasks, and in some cases a decrease in the perceived quality of HR service delivery. This should alert us to the possibility that too much adaptation may reduce the benefits of globally standardized systems and the ability of e-HRM to transform the role of HR. While some of the localization issues identified in this study might be specific to China; legislation, networks, corruption and language standardization are also likely to be relevant in the institutional settings of a number of other countries. The findings of this study also suggest that a non-Western institutional environment is not always a barrier for to e-HRM realizing its strategic potential. Evidence of the ease of implementation, focus on talent management systems, issues regarding corruption and the piloting of the Chinese system suggests that the Chinese environment can, to a certain extent, increase the realization of e-HRM's potential in MNCs, by transpositioning the strategic e-HRM activities to the Chinese environment. In other words, the institutional pressures, particularly in the turbulent emerging market context, seem to create conflicts and demand adjustment for e-HRM systems. This in turn creates functional and dysfunctional outcomes for strategic e-HRM, such as transpositioning of new strategic IS practices.

Finally, the findings of the articles indicate that strategic potential will be dependent on (a) the institutional setting of the subsidiary (b) how the subsidiary and its e-HRM systems and system users respond to the pressures arising from that setting. Again, the micro-political view adopted in Article 1 supports the approach in Article 3 and vice versa. By going beyond dualist paradigms, Article 1 captures the intended and actual considerations and decisions of an actor during the processes, so as to disentangle the discourses of rational intentions and the degree to which they are shaped by various institutional logics in Article 3. The advantage of reviewing macro institutional pillars with Scott (2001) adds to our knowledge about the connection of ideas adopted by actors and the prevailing institutional logics. By combining the theoretical approaches in Articles 1 and 3 we can now more accurately represent the multiple and layered factors of influence which shape the reality of e-HRM systems as operating in MNC subsidiaries. Such a combination will also advance theorization and researching of the outcomes of e-HRM implementation in MNC subsidiaries.

5.1.3 Futures Studies' IT trends and outcomes for HRM and e-HRM

Article 4 sheds light on the future impact of e-HRM. By suggesting that we are in *the era of social media* as a main finding of the study and specifically regarding the MNC context in Article 4, social media seems to be facilitating technology in recruitment, information sharing and training. Social media is particularly affecting control and evaluation issues within MNCs. The use of the Delphi method reported in Article 4 was a first attempt to utilize future perspectives in the discussion of the impact of e-HRM. By shedding light on the future implications of e-HRM gleaned from e-HRM experts, this method has been successfully applied in e-HRM studies with a focus on social media and recruiting and employee branding via IT.

When looking at Article 4 as a whole, it seems that technological developments will have implications for the role of HR in terms of whether it will be able to work outside traditional functional boundaries or silos, which have been reported as a hindrance for e-HRM by Tansley et al. (2001). Traditional silos in MNCs such as rewards and performance management must be made to work together collaboratively across boundaries and borders. Therefore social media, although being universal phenomenon, is particularly relevant for MNCs as the use this technology, at least in theory, connects all levels and individuals of an organization and therefore thas the potential to reduce “silo-thinking”.

In the future, the accelerating technology developments will require even more adaptability from HR. The capacity to understand the role of organizational politics, standardized language and the influence of institutional forces combined with the development of collaborative technology will be crucial for MNCs. From the qualitative approach, Article 2 suggested language issues remain reality in the near future where Article 3 provided evidence that MNCs were piloting local Chinese systems for international use, which might suggest that in the near future we might see trend of non-Western e-HRM vendors entering the international market.

In addition to facing a silo structure, many recruiting, performance and talent management systems are currently developed in Western countries and consequently the HR processes inherent in these systems are rooted in Western values. As a result, the system used may be less effective when used in nations with significantly different cultures (Stone 2005). In terms of the IS field, Leonardi (2008) also discusses this dilemma of localization and standardization:

> *[...] when technologies developed in Western industrialized countries are implemented in non-Western countries, there is far greater potential for mismatches between the (Western) cultural logics inscribed in the technologies and those (non-Western) cultural logics through which the technologies are perceived and used and around which work is structured.* (2008: 981)

This point leads to the discussion of what is international e-HRM and where it is going in the near future.

5.2 Toward truly international e-HRM

Following on from the above discussion of results, this cross-disciplinary dissertation will now attempts to open the discussion and research streams and define the characteristics of international e-HRM. The discussion is informed by streams of literature from international business, HRM, IS, Futures Studies and e-HRM, and leads to a picture of international e-HRM where different technologies, actors and institutional (including language) settings create a complex reality that affects e-HRM outcomes now and will do so in the future.

The foundations of truly international e-HRM lie in a mix of local adaptation needs and Western-origin practice standardization. When looking to the future, MNCs tend to move their business focus beyond the Western economies and with this in mind this thesis suggests that the approach towards standardization - local adaptation is being brought into question. The increased pace of globalization of business continues to change the prevailing business reality. Its effects include increased uncertainty, complexity and the unpredictability of institutional forces and especially the increasing domination of developing economies over Western economies, which, however, still dictate the development of e-HRM systems used by MNCs.

Truly international e-HRM should acknowledge these realities and how these issues will be problematic in MNC subsidiaries. More precisely, implementation and use of e-HRM without a doubt will be even more complex reality in the future, therefore research should go deeper with the issues of organisational politics and institutional factors influencing e-HRM. The current state of affairs brings significant implications for e-HRM in MNCs and e-HRM research in general. Perhaps the most important is that: "one of the important accelerators of technological developments will be an expanding flow of innovative technology ideas from emerging markets, especially India and China which ensure continued emergence of potentially disruptive technologies" (EIU 2011:12) and this should be one of the major focus areas for future research and practice.

Article 3 contains a minor 'weak signal' finding. Three subsidiaries that were piloting local, Chinese vendor-based systems advised that their systems were being prepared for global piloting during 2011, meaning Chinese e-HRM systems have the potential to be a template for e-HRM systems in other MNC subsidiaries. This directs discussion to the view of Pudelko and Harzing (2008) who conclude that the debate concerning standardization and localization needs to be extended to include the possibility that, in a globalized business environment, ethnocentric approaches to management are no longer sustainable.

To support this view, Stone, Stone-Romero and Lukaszewski (2003) concluded that many e-HRM systems are developed in Western cultures and consequently the HR processes inherent in these systems are rooted in Western cultural values (e.g., the meritocracy, individualism). As a result, e-HRM systems may be less effective when used outside Western countries. This tone is echoed in HR research from China. For example, Zhao and Ju (2011) posit that the majority of models of HR management originate from developed Western countries, and that while it is necessary to borrow relevant experiences from developed countries, it is, however, crucial to establish local theories and modes that are adaptable to transitional and other economies beyond the West.

The aforementioned leads to the question of whether e-HRM originating in the West is a threat to e-HRM playing a part in strategic role For instance, Baptista et al (2010) sheds light on the dark side of institutionalized intranets: "Aligning [standardizing] technology may be desirable to increase efficiency, however, it may also lead to too much specialization and lack of flexibility to respond to changes in the business environment" (2010: 22). This dissertation argues that when e-HRM is standardized in MNCs based on Western characteristics, systems will produce undesired and dysfunctional outcomes. Studying these issues needs multidisciplinary approach, therefore research will benefit from the approaches used in this dissertation in an attempt to study the issues of MNC politics, language and institutions in regards of e-HRM implementation and use.

With the rapid development of cloud computing and social media technology and its improved usability with the ability to measure e-HRM more efficiently, the question is not where to standardize or localize or where to centralize or decentralize. In the future these are unlikely to be either/or decisions; they are likely to be nuanced decisions based on measurement of the unique value each e-HRM practice or process can offer for a particular subsidiary in a particular institutional context.

5.3 Limitations and future research

This section presents the main limitations of the individual articles and presents some general limitations which apply to Articles 1, 2, and 3. It also addresses whether the limited use Delphi method in the e-HRM field to date constitutes a limitation. More specific limitations may be found in the articles themselves.

To begin with, in terms of theory building and based on the review of most reviewed articles, there is a need to conduct large surveys. For instance, the findings of Article 1 with its single case design should not be generalized to a wider population. The focus of Article 1 was on a Finnish subsidiary unit, and including respondents from other units and conducting surveys could have provided more insight into the key actors and conflict areas. It would have been especially productive to have interviewed consultants to clearly establish their roles. The subject merits more attention because Article 1 makes it apparent that third-party consultants have dual roles in the e-HRM context. Instead of studying clients of e-HRM, research should also focus on vendors and their views on the implementation and use of e-HRM. Research could also critically analyze the studies published by vendors and compare them to existing peer-reviewed research.

Although UTAUT in Article 2 has been used by Ruta (2005) in an MNC context, language was not subject to academic attention and similarly to other disciplines, was viewed as a medium of communication (Piekkari et al. 2005). Future research might therefore focus on the relative importance of language standardization in countries where English in not widely spoken. In addition, research should particularly focus on line managers and other end users, who might lack language competence. For the coming five years, research in the field of language and e-HRM should focus on the rapid advance of translation machines and how their use effects on the implementation and outcomes of e-HRM. Another aspect is to conduct systematic analysis on how incorrect translation effects e-HRM implementation in MNCs.

The multiple case study approach of Article 3 suffers from its restricted unit location; all subsidiaries were located in Beijing and Shanghai. There are considerable regional differences in the institutional environment in China, meaning generalizations to wider populations of subsidiaries and e-HRM practices should only be attempted with caution. Furthermore, this study did not attempt to list differences among industries, future research could focus on specific industries and regions in China. Finally, the use of English when interviewing Chinese respondents may have given rise to cultural misunderstandings, so ideally, researchers should in future team up with a Chinese researcher to ensure cultural and language barriers do not hinder the research.

Similar to the language issues raised in Article 2, more general institutional issues have been neglected within the area of e-HRM studies, even though Article 3 established that institutional factors have a major impact on e-HRM outcomes. Future research should utilize this approach to study more emerging economies and investigate the current ‘hybrid’ e-HRM model MNCs are using when searching for the optimal balance of strategic e-HRM. On a more general note, in Articles 1, 2, and 3 respondents were subsidiary HR managers or e-HRM experts and were mostly in the role of single informants for their particular subsidiary. To increase validity, future research should increase the informant number per subsidiary and particularly focus on the experiences of other key e-HRM end users such as line managers. All in all, theoretical approaches in articles 1, 2 and 3 serve a basis for large scale surveys which would further confirm the validity of these theories in international e-HRM research.

Article 4 concentrates on a number of chosen and predetermined areas of interest seen as important in e-HRM and had a positivist orientation which was chosen by the researcher. As a result of question setting, critical questions regarding negative aspects of e-HRM were not widely addressed by the expert panel. With regard to the dissertations findings in Article 4, the marketing function has been argued to be the most advanced adopter of social media (Cooke & Nick 2008). While marketing professionals are actively and regularly participating in social networks on a weekly basis, their usage of a variety of existing social media tools remains infrequent (Ama 2009).

The current level of adoption of social media tools by marketing professionals seems still to be fairly low, while the majority acknowledges that participation in social networks is important to their business and career. As this finding relates to a business field that is more people oriented, one might assume social media's influence on HRM is still theoretical. Future research might use the Delphi method to judge the importance of social media and invite line managers to participate as respondents, so the research generated might reflect the reality for end users in firms.

In addition, Article 4 is not industry-, shareholder- or company- specific and more detailed information should be provided in further studies. For example, its results do not mean that all organizations and professionals are using e-HRM and its functionality to a similar extent or will do so in the future. For example, a study by Ball (2001) showed that there is a significant relationship between the use of information systems and the size of an organization and which modules it adopts. The final limitation presented concerns implications being more complex than this study has reported. Implications (referred to as consequences by Strohmeier (2009)) are (un)expected and (un)desired. For instance, the desired consequences of reducing the cost of and accelerating recruitment can be anticipated following the adoption of a certain recruiting system. As mentioned, such expected and desired consequences are the key reason for using e-HRM systems. However, unexpected and undesired consequences may also occur. Strohmeier (2009) notes that researching undesired consequences adds complexity to research. The scope of this study meant it focused on a variety of future implications, and could not be stretched to detailed specification to panelists of this or other concepts raised by Strohmeier (2009).

In this dissertation, "international e-HRM" is what about happens in MNCs. . Future international research should focus on the converge and divergence of e-HRM practices in MNCs. For instance, research should look into how does institutional duality influence how IT is transforming HR role across MNCs operating in international stage and are we seeing IT – driven convergence of HR practices, i.e. domination of certain vendors and what implications this might have.

As a whole, the methodologies in this thesis reflect 'normal' Western practice, therefore, for example, studying the Chinese context is restricted to a narrow Western view and the results presented to suit a Western audience, which Westwood (2004) argues is, in international business studies, the exercise of political power where science and technology components of so-called development that are controlled by culture of North are trying to displace others. To avoid this, the international e-HRM researcher should team up with local researchers to learn of each other's knowledge systems and scientific bases. This would be fruitful, as an analysis of Chinese management studies has showed that 80 percent of authors are from the USA, Canada, or the UK (Li & Tsui 2002).

In terms of cross-disciplinary research, this dissertation suggests that there is a need to expand and mix the theoretical foundations of HR and IS disciplines and also combine them with international business and Futures Studies approaches. For instance, other HR disciplines such as organizational psychology are valuable, but the research reflected in the articles of this dissertation indicates that HR in MNCs is reaching beyond these traditional areas towards more IS-related issues. Therefore, theoretical investigations should also follow this route. In addition to learning from other disciplines, qualitative methods in this thesis provide a meaningful insight into the complex, dynamic, interrelated nature of social systems in which they are produced are re-produced. Therefore, there is a particularly strong case for future international e-HRM research to continue on the qualitative path.

In broader terms, Westwood (2004) argues that international business management research, in which international e-HRM can be classified as a sub-discipline, suffers from being conceptualized through the refracting lens of Western categories, constructs, theories, and methods. In the future, international e-HRM research should incorporate local knowledge systems and their modes of representation into theoretical approaches. Given the prevailing nature of geo-politics in academic research, this is not an easy task. However, by doing so, the emergent field of international e-HRM could claim to be truly international.

5.4 Managerial implications

When discussing practical implications of international e-HRM for practitioners, it can be concluded that this field is far more complex than the indigenous e-HRM field and underestimating the issues presented in this dissertation could cause major issues for MNCs and MNC subsidiaries in their routine operations.

In the light of the results of this dissertation, general early-stage implementation plans should be adapted to the local context in order to increase the actual use of e-HRM in the subsidiary. Communication between headquarter and subsidiaries is even more critical as "e-enablement" of HR puts subsidiary HR to the key role of gatekeeper of adopting new practices and using local ones. The key actor role, which tries to interpret different institutional forces, will give subsidiary HR manager more important role. Local subsidiary managers and e-HRM experts can weaken and modify disagreeable requests from corporate HR by referring to the institutional structures in their country which may create additional conflicts. With the powerful role, both subsidiary HR and IT managers should consider more closely the messages that are communicated for corporate HR and to line managers.

When the desired usage rate of the implemented e-HRM system is achieved, and in order to exploit the maximum benefits of e-HRM systems, managers should also consider the role of language within the MNC units. For example, ensuring that everyone has sufficient English language skills can increase e-HRM adoption and therefore HR should consider creating a position of Language Manager. Mandating a *lingua franca* can provoke intense and even destructive dynamics inside an MNC, and must therefore be managed with caution. Finally, there should be attention to issue of allocating the translation work. Wrongly allocated translation work can have effects on the strategic e-HRM as articles 2 and 3 suggested.

Although the author has a positive orientation toward technology, there are disadvantages to technology for e-HRM users. Even when e-HRM might strategically free up certain system stakeholders from administrative duties, it can be increasingly difficult to disconnect, especially from mobile technology. Failure to disconnect from online duties can lead to a certain degree of data overload and deterioration of the work/life balance. Managers should also acknowledge that adopting technology itself would not bring improvements in HRM; instead, the practices and processes that will be powered by technology must be developed simultaneously. Moreover, not everyone wants to be what is colloquially termed 'tech savvy' and embrace new practices enabled by technology. Indeed, technology enabled processes will be as effective as the people who use them and failure to recognize this will ultimately lead to failure.

The future challenges also include developing new skills in for example technological collaboration, data analysis and skills to customize the e-HRM processes suitable for MNC subsidiaries. If the managers in MNCs can combine the local needs and global requests, especially in emerging economies, the outcomes could be particularly fruitful for strategic e-HRM. By acknowledging the importance of institutions in the host country and learning from those economies, managers can benefit from the combination of the local and the global. Such a skill set will shape the future role of the HR and IT manager and if systems are successfully adopted, this will propel e-HRM one step closer to a strategic role, the ultimate role that e-HRM has the potential to achieve.

REFERENCES

Abdinnour-Helm, S., Lengnick-Hall, M., Lengnick-Hall, C. (2003). Pre-implementation attitudes and organizational readiness for implementing an Enterprise Resource Planning system. *European Journal of Operational Research* 146, 258–273.

Ajzen, I (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50:2, 179–211.

Alasuutari, P. (1995). *Laadullinen tutkimus* (Qualitative Research). 2. uudistettu painos. Tampere: Vastapaino.

AMAAMA (2009). *American Marketing Association Social Media, Survey Results and Analysis 2009*. 1st edition.

Andersen, P.H. & Skaates, M.A. (2004). Ensuring validity in qualitative international business research. In R. Marschan-Piekkari & C. Welch (Eds). *Handbook of Qualitative Research Methods for International Business.* Cheltenham: Edward Elgar.

Andersen, H. & Rasmussen, E.S. (2004). The role of language skills in corporate communication. *Corporate Communication: An International Journal* 9:2, 231–242.

Ball, K.S (2001). The use of human resource information systems: a survey. *Personnel Review* 30:6, 677–693.

Baptista, J., Newell, S., & Currie, W. (2010). Paradoxical effects of institutionalization on the strategic awareness of technology in organizations. *Journal of Strategic Information Systems* 19, 171–183.

Barner-Rasmussen, W. & Björkman, I. (2007). Language fluency, socialization and inter-unit relationships in Chinese and Finnish subsidiaries. *Management & Organization Review* 3:1, 105–128.

Barner-Rasmussen, W. (2003). *Knowledge Sharing in Multinational Corporations: a Social Capital Perspective*. Yliopistopaino, Helsinki, Swedish School of Economics and Business Administration, No. 113. PhD thesis.

Bartlett, C. & Ghoshal, S. (1989). *Managing Across Borders*. Cambridge, MA: Harvard Business School Press.

Becker-Ritterspach, F.A.A. (2005). Transfer, intercultural friction and hybridization: Empirical evidence from a German automobile subsidiary in India. *Asian Business and Management* 4:4, 365–387.

Beamish, N., Armistead, C., Watkinson, M., & Armfield, G. (2002). The deployment of e-learning in UK/European corporate organizations. *European Business Journal* 14:3, 105–115.

Bell, W. (1997). *Foundations of Futures Studies: Human Science for a New Era. Volume 1, History Purposes and Knowledge*. NY: Transaction.

Bell, W. (2003). *Foundations of Futures Studies: Human Science for a New Era. Volume 1, History Purposes and Knowledge*. 2003 ed. NY: Transaction.

Bell, B.S., Lee, S-W. & Yeung, S.K. (2006). The impact of e-HR on professional competence in HRM: Implications for the development of HR professionals. *Human Resource Management* 45:3, 295–308.

Beulen, E. (2008). The enabling role of information technology in the global war for talent: Accenture's industrialized approach. *Information Technology for Development* 14:3, 213–224.

Bhaskar, R. (1979) *The Possibility of Naturalism. A Philosophical Critique of the Contemporary Human Sciences*. Brighton: Harvester. 43–44.

Bhaskar, R. (1993). *Dialectic: The Pulse of Freedom*. London: Verso. 253–254.

Björkman, I., Budhwar, P., Smale, A. & Sumelius, J. (2008). Human resource management in foreign-owned subsidiaries: China versus India. *International Journal of Human Resource Management* 19:5, 966–980.

Bondarouk, T.V. & Ruël, H.J.M. (2009a). Electronic human resource management: challenges in the digital era. *The International Journal of Human Resource Management* 20:3, 505–514.

Bondarouk, T.V & Ruël, H.J. (2009b). Structuring the IT-enabled transformation of HR: An HRM frames analysis in an international company. In Sparrow (Ed.). *Handbook of International Human Resource Management*. USA: John Wiley.

Bondarouk, T., Ruël, H. & Van der Heijden, B. (2009). e-HRM effectiveness in a public sector organisation: a multi-stakeholder perspective. *The International Journal of Human Resource Management* 20:3, 578–590.

Brockhoff, K. (1975). The performance of forecasting groups in computer dialogue and face-to-face discussion. In H. A. Linstone, & M. Turloff (Eds). *The Delphi Method: Techniques and Applications*. Reading, MA: Addison- Wesley. 291–321.

Bruntse, J. (2003). *It's Scandinavian: dansk-svensk kommunikation i SAS*. Institut for Nordisk Filologi, Kobenhavns Universitet, Copenhagen.

Burbach, R. & Royle, T. (2010). *Global Integration versus Local Adaption of an e-HRM System in a US MNC*. Proceedings of 3rd European workshop on e-HRM. Bamberg, Germany.

Burns, T. (1961). Micropolitics: mechanisms of institutional change. *Administrative Science Quarterly* 6:3, 257–281.

CedarCrestone (2010–2011). *HR Systems Survey: HR Technologies, Service Delivery Approaches, and Metrics*. 13th annual edition.

CedarCrestone (2010). *Going Global with HR Technologies. Research Based on the CedarCrestone 2010–2011 HR Systems Surve.*

Chapman, D.S. & Webster, J. (2003). The use of technologies in the recruiting, screening, and selection processes for job candidates. *International Journal of Selection and Assessment* 11:2/3, 113–120.

Chien, C-F. & Chen, L-F. (2008). Data mining to improve personnel selection and enhance human capital: A case study in high-technology industry. *Expert Systems with Applications* 34:1, 280–290.

Clemmons, S. & Simon, S.J. (2001). Control and coordination in global ERP configuration. *Business Process Management Journal* 7:3, 205–215.

Colton, S. (2002). *Developing an Instrument to Analyze the Application of Adult Learning Principles to World Wide Web Distance Education Courses Using the Delphi Technique.* University of Louisville. Doctoral dissertation.

Compeau, D.R., Higgins, C.A. & Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: A longitudinal study. *MIS Quarterly* 23:2, 145–158.

Cooke, M. & Nick, S. (2008). Web 2.0, social networks and the future of market research. *International Journal of Market Research* 50:2, 267–292.

Czinkota, M.R. & Ronkainen, I.A. (2005). A forecast of globalization, international business and trade: report from a Delphi study. *Journal of World Business* 40:2, 111–123.

Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly* 13:3, 319–339.

Davis, F.D., Bagozzi, R.P. & Warshaw, P.R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science* 35:8, 982–1003.

Davies, P. (2006). *Exploratory Research*. The SAGE Dictionary of Social Research Methods. Ed. V. Jupp. ISBN: 9780761962984.

Dawson, M.D., Brucker, P.S. (2001). The utility of the Delphi method in MFT research. *The American Journal of Family Therapy* 29:2, 125–140.

Deans, P.C. & Karwan, K. (1997). Global information systems and technology: Focus on the organization and its functional areas. Series in *Global Information Technology Management*.

Denzin, N.K. (1978). *The Research Act: Theoretical Introduction to Sociological Methods*. New York: McGraw-Hill.

Dery, K., & Wailes, N. (2005). Necessary but not sufficient: ERPs and strategic HRM. *Strategic Change* 14:5, 265–272.

DeSanctis, G. (1986). Human resource information systems: A current assessment. *MIS Quarterly* 10:1, 15–27.

De Wit, F. (2011). *Where the Light Is: A Review of the Literature on Factors and Consequences of e-HRM Success and a Contingency Framework*. University of Twente, Netherlands. Master's thesis.

Dickmann, M. & Müller-Camen, M. (2006). A typology of international human resource management strategies and processes. *International Journal of Human Resource Management* 17:4, 580-601.

DiMaggio, P. & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociology Review* 48:2, 147–160.

Dowling, P.J. (1988) International and domestic personnel/human resource management: Similarities and differences. In R.S. Schuler, S.A. Youngblood & V.L. Huber (Eds). *Readings in Personnel and Human Resource Management*. 3rd ed. St. Paul, MN: West Publishing.

Doz, Y. & Prahalad, C.K. (1993). Managing DMNCs: A search for a new paradigm. In: S. Ghoshal & D.E. Westney (Eds). *Organization Theory and the Multinational Corporation.* Basingstoke, UK: MacMillan. 24–50.

Dörrenbächer, C. & Geppert, M. (2006). Micro-politics and conflicts in multinational corporations: Current debates, re-framing, and contributions of this special issue. *Journal of International Management* 12:3, 251–265.

Dörrenbächer, C. & Geppert, M. (2009). Micro-political games in the multinational corporation: The case of mandate change. *Management Revue* 20:4, 373–391.

Easterby-Smith, M., Thorpe, R. & Lowe, A. (1991). *Management Research: An Introduction*. London: Sage.

Edwards, T., Colling, T. & Ferner, A. (2007). Conceptual approaches to the transfer of employment practices in multinational companies: an integrated approach. *Human Resource Management Journal* 17:3, 201–217.

Ehrhart, K.H & Chung-Herrera, B.G. (2008). Developing effective HRM systems in the context of E-service. *Organizational Dynamics* 37:1, 75–85.

Eisenhardt, K. (1989). Building theories from case study research. *The Academy of Management Review* 14:4, 532–550.

Eskola, J. & Suoranta, J. (2005) *Johdatus laadulliseen tutkimukseen* (Introduction to qualitative research). Jyväskylä: Vastapaino.

Evans, C. (1997). The use of consensus methods and expert panels in pharmacoeconomic studies. *Pharmacoeconomics* 12, 121–129.

Ezzy, D. (2002). *Qualitative Analysis: Practice and Innovation*. London, UK: Routledge.

Feely, A.J. & Harzing, A-W. (2003). Language management in multinational companies. *Cross Cultural Management: An International Journal* 10:2, 37–52.

Feldman D, C. & Klaas, B.S. (2002). Internet job hunting: A field study of applicant experiences with on-line recruiting. *Human Resource Management* 41:2, 175–192.

Ferner, A. (2000). The underpinnings of 'bureaucratic' control systems: HRM in European multinationals. *Journal of Management Studies* 37:4, 521–539.

Ferner, A. & Edwards, P.K. (1995). Power and the diffusion of organizational change within multinationals. *European Journal of Industrial Relations* 1:2, 229–257.

Ferner, A. & Quintanilla, J. (1998). Multinationals, national business systems and HRM: the enduring influence of national identity or a process of 'Anglo-Saxonization'. *International Journal of Human Resource Management* 9:4, 710–731.

Ferner, A., Almond, P., Clark, I., Colling, T., Edwards, T., Holden, L. & Muller-Camen, M. (2004). The dynamics of central control and subsidiary autonomy in the management of human resources: case-study evidence from US MNCs in the UK. *Organization Studies* 25:3, 363–391.

Ferner, A., Almond, P. & Colling, T. (2005). Institutional theory and the cross-national transfer of employment policy: the case of 'workforce diversity' in US multinationals. *Journal of International Business Studies* 36:3, 304–321.

Forsgren, M. (1990). Managing the international multi-centre firm: Case studies from Sweden. *European Management Journal* 8:2, 261–267.

Fisher, S. L., & Howell, A.W. (2004). Beyond user acceptance: An examination of employee reactions to information technology systems. *Human Resource Management*. 43:2&3, 243–258.

Florkowski, G. & Olivas-Luján, M.R. (2006). Diffusion of information technology innovations in human resource service delivery: A cross-country comparison. *Personnel Review* 35:6, 684–710.

Fredriksson, R., Barner, W. & Piekkari, R. (2006). The multinational corporation as a multilingual organization: The notion of a common corporate language. *Corporate Communications: An International Journal* 11:4, 406–423.

Geppert, M., Matten, G. & Williams, K. (2003). Change management in MNCs: How global convergence intertwines with national diversity. *Human Relations* 56:7, 807–838.

Geppert, M. & Mayer, M. (2006). Introduction. In M. Geppert & M. Mayer (Eds). *Global, National and Local Practices in Multinational Companies*. Basingstoke: Palgrave Macmillan. 1–14.

Ghauri, P. (2004). Designing and conducting case studies in international business research. In R. Marschan-Piekkari & C.Welch (Eds). *Handbook of Qualitative Methods for International Business*. Cheltenham: Edward Elgar. 109–204.

Gimenez, J. (2002). New media and conflicting realities in multinational corporate communication: a case study. *International Review of Applied Linguistics in Language Teaching* 40:4, 323–344.

Girard, A. & Fallery, B. (2009). e-recruitment: New practices, new issues an exploratory study. In T. Bondarouk & H. Ruël (Eds). *Proceedings of the third International Workshop on Human Resource Information Systems*. Milan, Italy: INSTICC Press. 39–48.

Girard, A., Fallery, B. & Rodhain, F. (2012). *Social Media and Recruitment: A Delphi Study*. Proceedings of 4th e-HRM workshop. Nottingham, UK.

Gratton, L. (2011). Workplace 2025 – What will it look like? *Organizational Dynamics* 40:4, 246–254.

Gueutal, H. & Stone, D.L. (2005). *The Brave New World of eHR: Human Resources in the Digital Age*. CA, USA: Wiley.

Gummesson, E. (2006). Qualitative research in management: Addressing complexity, context and persona. *Management Decision* 44:2, 167–179.

Haines, V.Y. & Lafleur, G. (2008). Information Technology usage and human resource roles and effectiveness. *Human Resource Management* 47:3, 525–540.

Haines, V.Y. and Petit, A. (1997). Conditions for Successful Human Resource Information Systems. *Human Resource Management* 36: 2, 261–275.

Hair, J., Money, A., Samouel, P. & Page, M. (2007). *Research Methods for Business*. Chichester, UK: John Wiley & Sons.

Hannon, J., Jelf, G. & Brandes, D. (1996). Human resource information systems: Operational issues and strategic considerations in a global environment. *International Journal of Human Resource Management* 7:1, 245−269.

Hart, C. (1998). *Doing a Literature Review: Releasing the Social Science Research Imagination*. London, UK: Sage.

Hatcher, T. & Colton, S. (2007). Using the internet to improve HRD research: The case of the web-based Delphi research technique to achieve content validity of an HRD-oriented measurement. *Journal of European Industrial Training* 31, 570–-582.

Harzing, A-W. & Feely, A. (2008). The language barrier and its implications for HQ-subsidiary relationships. *Cross Cultural Management: An International Journal* 15:1, 49–61.

Heikkilä, J-P. (2010). *A Delphi Study on E-HRM: Future Directions*. 3rd European Academic Workshop on Electronic Human Resource Management 05. Bamberg, Germany.

Hellström, T., Kemlin, P. & Malmquist, U. (2000). Knowledge and competence management at Ericsson: decentralization and organizational fit. *Journal of Knowledge Management* 4, 99–110.

Haines, V.Y. & Lafleur, G. (2008). Information technology usage and human resource roles and effectiveness. *Human Resource Management* 47:3, 525–540.

Hannon, J., Jelf, G. & Brandes, D. (1996). Human resource information systems: operational issues and strategic considerations in a global environment. *International Journal of Human Resource Management* 7:1, 245–269.

Helmer, O. (2003). *Looking Forward: A Guide to Futures Research*. London: Sage.

Hoobler, J.M. & Johnson, N.B. (2004). An analysis of current human resource management publications. *Personnel Review* 33:6, 665–676.

Hooi, L.W. (2006). Implementing e-HRM: The readiness of small and medium sized manufacturing companies in Malaysia. *Asia Pacific Business Review* 12:4, 465–485.

Huang, J-H., Jin, B-H. & Yang, C. (2004). Satisfaction with business-to-employee benefit systems and organizational citizenship behavior: An examination of gender differences. *International Journal of Manpower* 25:2, 195−210.

Huber, G. P. & Power, D.J. (1985). Research notes and communication retrospective reports of strategic level managers: Guidelines for increasing their accuracy. *Strategic Management Journal* 6, 171–180.

Hustad, E., & Munkvold, B. E. (2005). IT-supported competence management: A case study at Ericsson. *Information Systems Management* 22:2, 78–88.

Janssens, M., Lambert, J. & Steyaert, C. (2004). Developing language strategies for international companies: the contribution of translation studies., *Journal of World Business* 39 :4, 414–30.

Kaivo-Oja, J. & Kuusi, O. (1999) Arvioita ja analyysejä tietoyhteiskunnan työmarkkinoiden kehityspiirteistä Suomessa. ESR-julkaisu 42/99. Helsinki: Edita

Kankaanranta, A. (2005). *Hej Seppo, Could you Pls Comment on This! – Internal email Communication in Lingua Franca English in a Multinational Company*. University of Jyväskylä. Centre for Applied Language Studies. PhD thesis.

Kamppinen, M., Kuusi, O. & Söderlund, S. (2003). *Tulevaisuudentutkimus*. Perusteet ja sovelluksia. 2.painos. Suomalaisen Kirjallisuuden Seuran Toimituksia 896. Tampere :Tammer-Paino.

Kavanagh, M., Thite, M. & Johnson, R. (2012). *Human Resource Information Systems: Basics, Applications and Directions*. 2nd ed. Thousand Oaks, California: Sage.

Keeney, S., Hasson, F. & McKenna, H. (2006). Consulting the oracle: ten lessons from using the Delphi technique in nursing research. *Journal of Advanced Nursing* 53:2, 205–212.

Kennedy, H.P. (2004). Enhancing Delphi research: methods and results. *Journal of Advanced Nursing* 45:5, 504–511.

King, W. & He, J. (2006). A meta-analysis of the technology acceptance model. *Information & Management* 43, 740–755.

Kluemper, D. & Rosen, P. (2009). Future employment selection methods: evaluating social networking web sites. *Journal of Managerial Psychology* 24, 567–580.

Kostova, T. (1999). Transnational transfer of strategic organizational practices: a contextual perspective. *Academy of Management Review* 24:2, 308–324.

Kostova, T & Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporation: Institutional and relational effects. *Academy of Management Journal* 45:1, 215–233.

Kuusi, O. (2002). Delfoi-menetelmä. In M. Kauppinen, O. Kuusi & S. Söderlund (toim.). *Tulevaisuudentutkimus – Perusteet ja sovellukset*. Helsinki. Suomalaisen kirjallisuuden seura. 204–225.

Lane, H., Maznevski, M. & Mendenhall., M (2004). Globalization, when hercules meets buddha. In: H. Lane, M. Maznevski, M. Mendenhall, J. McNett (Eds). *Handbook of Global Management*. Cornwall, UK: Blackwell. 3–25.

Lawler, E., Levenson, A. & Boudreau J. (2004). HR metrics and analytics: use and impact. *Human Resource Planning* 27:4, 27–35.

Lepak, D. & Snell, S.A. (1998). Virtual HR: Strategic human resource management in the 21st century. *Human Resource Management Review* 8:3, 215–234.

Lepak, D.P., Smith, K.G. & Taylor, M.S. (2006). Value creation and value capture: A multilevel perspective. Introduction to a special topic forum. *Academy of Management Review* 32:1, 180–194.

Lepak, D.P. & Shaw, J.D. (2008). Strategic HRM in North America: looking to the future. *International Journal of Human Resource Management* 19:8, 1486–1499.

Lervik, J.B. (2011). The single MNC as a research site. In: R. Piekkari & C. Welch (Eds). *Rethinking the Case Study in International Business and Management Research*. USA: Edward Elgar Publishing.

Leonardi, P.M. (2008). Indeterminacy and the discourse of inevitability in international technology management. *Academy Management Review* 33:4, 975–984.

Li, J. & Tsui, A. (2002). A citation analysis of management and organization research in the Chinese context: 1984–1999. *Asia Pacific Journal of Management* 19, 87–107.

Lin, C.Y.Y. (1997). Human resource management in Taiwan: a future perspective. *International Journal of Human Resource Management* 5, 57–72.

Lincoln, Y. & Guba, E. (1985). *Naturalistic Inquiry*. Thousand Oaks, CA: Sage.

Lobel, S.A., Bradley, K.G. & Bankert, E. (1999). The future of work and family: Critical trends for policy, practice and research. *Human Resource Management* 38, 243–254.

Loo, R. (1996). Managing workplace stress: a Canadian Delphi study among human resource managers. *Work & Stress* 10:2, 183–189.

Loughlin, K.G. & Moore, L.F. (1979). Using Delphi to achieve congruent objectives and activities in a paediatrics department. *Journal of Medical Education* 54:2, 101–106.

Louhiala-Salminen, L., Charles, M. & Kankaanranta, A. (2005). English as lingua franca in Nordic corporate mergers: two case companies. *English for Specific Purposes* 24:4, 401–421.

MacCormick, J.S., Dery, K. & Kolb, D.G. (2012). Engaged or just connected? Smartphones and employee engagement. *Organizational Dynamics* 41, 194–201.

Macionis, J. & Gerber, L. (2011). *Sociology*. 7th ed. Canada: Pearson.

Mannermaa, M. (1999). Tulevaisuuden hallinta. Skenaariot strategiatyöskentelyssä. Porvoo, Helsinki, Juva: WSOY.

Marchand, D. (2004). Seeking global advantage with IM and IT capabilities. In Lane et al. (Eds). *Handbook of Global Management*. Cornwall, UK: Blackwell.

Marler, J.H. & Fisher, S.L. (2012). An evidence-based review of e-HRM and strategic human resource management. *Human Resource Management Review*.

Marler, J. H. (2009). Making human resources strategic by going to the Net: reality or myth? *The International Journal of Human Resource Management* 20, 515–527

Marschan-Piekkari, R., Welch, D. & Welch, L. (1997). Language the forgotten factor in multinational management. *European Management Journal* 15:5, 591–598.

Marschan-Piekkari, R., Welch, D. & Welch, L. (1999). Adopting a common corporate language: IHRM implications. *International Journal of Human Resource Management* 10:3, 377–390.

Martin, G., Reddington, M. & Alexander, H. (Eds) (2008). *Technology, Outsourcing and Transforming HR: Potentials, Problems, and Guidance for Practitioners*. Oxford: Butterworth- Heinemann/Elsevier.

Martin, G. & Reddington, M. (2009). Reconceptualising absorptive capacity to explain the e-enablement of the HR function (e-HR) in organizations. *Employee Relations* 31:5, 515–537.

Martin, G., Reddington M., Kneafsey, M.B. & Sloman, M. (2009). Scenarios and strategies for Web 2.0. *Education & Training* 51:5/6, 370–380.

Martinsons, M.G. (1994). Benchmarking Human-Resource Information-Systems in Canada and Hong-Kong. *Information & Management* 26:6, 305–316.

Masini, E.B. (2001) New challenges for futures studies. *Futures* 33, 637–647.

McGuire, D. & Cseh, M. (2006). The development of the field of HRD: a Delphi study. *Journal of European Industrial Training* 30:8, 653–667.

Mead, D.M. & Moseley, L.G. (2001). The use of Delphi as a research approach. *Nurse Researcher* 8, 4–37.

Moore, G.C. & Benbasat, I. (1996). Integrating diffusion of innovations and theory of reasoned action models to predict utilization of information technology by end-users. In K. Kautz & J.Pries-Hege (Eds). *Diffusion and Adoption of Information Technology*. London, UK: Chapman and Hall. 132–146.

Morris, S.S., Wright, P.M., Trevor, J., Stiles, P., Stahl, G.K., Snell, S., Farndale, E. (2009). Global challenges to replicating HR: The role of people, processes, and systems. *Human Resource Management* 48:6, 973–995.

McKenna, H. (1994). The Delphi technique: a worthwhile approach for nursing? *Journal of Advanced Nursing* 19, 1221–1225.

McKenna, H.P., Bradley, M. & Keeney, S. (2000). *Primary Care Nursing: a Study Exploring Key Issues for Future Developments*. Newtownabbey: University of Ulster Press.

Mense-Petermann, U. (2006). Micro-political or inter-cultural conflicts? – An integrating approach. *Journal of International Management* 12:3, 302–317.

Merriam, S. (1998). *Qualitative Research and Case Study Application in Education*. San Francisco: Jossey-Bass.

Ngai, E.W.T. & Wat, F.K.T. (2006). Human resource information systems: a review and empirical analysis. *Personnel Review* 35:3, 297–314.

Nevo, D. & Chan, E. (2007). A Delphi study of knowledge management systems: Scope and requirements. *Information & Management* 44, 583–597.

Nickerson, C. (2005). English as a lingua franca in international business contexts. *English for Specific Purposes* 24:4, 367–380.

Olivas-Luján, M.R., Ramírez, J. & Zapata Cantú, L. (2006). e-HRM in Mexico – Towards a Research Agenda. *Proceedings of the First European Academic Workshop on e-HRM*. Enschede, the Netherlands: U. of Twente. 113–124.

Olivas-Lujan, M., Ramirez, J. & Zapata-Cantu, L. (2007). E-HRM in Mexico: Adapting innovativeness for global competitiveness. *International Journal of Manpower* 28:5, 418–434.

Olivas-Luján, M.R. & Florkowski, G.W. (2009). The diffusion of HRITs across English-speaking countries. In T. Torres-Coronas & M. Arias-Oliva (Eds). *Encyclopedia of Human Resources Information Systems: Challenges in e-HRM, Volume I*. New York: IGI Global. 242–247.

Orlikowski, W.J. (1992). The duality of technology: rethinking the concept of technology in organizations. *Organization Science* 3:3, 398–427.

Orlikowski, W.J. (2000). Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science* 11:4, 404–428.

Ovaskainen, M. (2010). *Qualification Requirements of SMEs in Internet-based Electronic Commerce: Findings from Finland*. University of Jyväskylä. School of Business and Economics. Doctoral dissertation no. 87.

Patton, M. (2002). *Qualitative Evaluation and Research Methods*. Thousand Oaks, CA: Sage.

Parry, E., Dickmann, M. & Morley, M. (2008). North American MNCs and their HR policies in liberal and co-ordinated market economies. *International Journal of Human Resource Management* 19:11, 2024–2040.

Parry, E. & Tyson, S. (2011). Desired goals and actual outcomes of e-HRM. *Human Resource Management Journal* 21: 3, 335–35.

Piekkari, R. & Zander, L. (Eds) (2005). *Language and Communication in International Management, International Studies of Management & Organization*. New York: M.E. Sharpe.

Piekkari, R. (2006). Language effects in multinational corporations: A review from an international human resource management perspective. In G.K. Stahl & I. Björkman (Eds). *Handbook of Research in International Human Resource Management*. Cheltenham: Edward Elgar. 536–550.

Piekkari, R. & Tietze, S. (2011). A world of languages: Implications for international management research and practice. Guest-editors' introduction. *Journal of World Business* 46, 1–9.

Piekkari, R. & Welch, C. (2011). *Rethinking the Case Study in International Business and Management Research*. Northampton, USA: Edward Elgar.

Prahalad, C.K. & Doz, Y.L. (1987). *The Multinational Mission, Balancing. Global Integration with Local Responsiveness*. New York: Free Press.

Probst, G., Raisch, S. & Tushman, M. (2011). Ambidextrous leadership: Emerging challenges for business and HR leaders. *Organization Dynamics* 40, 326–334.

Pudelko, M. & Harzing, A.W. (2008). The Golden Triangle for MNCs: Standardization towards headquarters practices, standardization towards global best practices and localization. *Organization Dynamics* 37:4, 394–404.

Rao, P. (2009a). The role of national culture on e-recruitment in India and Mexico. In T. Bondarouk, H. Rüel, K. Guidedoni-Jourdain, & E. Oiry (Eds). *Handbook of Research on E-Transformation and Human Resources Management Technologies: Organizational Outcomes and Challenges*. New York: Hershey. 218–230.

Rao, P. (2009b). Identifying the 'best' human resource management practices in India: A case study approach. In T. Bondarouk & H. Ruël (Eds). *Proceedings of the Third International Workshop on Human Resource Information Systems*. Milan, Italy: INSTICC Press. 69–83.

Reddington, M., Williamson, M. & Withers, M. (2005). *Transforming HR: Creating Value Through People.* Oxford: Butterworth Heinemann.

Robinson, M., Sparrow, P., Clegg, C. & Birdi, K. (2007). Forecasting future competency requirements: a three-phase methodology. *Personnel Review* 36:1, 66–90.

Roehling, M., Boswell, W., Caligiuri, P., Feldman D., Graham, M., Guthrie, J. Morishima, M. & Tansky, J.W. (2005). The future of HR management: Research needs and directions. *Human Resource Management* 44:2, 207–216.

Rupidara, N.S & McGraw (2011) The role of actors in configuring HR systems within multinational subsidiaries. *Human Resource Management Review* 21, 174–185.

Ruël, H., Bondarouk, T. & Looise, J.C. (2004). *E-HRM: Innovation or Irritation? An Exploration of Web-based Human Resource Management in Large Companies*. Utrecht, The Netherlands: Lemma Publishers.

Ruël, H., Bondarouk, T. & Van der Velde, M. (2007). The contribution of e-HRM to HRM effectiveness. *Human Relations* 29:3, 280–291.

Ruël, H. (2009). Studying human resource information systems implementation using adaptive structuration theory: The case of an HRIS implementation at dow chemical company. In T. Bondarouk, H. Rüel, K. Guidedoni-Jourdain, & E. Oiry (Eds). *Handbook of Research on E-Transformation and Human Resources Management Technologies: Organizational Outcomes and Challenges*. New York: Hershey. 171–185.

Ruël, H. & Bondarouk, T. (2010). The intersection between information technology and human resource management from a cross-national perspective: towards a research model. In C.J. Brewster & M. Mayrhofer (Eds). *Handbook of Research on Comparative Human Resource Management.* Cheltebham,U.K.: Edward Elgar.

Ruta, C.D. (2005). The application of change management theory to HR portal implementation in subsidiaries of multinational corporations, *Human Resource Management* 44:1, 35–53.

Ruta, C.D. (2009). HR portal alignment for the creation and development of intellectual capital. *International Journal of Human Resource Management* 20:3, 562–577.

Saunders, M.P, Lewis, P. & Thornhill, A. (2007) *Research Methods for Business Students.* 4th ed. London: Financial Times and Prentice Hall.

Schmidt, R., Lyytinen, K., Kiel, M. & Cule, P. (2003). Identifying software project risks: an international Delphi study. *Management Information Systems* 17:4, 5–37.

Schoemaker, P.J.H. (1993). Multiple scenario development: Its conceptual and behavioral foundation. *Strategic Management Journal* 14:3, 193–213.

Schuler, R. & Jackson, S. (1987) Linking competitive strategies and human resource management practices. *Academy of Management Executive* 1:3, 207–219.

Scullion, H. (1995). International human resource management. In J. Story *(*Ed). *Human Resource Management: A Critical Text*. London: Routledge. 352–382.

Schwarz, S. (2008) Assessing the future studies in management. *Futures* 40: 237–246.

Scott, W. R., (2001*). Institutions and Organizations* (2nd ed.). Thousand Oaks, CA: Sage.

Sheu, C., Yen, H.R. & Krumwiede, D. (2003). The effect of national differences on multinational ERP implementation: an exploratory study. *Total Quality Management & Business Excellence* 14:6, 641–657.

Shrivastava, S. & Shaw, J.B. (2003). Liberating HR through technology. *Human Resource Management* 42:3, 201–222.

Smale, A. & Heikkilä, J.-P. (2009). IT-based integration of HRM in a foreign MNC subsidiary: a micro-political perspective. In T. Bondarouk, H. Ruël, K. Guiderdoni-Jourdain, & E. Oiry (Eds). *Handbook of Research on E-Transformation and Human Resources Management Technologies: Organizational Outcomes and Challenges*. London: Information Science Reference. 153–170.

Smale, A. & Heikkilä, J. (2008b). *IT – Based Integration of HRM in a Foreign MNC Subsidiary: A Micro Political Perspective*. 2nd European e-HRM Workshop, France, 05/2008.

Sparrow, P. (2009). *Handbook of International Human Resource Management.* (Eds.) Chippenham: Wiley.

Society for Human Resource Management (2011). *SHRM Survey Findings: An Examination of How Social Media Is Embedded in Business Strategy and Operations.*

Stahl, G. & Bjorkman, I. (Eds). (2006). *Handbook of Research in International Human Resource Management*. Cheltenham: Edward Elgar.

Stone, D.L, Stone-Romero, E.F. & Lukaszewski, K. (2003). The functional and dysfunctional consequences of human resource information technology for organisations and their employees. In D.L. Stone (Ed). *Advances in Human Performance and Cognitive Engineering Research*. Greenwich CT: JAI Press 37–68.

Stone, D., Stone-Romero, E. & Lukaszewski, K. (2006). Factors affecting the acceptance and effectiveness of electronic human resource systems. *Human Resource Management Review* 16, 229–244.

Strauss, A. & Corbin, J. (1998). *Basis of Qualitative Research. Techniques and Procedures for Developing Grounded Theory*. 2nd ed. Thousand Oaks, CA: Sage.

Strohmeier, S. (2007). Research in e-HRM: review and implications. *Human Resource Management Review* 17, 19–37.

Strohmeier, S. (2009). Concepts of e-HRM consequences: a categorisation, review and suggestion. *The International Journal of Human Resource Management* 20:3, 528–543.

Sørensen, E.S. (2005). *Our Corporate Language Is English: an Exploratory Survey of 70 DK-Sited Corporations' Use of English*. Aarhus Business School. Faculty of Language and Business Communication. Master's thesis.

Tan, H. & Nojonen, M. (2011). Doing case studies in China: two perspectives. In R. Piekkari & C.Welch (Eds). *Rethinking the Case Study in International Business and Management Research*. Northampton USA: Edward Elgar .

Tannenbaum, S.I. (1990). HRIS: user group implications. *Journal of Systems Management* 41:1, 27–32.

Tansley, C., Newell, S. & Williams, H. (2001). Effecting HRM-style practices through an integrated human resource information system. *Personnel Review* 30:3, 351–370.

Teo, T.S.H., Soon, L.G. & Fedric, S.A. (2001). Adoption and impact of human resource information systems (HRIS). *Research and Practice in Human Resource Management* 9:1, 101–117.

Thompson, R.L, Higgins, C.A. & Howell, J.M. (1994). Influence of experience on personal computer utilization: Testing a conceptual model. *Journal of Management Information Systems* 11:1, 167–187.

Tixier, J. (2004). Does the evolution of the human resources practices imply the implementation of an information system? For a contextualism of practices. *International Journal of Human Resources Development and Management* 4:4, 414–430.

Turoff, M. (1970). The design of a policy Delphi. *Technological Forecasting and Social Change* 2:2, 149–171.

Turoff, M. (1975) *The Policy Delphi. The Delphi Method: Techniques and Applications*. Reading: Addison-Wesley.

Ulrich, D. (1997). *Human Resource Champions: the Next Agenda for Adding Value and Delivering Results*. Boston, MA: Harvard Business School Press.

Valentine, S., Fleischman, G.M, Sprague, R. & Godkin, L. (2010). Exploring the ethicality of firing employees who blog. *Human Resource Management* 49:1, 87–108.

Vaughan, K. & MacVicar, A. (2004). Employees' pre-implementation attitudes and perceptions to e-learning. A banking case study analysis. *Journal of European Industrial Training* 28:5, 400–413.

Venkatesh, V. & Morris, M.G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly* 24, 115–139.

Venkatesh, W., Morris, M., Davis G. & Davis, F. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly* 27: 425–478.

Voermans, M. & Van Veldhoven, M. (2007). Attitude towards E-HRM: an empirical study at Philips. *Personnel Review* 36:5/6, 887–902.

Wallerstein I. (1996). *Open the Social Sciences*. Stanford: Stanford University Press.

Walker, A.J. (ed.) (2001). *Web-based Human Resources*. New York: McGraw-Hill.

Welch, D.E., Welch, L.S. & Marschan-Piekkari, R. (2001). The persistent impact of language on global operations. *Prometheus* 19:3, 193–209.

Welch, D., Welch, L. & Piekkari, R. (2005). Speaking in tongues: language and international management. *International Studies of Management & Organization* 35:1, 10–27.

Westwood, R. (2004). Towards a postcolonial research paradigm in international business and comparative management. In R. Marschan-Piekkari & C. Welch (Eds). *Handbook of Qualitative Research Methods for International Business*. Cheltenham, UK: Edward Elgar.

Ziglio, E. (1996). The Delphi method and its contribution to decision making. In M. Adler & E. Ziglio (Eds). *Gazing into the Oracle: the Delphi Method and its Application to Social Policy and Public Health.* London: Jessica Kingsley. 3–26.

Zhang, Y. & Salaba, A. (2009). What is next for functional requirements for bibliographic records? A Delphi study. *Library Quarterly* 79:2, 233–255.

Yin, S. (2003). *Case Study Research: Design and Methods*. Thousand Oaks, CA: Sage.

Yin, R.K (2009). *Case Study Research*: Design and *Methods*. 3rd ed. Thousand Oaks, CA: Sage.

Zhao, S. & Ju, J. (2011) Thirty-two years of development of human resource management in China: Review and prospects. *Human Resource Management Review.*

PART II: ARTICLES

Chapter IX
IT-Based Integration of HRM in a Foreign MNC Subsidiary:
A Micro-Political Perspective

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ABSTRACT

The design and implementation of a globally integrated e-HRM system within a multinational corporation (MNC) requires different parties to reach some form of agreement on which HR processes must be standardised and which must be locally adapted. In this respect, the IT-based integration of HRM presents an intriguing setting in which to study micro-political behaviour during HRM integration, that is, how parties promote their own interests and the strategies they use during negotiations. Accordingly, the study's aims were to identify those issues which generated the greatest degree of conflict during the IT-based integration of HRM, the key actors involved and the resources that were deployed during negotiations. A longitudinal, in-depth case study approach was used, and followed the integration of a global e-HRM system in the Finnish subsidiary of a large European-owned MNC over a period of nearly two years. Qualitative data was collected via semi-structured interviews with key subsidiary HR personnel and was complemented with company documentation. The findings indicate that the key areas of conflict were system design, the standardised use of English, and grey areas of HR policy. Three key parties were identified as being involved in subsequent negotiations. These parties utilised a range of negotiation resources including business case logic, technical know-how, internal benchmarking, local constraints and ignorance.

INTRODUCTION

One weakness that has been highlighted in the extant literature on HRM in multinational corporations (MNCs) is the over-emphasis on structural explanations of HRM practices in foreign subsidiaries and insufficient consideration of the role of organisational politics (Edwards & Kuruvilla, 2005). Case-study research suggests that our knowledge about how and why HRM integration takes place will remain incomplete if the contested nature of parent-subsidiary relations is not taken into account (Ferner, 2000; Ferner *et al*, 2005). These arguments essentially refer to the significance of subsidiary attitudes and the strategic responses that are open to subsidiary managers in the face of pressures to integrate parent HRM practices. Oliver (1991) cites this lack of attention to organisational self-interests as one weakness of institutional theory explanations of subsidiary behaviour and suggests that it should be complemented with a resource dependence perspective, which better acknowledges the strategies and tactics subsidiaries might use to resist institutional pressures.

In particular, these case studies highlight the seemingly important role that power relations and micro-political processes play in determining the use and effectiveness of different HRM integration mechanisms (Martin & Beaumont, 1999; Ferner, 2000). Empirical work by Ferner *et al.* (2004, 2005) elaborate further by presenting a dynamic view of HRM integration whereby mechanisms of HRM integration, centralisation in particular, are subject to continual negotiation between parent and subsidiary and are thus better viewed as contested processes of 'oscillation' between global integration and local responsiveness. The role played by subsidiary managers as interpreters of the local HRM environment is seen as a key determinant in patterns of HRM integration in this respect.

As will be argued throughout this paper, the implementation of an e-HRM system presents an excellent opportunity to observe how the global integration of HRM is negotiated and contested in MNCs. In essence, this is because e-HRM implementation is often accompanied with a fundamental re-think in how HRM is delivered, which requires the parties involved to reach some form of agreement, in a relatively short period of time, on what must be globally standardised versus what must be locally adapted, and why.

Thus, adopting a micro-political perspective, the study's main objective is to explore the ways in which the IT-based integration of HRM is negotiated and contested within a foreign MNC subsidiary setting. More specifically, the study aims to identify those issues which generate the greatest degree of conflict during the IT-based integration process, they key actors involved and the resources that are deployed by those actors during negotiation. The setting of the study is a Finnish subsidiary of a well-known European MNC, INTRACOM [1].

The paper starts by reviewing the literature on the mechanisms used by MNCs to achieve greater integration of HRM practices within foreign subsidiaries. The focus is then turned to the field of e-HRM as an IT-based mechanism of integration, and the micro-political perspective. Following a description of the methods used, the paper presents the results on the key areas of conflict and the resources used in negotiation. The paper concludes with a discussion of the findings and some suggestions for future research.

LITERATURE REVIEW

HRM Integration in MNCs

Evidence suggests that MNCs are shifting their attention more and more towards the integration and cohesion side of the integration-responsiveness tension (Ghoshal & Gratton, 2002). This trend would also seem to be having widespread implications for how the HR function and its contingent HRM practices are coordinated (Taylor, 2006). Indeed, from an evolutionary perspective, it is argued that the required organisational levels of coordination now necessary to execute global strategies has provoked the emergence of a strategic global HRM agenda (Kiessling & Harvey, 2005).

The case for global HRM notwithstanding, the majority of research on HRM in MNCs has focused on the characteristics of HRM practices in foreign subsidiaries and those factors that lead to either greater parent or local firm resemblance. A feature of this literature is that unlike most other business functions, HR is generally regarded to be the most culture- and institution-specific and thus the most difficult to integrate, typically requiring higher levels of local responsiveness (Tayeb, 1998). Accordingly, contributions to this literature have drawn on a range of theoretical approaches in trying to provide explanations for patterns of HRM integration and/or local responsiveness, including resource dependency theory (e.g. Hannon *et al*, 1995), cultural theory (e.g. Gill & Wong 1998), institutional theory (e.g. Björkman & Lu 2001), and the national business systems approach (e.g. Ferner & Quintanilla 1998).

Whilst the above contributions provide a detailed list of structural factors (e.g. MNC characteristics, parent-subsidiary relations) and contextual factors (e.g. country-of-origin, isomorphic pressures) that are likely to affect patterns of HRM integration and local responsiveness, the research is comparatively silent on those factors associated with the process (the 'how') of integration (Smale, 2007). In this regard, a wide variety of organisational mechanisms have been documented in the literature, including expatriation (e.g. Björkman & Lu, 2001), internal benchmarking (Martin & Beaumont, 1998), global expertise networks and HR centres of excellence (Sparrow *et al*, 2004), and IT-based integration (e.g. Hannon *et al*, 1996; Tansley *et al*, 2001; Ruta, 2005), to which we now turn.

IT-Based Integration of HRM

For the purpose of clarity, this paper distinguishes between the use of IT in human resource information systems (HRIS) and e-HRM. In line with the definitions provided by Ruël *et al* (2004) and Reddington and Martin (2007), whilst HRIS refers to the automation of systems for the sole benefit of the HR function, e-HRM is concerned with the application of internet and web-based systems, and more recently mobile communications technologies, to change the nature of interactions among HR personnel, line managers and employees from a face-to-face relationship to one that is increasingly mediated by technology. Based on a study of human resource articles published in the top HRM journals from 1994 to 2001, only one percent of the articles focused on the influence of IT in HR (Hoobler & Johnson, 2004). Although the field of e-HRM has started to mature, historically academics have paid insufficient attention to the impact of IT on HR (Lepak & Snell, 1998).

The case for the adoption of integrated e-HRM systems have been argued from a number of different perspectives. From a business case perspective, three drivers of integrated e-HRM systems have been cited (Stone & Guetal, 2005, Reddington & Martin, 2007). Firstly, e-HRM systems can reduce HR transaction costs and headcount. Secondly, e-HRM can substitute physical capability by leveraging digital assets, i.e. HR information can be used flexibly on an infinite number of occasions at little or no marginal cost. And thirdly, the effective use of integrated e-HRM systems can transform the HR "business model" by e-enabling the HR function to provide strategic value to the business that it previously could not do.

From a control perspective, e-HRM has been identified as facilitating the greater integration of HRM practices in foreign subsidiaries in three main ways (Smale, 2008). Firstly, e-HRM can serve as a form of bureaucratic control by establishing procedural standards about how the system is used (Clemmons & Simon, 2001) and thus how HRM processes are carried out. Secondly, e-HRM presents an opportunity for output control in its role of communicating goals and monitoring them through an array of management reporting functions. Thirdly, e-HRM can accommodate varying degrees of control via centralisation by restricting access rights and introducing layers of transaction authorisation.

The arguments for adopting integrated e-HRM systems notwithstanding, case study evidence indicates that firms have been active in their implementation (e.g. Tansley *et al*, 2001; Shrivastava & Shaw, 2003; Ruta, 2005). Collectively, however, this body of research appears to have more to say about the problems encountered in implementation, especially in terms of end user acceptance (e.g. Fisher & Howell, 2004), than any far-reaching transformation of the HR function. Indeed, there is a danger that the adoption of e-HRM may even have negative consequences for HR professionals and their internal clients if change management and technology acceptance issues are handled ineffectively (Reddington *et al*, 2005).

Given the potential that e-HRM has for the transformation of HR, it is reasonable to expect that the sizeable changes required, both in organisation and mindset, are likely to provoke resistance from various end users. At the very least, since e-HRM models of HR delivery encourage a fundamental re-think about how HRM is carried out, their exists a big incentive for various end users to ensure that their own interests are considered in subsequent decisions regarding e-HRM design and implementation. This is not least true for foreign MNC subsidiaries which must communicate convincingly their interests to the parent—a task that is likely to involve conflict and negotiation.

A Micro-Political Perspective on the IT-Based Integration of HRM

Compared to the dominant economic and deterministic approaches to studies on MNCs, the socio-political dimension of managing MNCs has been largely neglected in the international business literature (Ferner, 2000; Geppert & Williams, 2006). Conceptualisations of MNCs as hierarchical structures based on formal authority relations between headquarters and subsidiaries are becoming increasingly inappropriate given the complex interdependencies that characterise the modern MNC (e.g. Doz & Prahalad, 1993). Indeed, MNCs have come to be described as ‘loosely coupled political systems’ where power games and political influence over decision-making are useful in explaining the nature of internal processes (Forsgren, 1990).

Organisational micro-politics has been defined in general terms as “*an attempt to exert a formative influence on social structures and human relations”* (Dörrenbächer & Geppert, 2006: 256), but is suggested more specifically to focus on “*bringing back the actors and examining the conflicts that emerge when powerful actors with different goals, interests and identities interact with each other locally and across national and functional borders”* (2006: 255). In this sense, studies on micro-politics are argued to provide a deeper understanding about internal processes within MNCs and managing the complexities associated with transnational reorganisation by concentrating on the strategies of local/subsidiary actors (Mense-Petermann, 2006). One common theme within the micro-politics literature, which is also the focus of the present study, is where concepts, systems and/or practices developed elsewhere require subsidiaries to engage in local adaptation and translation—processes that often involve conflicts.

With regards to studies in the field of HRM in MNCs one major critique concerns the assumptions made about how HRM practices become established in foreign subsidiaries and the roles played by different actors in the integration process. In this regard, Edwards *et al*. (2007) suggest such studies should adopt a political economy approach. This conceptual approach, they argue, integrates a focus on markets, distinct national institutional frameworks, and the micro-political activity of multinationals. The *market-based* approach focuses on the competitive pressures firms face to transfer 'best practices' and is rooted in resource-based explanations of HRM in foreign subsidiaries (see e.g. Taylor *et al*, 1996; Bae *et al*, 1998). The *cross-national comparative* approach focuses on the influence of distinct political and socio-economic structures in shaping an MNC's international HRM activities (see e.g. Rosenzweig & Nohria, 1994; Gooderham *et al*, 1999). Lastly, the *micro-political* (or power-based) approach focuses on "*how actors seek to protect or advance their own interests, the resources they use, and the resolution of conflicts"* (Edwards *et al*, 2007: 203).

Rather than adopting all three conceptual approaches, this paper predominantly focuses on the micro-political approach in its study of the IT-based integration of HRM. The reasons for this are firstly, that this paper shares the view of Geppert and Mayer (2006) when they state that,

Only rarely, if ever, does the literature engage in more than a passing way with the agency of actors in shaping the lived 'reality' of corporate coordination and control mechanisms and in defining the adoption—and adaptation—of organizational and managerial practices as they move throughout the organization, particularly across national boundaries (2006: 2).

In this sense, the paper seeks to contribute to this under-researched approach on HRM integration in MNCs and extend it to the specific field of e-HRM. The second reason for adopting the micro-political approach concerns the IT-based integration of HRM specifically. It is argued here that the IT-based integration of HRM presents a somewhat unique setting in which to observe how the global-local dilemma plays out in foreign MNC subsidiaries. This is because the design and implementation of an integrated e-HRM system explicitly requires the parties involved to reach some form of agreement in a relatively short period of time on what must be standardised versus what must be locally adapted, and why. Accordingly, the IT-based integration of HRM will typically involve the relevant parties to enter into systematic negotiations regarding the system's appearance, content and processes—potentially on the full range of HRM practices. This would appear to be particularly fertile ground on which to conduct an investigation into how parties promote their own interests during the IT-based integration of HRM and the resources that each party uses during the ensuing negotiations.

METHOD

Research Design

This paper adopts a single, in-depth case-study design. The unit of analysis is the IT-based integration of HRM in a Finnish subsidiary owned by a well-known, European MNC. The study can be classified as holistic (Yin, 2003) since it concerns the integration of HRM into the focal subsidiary and no further sub-units of analysis. In connection with the 'how'-type question of the study, which itself justifies a case-study approach (Ghauri & Grønhaug, 2002), the study's analytical focus is on issues of process—in this case the process of negotiation during the IT-based integration of HRM and the involvement of key actors. Ferner *et al* (2005) argue that an emphasis on processual issues favours an in-depth case-study approach, especially when the aim is to unravel the dynamics of bargaining processes between HQ and subsidiary. Moreover, the single case-study method is instructive when the issue of contextuality, crucial to studies on subsidiary-headquarters relations, is of key importance in interpreting the data (Yin, 2003). Lastly, the use of exploratory research methods has especially been advocated in fields within HRM such as technology due to its relative infancy (Hoobler & Johnson, 2004).

According to Yin (2003), single case-study designs are appropriate if they fit one of five circumstances or rationale. In order of importance, the study firstly falls under the rationale of the *longitudinal* case where interest lies in how the phenomenon develops over time and how certain conditions may change, thus allowing for a deeper understanding (Ghauri, 2004). Secondly, the study contains elements of a *representative* or typical case in its acknowledgement that the IT-based integration of HRM has become increasingly commonplace yet has remained under-researched.

Data Collection and Analysis

The study was conducted over a period of almost two years (2006-2007), approximately one year after the decision was made to include INTRACOM Finland in the global, IT-based integration process (see below for details). Since the study's emphasis was on uncovering how local actors shape the lived 'reality' of corporate control and coordination mechanisms (Geppert & Meyer, 2006), the key informants were the HR personnel of the Finnish subsidiary. This foreign subsidiary 'view from below' (see e.g. Ferner *et al*., 2004) allows for the more accurate identification of conflict areas and the resources used in negotiation, which are central to the micro-political approach.

Data were collected using in-depth face-to-face interviews with the HR personnel of the Finnish unit and via a detailed review of company documentation on the integration process. In total, five in-depth, face-to-face interviews were conducted with the Finnish Country HR Manager, the HR Account Manager and the HR Advisor at even intervals over the two years. In addition, the Nordic HR Manager and one of the e-HRM third-party consultants were also interviewed. The interviewees were invited to comment on their own experiences of the HRM integration process. In particular, interviewees were asked to state which issues produced the greatest conflict and how they sought to resolve these issues with the parties involved. Interviews were conducted in English, lasted an average of sixty minutes and were all recorded and *verbatim* transcribed. The company documentation included presentations from INTRACOM headquarters, Nordic presentations on the integration process, minutes of the project meetings, as well as communication on the main problem areas and subsequent actions taken.

The data was content-analysed, coded and categorised into groups relating to the conflicts identified. Further analysis within these groups enabled a detailed identification of the conflicts, the parties involved and the resources used in negotiation. Collecting data from multiple sources within the Finnish subsidiary allowed for the comparison of personal experiences and the identification of where responses converged and diverged thus enhancing the validity of the research via informant triangulation (Denzin, 1978). Direct citations of the raw data are used to illustrate and support the analysis presented in the results.

Introduction to INTRACOM

INTRACOM[1] is a well-known European MNC, operating in over 100 countries and employing more than 100,000 people. Having grown via acquisitions into a large and diversified MNC with operations dispersed on a global scale, INTRACOM found that it had become a collection of semi-autonomous subsidiaries with insufficient integration between businesses. The complexity and weaknesses of this multidomestic structure and strategy came to a head in the late 1990's and prompted a significant organisational restructuring effort whereby INTRACOM launched its new 'Global Organisation' approach. Features of this 'Global Organisation' included, amongst other things, the streamlining of its core businesses, a matrix structure organisational design, and far-reaching efforts at process standardisation. In short, INTRACOM's focus was on reducing complexity, speeding up decision-making, creating economies of scale and changing the culture.

In recent years the above 'global' strategic realignment has led to an equally sizeable transformation in INTRACOM's Group HR strategy. The three major goals of the new group HR strategy have been HR's greater functionality in how it serves INTRACOM's newly defined lines of business, the greater standardisation of HR processes and the creation of a single global HR system.

Integral to the achievement of these three goals has been the global, IT-based integration of HRM. More specifically, IT-based integration in the case of INTRACOM has meant the design and implementation of a globally integrated e-HRM system (SAP HR), referred to hereafter as their 'global e-HRM system'. In addition to the three goals of the Group's new global HR strategy, the rationale behind adopting the global HR system included; (i) HR process simplification, alignment and standardisation as a necessary step prior to setting-up HR shared service centres (a Nordic service centre is already in operation with plans to migrate to a single European service centre within three years); (ii) to increase employee and manager self-service roles, and thus accountability, allowing for a focus on more value-adding HR activities by HR representatives; (iii) to improve HR strategic decision-making via more sophisticated management reporting tools (e.g. identifying talent pools throughout the Group); and (iv) to reduce compliance costs by assuming greater control over HR processes and monitoring them.

Group-wide implementation of the global HR system commenced in 2001 and, after a failed attempt to roll it out globally at the same time in all locations, has been introduced in the different foreign operations in order of their strategic importance to the Group. INTRACOM Finland was established nearly 100 years ago and currently employs around 350 people across more than 200 service outlets. The HR department consists of three full-time personnel (all included in this study). Being a relatively small foreign unit, involved in fewer strategic lines of business, INTRACOM Finland began implementing the global e-HRM system in the summer of 2005. This study reports the experiences of the HR personnel in INTRACOM Finland throughout the integration process and their dealings with other key parties involved.

RESULTS

In line with the study's aims, the results are structured in such a way so as to indicate the key areas of conflict, the key parties involved, and the resources used in negotiation. Content analysis revealed that the key sources of conflict revolved around three main issues; (i) system design components, (ii) the standardised use of English, and (iii) institutionally 'grey areas' of HR policy. The parties involved in negotiations and the tools they used are summarised in Table 1.

Omitted from the above list is the initial decision to integrate the system in the Finnish subsidiary in the first place. Although this presented an opportunity for the subsidiary to resist and negotiate, the reason for its omission is because the Finnish HR personnel accepted the decision as ultimately a positive thing. As described by the Country HR Manager:

My Line Manager told me last August "I have good news. You are going live with the (system) in six months time." Of course my first reaction was that I started to scream "no, we're not going to do it!" Then I said, "Oh, good. Good to be part of the family." He said afterwards that

Table 1. Areas of conflict, key parties and resources used in negotiation

Area of conflict	Key parties	Resources used in negotiation
System design components	• Group HR; • Finland HR; • System consultants	• Business case (cost), internal benchmarking, authority, use of third-party consultants • Business case (operational), local constraints • Systems know-how, Group mandate, ignorance
Standardised use of English	• Group HR; • Finland HR • System consultants	• Strategic mandate, business case (cost), no resource allocation for translation services • Business case (operational), linguistic ability, employee discontent, contradictions in Group policy • Group mandate, ignorance
Grey areas of HR policy?	• Group/Nordic HR; • Finland HR	• Steering committee, verifying local 'interpretations,' internal benchmarking • Local norms, local legislation

he had been very surprised about my reaction, and that he had prepared lots of arguments that he could have used had I started to argue that we can't do it.

Another reason for the decision of integrating the system not provoking a round of negotiation was the explicit use of authority- (or hierarchy-) based resources from the outset by INTRACOM Group HR. As the Country HR Manager vividly recalls:

The number one HR person in the INTRACOM Group said that "one hour used up talking about whether to have (the system) or not is an hour wasted." So, I think it was quite clearly put! We knew what was expected from us. It was repeated so many times that we finally understood it.

Indeed, the Finnish subsidiary response to the decision quickly turned to acceptance as the integration process appeared to be inevitable. Interestingly, this response was described to differ noticeably from that of the Swedish subsidiary, which was reported as sitting in meetings discussing all the possible reasons for not adopting the new system. Certain HR colleagues in other INTRACOM units interpreted this as Finland's high power distance and subservience to hierarchy, or that they just didn't understand the implications. From the Finnish perspective, however, their lack of resistance reflected their belief that the decision had already been made. The only issues that were offered up for negotiation at this stage were the amount of extra resources needed to facilitate the system implementation and the reasons why they might not be able to complete it in the given time schedule. These issues are explored next in connection with the three substantive areas of conflict.

System Design and Components

The first substantive area of conflict was the design of the new e-HRM system. More specifically, there was disagreement over which HR modules should be included in the system and which ones should be left out. This was most evident in the case of the payroll function. Most other components of the system, with some exceptions such as the learning module (i.e. booking training events), were stipulated as compulsory. However, payroll was less clear cut and invited the parties involved to discuss the relative merits of including payroll processes under the new system.

The parties involved in this particular negotiation were Group HR representatives and the Country HR Manager. The primary resource used by Group HR in the ensuing negotiation was the business case, which followed that the costs of integrating the payroll module into the system would be too costly in relation to the size of the Finnish unit. Internal benchmarking was also used as a tool in negotiation whereby Group HR reinforced its business case argument through the use of comparisons with other similar sized units. In response, the Finnish Country HR Manager argued the case for including payroll also based on the business case, but from an operational perspective:

It was more or less a given fact that the figures show it is cheaper to run (payroll) by building an interface. […] *They (Group HR) were more or less giving the figures and there was not much resistance from our side. We tried, because we saw the complexity of having two systems with only a one-way interface. But the discussion was more or less stopped.*

Nearly two years later it is interesting to note that the costs of running the interface have been higher than anticipated and the inclusion of payroll is back on the agenda. Nevertheless, whilst INTRACOM Finland did not succeed in negotiating the inclusion of payroll, they were successful in negotiating more autonomy in certain other HR processes. In this regard, the third-party system consultants employed by the INTRACOM Group played a key role in conflict generation and negotiations. Indeed, the e-HRM system consultants could be considered as being, on the one hand, a resource used by Group HR in negotiating the tighter integration of the system, and on the other hand, as being influential actors themselves with their own interests and negotiation resources.

Regarding the latter, the consultants were sometimes perceived as having their own agenda and, in reference to their systems know-how, were seen to shape the system's design in ways that were in conflict with what Finland HR wanted. For example,

I felt that we had agreed that "OK, this is the scope" and suddenly we started getting business process procedures, describing processes that we had already said that we don't want to have in the system. So there were some consultants who thought, if I want to look at it positively, that we wanted to have something we didn't know we wanted to have. We had to fight back and say "sorry, we said that we don't need this bit. It doesn't work here." (Country HR Manager)

In these cases the negotiations were between INTRACOM Finland HR personnel and the third-party consultants. The negotiation resources used by the consultants typically rested on systems know-how and repeating what they had been instructed by their client, the INTRACOM Group (Group mandate). When those resources failed to resolve the conflict, consultants were perceived to resort to ignorance in the sense that they lacked sufficient knowledge of the local environment and made little efforts to learn or adapt,

One example was our (production) plant, where there are fifty blue-collar workers, who don't have their own individual PC's. […] *The recommendation from the consultants was that, at the beginning of every month, they would fill out themselves the shifts they have worked during the previous month. We just imagined those fifty guys queuing for this one PC* […]. *The solution from the consultants was "well, go and buy more PC's," but we knew it wouldn't work in that environment so we said "we won't be taking that part of the system."* (Country HR Manager)

When we had meetings, they (consultants) would say "yeah, you should really take this." They didn't consider what's suitable for Finland. I think it was a problem in many cases that they didn't really know how payroll in Finland works, or annual leave issues, or any HR issues in Finland. (HR Advisor)

As reflected above, the reasons used by Finland HR in negotiations again centred on the operational case and the local constraints connected to certain HR processes. In essence, the consultants' lack of local HR knowledge was a source of conflict with Finnish HR personnel, but at the same time it provided the HR personnel with an opportunity to resist certain components in the system's design.

Standardized Use of English

The second key area of conflict centred around the strict, standardised use of English in the new e-HRM system. Indeed, the use of English was so standardised that the system did not recognise certain characters within the Finnish alphabet. As a result, Finland HR repeatedly used the business (operational) case in negotiating with the consultants for some local, linguistically-related modifications. The reasons varied from people not being able to enter their own names and employees' salary slips being lost in the post because the system didn't allow for the correct spelling of addresses. Eventually, the consultants conceded and added a separate field for addresses, but all other language-related change requests were rejected. Again, Finland HR felt that the resources consultants used in negotiations were more or less borne out of ignorance. For example:

It was very difficult to explain to the consultants that in Finnish we have Scandinavian characters and the system doesn't recognize them. And they said, "Well, if there's a name with dots, just write it without dots." They didn't understand that the word could have a totally different meaning. [...] *So that's something we will now have to enter in two places.* (Country HR Manager)

The seemingly straightforward decision to use English throughout the system had the accumulative effect of handing all necessary translation tasks to local HR personnel. Although one of the key objectives behind the globally integrated e-HRM system and shared-service model was to free HR personnel from administrative duties, local HR personnel claimed that these duties were more than being replaced with their new role as translators. This role included translating global HR policies, providing detailed notes to payroll staff regarding what different fields in the e-HRM system meant and taking telephone calls from employees who could not understand, for example, their own pay policy.

For example, the pay policy document is sixty pages and in addition to that we have a local policy for blue-collar workers. We don't apply the global pay policy for blue-collar workers, because they are so attached to the collective bargaining agreement. So, that's really a challenge, how to balance the global and local policies and what to translate into English and what then to translate into Finnish. (HR Advisor)

Interestingly, the standardised use of English transformed the role of local HR personnel into that of a communication filter. Since many subsidiary employees struggled to understand English, local HR personnel were forced to make quick judgements about what HR information, policies and processes needed to be translated and what did not. Consequently, the source of this communication and the designers of the e-HRM system had to rely on the personal judgement and linguistic skills of local HR if the messages were to get across. This was sometimes described to be extremely challenging given technical nature of the terms and legal jargon.

From the perspective of local HR staff, the stance of Group HR towards language was self-evident in their decision to provide no extra provisions or resources to the translation work. In a sense, this was a resource used in negotiation—you cannot do what you don't have the resources to do. One consequence of this decision was for Finland HR to include English language skills into all recruitment and selection criteria for new employees. The second key resource used by Group HR was the re-emphasising of the strategic mandate behind the introduction of the e-HRM system, in this case the pursuit of process standardisation and data integrity. By adopting a common language these two goals could be more easily achieved. To follow up this argument in negotiations, access rights to the system in many areas were reduced to viewing only.

However, in reference to certain strategic goals like freeing HR personnel from more administrative tasks not actually being achieved, the standardised use of English was contested by Finland HR on the grounds that it contradicted other INTRACOM goals. This was also evident in Finland HR's concern that the standardised use of English sat in direct contrast to the Group's recent large-scale promotion of workforce diversity and inclusiveness. In their view, using a language many employees found difficult to understand was having precisely the opposite effect.

This language issue comes up every time we have a staff council meeting. […] *There are lots of people that feel excluded, because they can't understand what is being talked about and there are thousands of e-mails and intranet messages arriving in English. And we really don't have the resources in HR, or in any other departments, to do the translating.*

In terms of negotiation outcomes, the arguments for local system adaptations for linguistic reasons have largely been unsuccessful regardless of the resources used in negotiations. Evidently, the costs of adaptation and the threat to process standardisation and data integrity have outweighed local, operational concerns and apparent contradictions in Group policy.

Grey Areas of HR Policy?

INTRACOM's Group HR strategy clearly spelt out the need for greater HR process standardisation and the movement towards a single, global HRM system. Taken together, the strategic mandate from the Group's perspective did not leave much room for manoeuvre in terms of local adaptation. However, they did acknowledge the need to adhere to local regulations. The Finland Country HR Manager interpreted the Group approach as follows:

We're moving towards having more global processes in HR, and then some local processes. The local [processes] *are the ones we refer to as being defined in collective bargaining agreements or local law. But there should actually be nothing in between.* (Country HR Manager)

Indeed, subsidiary HR came to understand that this approach really meant that everything will be standardised up until the point where it is deemed illegal. Over time, Finland HR personnel thus found it increasingly difficult to negotiate for greater flexibility due to this approach of global, local and nothing in between. Their scope for negotiation was effectively limited due to the Group's stance that there should not be any grey areas.

In reality, of course, this approach was not so easy to follow and a number of resources were used by the different parties either to convince the other that something was or wasn't illegal, or that it really is or isn't a grey area of HR policy. One of the tools used in such negotiations was HR steering committees, which were used as a forum to present arguments for local adaptation and process standardisation and return a decision on how to proceed. The steering committee consisted of HR representatives from the different European regions and Group HR. The logic was that serious local requests for deviating from the standard process would be discussed by the committee. Over time, Finland HR came to learn which arguments never succeeded in this process (e.g. language) and which ones stood a chance. Based on experience, the Nordic HR representative would also sometimes refuse to put certain subsidiary requests on the committee table knowing that they were not convincing enough. In addition, the bureaucratic nature of the decision-making process itself seemed to act as a disincentive to formulate a case for adaptation. Collectively, the INTRACOM Group appeared to have used their resources in negotiation in such a way so as to persuade Finland HR to not enter into negotiations in the first place.

Another important feature of the steering committee was its use as an internal benchmarking tool. Via a process of coercive comparison (Ferner & Edwards, 1995), the committee would compare the experiences and arguments of similar units and use them as a resource in negotiating for greater standardisation. In other words, if one unit could standardise the process or adopt English as the common language without any problems then the others could too. Sometimes as a result, supposedly grey areas looked a lot more clear-cut.

The definition of what contravened local law and what didn't was strictly verified by Group HR. By explicitly requiring Finland HR personnel to provide independent legal proof that a certain part of Group HR policy was illegal, including which paragraph of the law, INTRACOM was effectively reducing Finland HR's ability to 'interpret' the local context in their favour—a potentially powerful resource for subsidiaries in such negotiations:

You can only deviate from [Global HR policy] *if you have a legal reason. And we actually need to confirm it through our Head of Legal Affairs, that this is a legal requirement in Finland. It isn't enough that the answer comes from us.* (HR Advisor)

In some cases the Group's tough stance in negotiations has forced Finland HR to shift their emphasis from operational arguments or arguments based on local norms to legal arguments. One example of this was the letters sent out to new employees. The new e-HRM system, to be used shortly by the shared service centre, was designed so that standardised 'new joiner' letter templates were sent out in English. Rather than argue that certain employees would not understand the letter or "that wouldn't be the way things are done here", which would most likely have been insufficient reasons, instead Finland HR have had to find the appropriate piece of local legislation that stipulates that firms are obliged to provide such letters in Finnish and/or Swedish.

DISCUSSION AND CONCLUSION

By adopting a micro-political perspective, the main objective of the present study was to explore the ways in which the IT-based integration of HRM is negotiated and contested within a foreign MNC subsidiary setting. The specific aims of the research were to identify those issues which generate the greatest degree of conflict during the IT-based integration process, they key parties involved and the resources used by those parties during negotiation. In doing so, the study acknowledges the potentially significant role of micro politics in the MNC's use of control mechanisms in general (e.g. Geppert & Meyer, 2006) and HRM integration in particular (e.g. Martin & Beaumont, 1999; Ferner *et al*, 2004; Edwards *et al*, 2007).

The study's findings provide broad support for the argument made here that the implementation of a globally integrated e-HRM system not only provides fertile ground for revisiting the HRM global-local debate, but furthermore, that it generates a somewhat transparent forum in which to observe key actors forced to come together in a relatively short period of time to make their case for either the standardisation or local adaptation of a range of HRM practices. Accordingly, researchers are presented with a fairly unique opportunity to investigate where the most conflict arises, what arguments each party is using, and the resources each party deploys to advance their own interests.

Three issues were identified as generating the most conflict. Firstly, the e-HRM *system design* generated conflict perhaps because it represented the first genuine opportunity for parties to shape local HRM practices and processes. Accordingly, system design negotiations involving three main parties—Group HR, Finland HR and the IT system consultants—were characterised by all parties deploying multiple negotiation resources. In terms of the parties involved, the role of the third-party consultants was particularly significant. On the one hand, the consultants commanded a powerful negotiating position by being able to switch from Group orders (or mandate) to technical know-how to plain ignorance in resisting requests for local modifications from subsidiary HR personnel. On the other hand, the consultants' lack of local contextual knowledge also handed subsidiary HR with additional bargaining power. Indeed, scholars have identified the potentially unconstructive and powerful role played by consultants who may be trying to sell inappropriate e-HRM packages as part of a broader ERP solution (Walker, 2001; Lengnick-Hall & Lengnick-Hall, 2006). Supported by the findings of the present study, critical investigation into the roles of consultants in e-HRM system design and integration would be a constructive area for further research.

The second area of conflict was the *standardised use of English*, which caused widespread discontent throughout the Finnish subsidiary. Despite the number of negotiation resources deployed by Finland HR personnel, the strategic mandate (process standardisation, data integrity etc.) and the business case of cost seemed to outweigh most obvious language-related concerns. In terms of designing an effective globally integrated e-HRM system, which in turn facilitates moves towards a shared service model of HR delivery, the standardised use of English is a logical decision. However, the far-reaching implications of a strictly standardised language policy such as end users failing to understand what they are expected to do and lack of clarity and resources concerning translation responsibilities points to the pervasive role of language in multinational management and how it is often overlooked (e.g. Marschan *et al*, 1997). This is not to mention the feelings of exclusion that result.

Globally integrated e-HRM systems are not well suited to addressing potentially *grey areas of HR policy*. Instead, the huge costs associated with adaptation together with the system's key strengths in streamlining HR processes, are more likely to encourage a black and white approach to HRM standardisation and local adaptation. This was clearly evident in this study whereby the black and white approach was reinforced by questions of legality. Indeed, in terms of negotiation resources, the message being communicated by Group HR was that only verified legal constraints will suffice in negotiating deviations from Group-wide HR policies and processes. An interesting question warranting further research in this respect is whether the MNC parent uses certain arguments (or negotiation resources) more when seeking to achieve global integration via e-HRM systems compared to other situations. In this study the issue of cost, as a business case, played a significant role. Thus, there appeared to be connections to the cost-minimisation approach to the HRM global-local decision presented by Schmitt and Sadowski (2003), who argue that MNC decisions on this issue can be explained by applying rational economic thinking about the relative costs of achieving HRM centralisation and decentralisation.

On a more general note, the present study reported an MNC's attempts at greater HR process standardisation, facilitated by the global integration of an e-HRM system. In reference to the international HRM literature, this is an intriguing development given HRM's reportedly high cultural sensitivity (e.g. Tayeb, 1998). However, it is also worth noting here precisely what is being standardised and what is not. As Schuler (1992) argues, there are various levels of HRM ranging from HRM philosophies to HRM policies and practices. Research has since shown that the extent of HRM integration and responsiveness is likely to differ between these levels (e.g. Tayeb, 1998; Sippola & Smale, 2007). From this perspective, e-HRM systems may be able to standardise certain levels of HRM such as the philosophy behind its delivery and a range of transactional HRM processes, but it may be less successful in achieving the global integration of certain institutionally sensitive HRM practices.

In the IT literature we have come to understand that the key strengths of large-scale IT systems, such as ERP-based solutions, risk being undermined by excessive concessions and local modifications. This study has demonstrated at least that there can be few sufficiently compelling reasons for local adaptation. In this sense, will globally integrated e-HRM systems of this kind become somewhat of an oxymoron and lead to a disappointing uptake by end users, or will local HR personnel have to assume additional responsibilities in ensuring that end users do not become disenfranchised. Either way, it would appear that although HR professionals might benefit from such systems by allowing them to hand over more routine administrative HR transactions (e.g. Reddington & Martin, 2007), these tasks could just as easily be replaced not by more strategic roles, but by other administrative tasks aimed at limiting the negative impact of the system itself. If this is the case, the transformational effect of e-HRM systems on the HR function will be limited.

LIMITATIONS AND FUTURE RESEARCH

Any interpretations or conclusions based on the present study must of course be made in light of its limitations. Nevertheless, the limitations outlined below can also serve as potentially fruitful avenues for future research. Firstly, in order to establish a picture of the lived 'reality' of corporate control and coordination mechanisms (Geppert & Meyer, 2006), the study only drew upon the experiences and perceptions of subsidiary HR personnel. To alleviate potential respondent bias, interviews with representatives from headquarters and third-party consultants would have provided a more balanced account and served as an effective means through which to gain insights about each party's responses to the other's tactics and political stratagems (Oliver, 1991). Future studies in this area might therefore benefit from viewing HRM system integration outcomes as the result of complex negotiations between these different parties.

Secondly, and related to the first limitation, some of the findings of the study could be explained by the relatively small size of the Finnish subsidiary and its institutional setting. However, the aim of the study was not to explain negotiation outcomes, but rather to identify the main areas of conflict, which parties were involved and which negotiation resources were used. In this sense, it would be interesting to investigate whether these issues of conflict and use of negotiation resources differ across subsidiaries of different size and background. Furthermore, future studies could go on to evaluate the effectiveness of various negotiation resources in terms of their ability to promote interests and successfully achieve more room for manoeuvre.

Lastly, the findings are based on data from one MNC. As is typical to any single, in-depth case study, the generalisability of the findings is limited. However, when positioned methodically as a longitudinal and representative case

(Yin, 2003), this paper has contributed to our understanding about how HRM integration is negotiated between different key actors and the role that micro politics plays in this process. More specifically, it is demonstrated here that the introduction of a globally integrated e-HRM system offers academics in the field of HRM a rare opportunity to observe how HRM practices are established and controlled in MNC subsidiaries as well as the rationale used.

REFERENCES

Bae, J., Chen, S., & Lawler, J. (1998). Variations in human resource management in Asian countries: MNC home-country and host-country effects. *International Journal of Human Resource Management, 9*(4), 653–670.

Björkman, I., & Lu, Y. (2001). Institutionalization and bargaining power explanations of HRM practices in international joint ventures—the case of Chinese-Western joint ventures. *Organization Studies*, *22*(3), 491–512.

Brewster, C., Sparrow, P., & Harris, H. (2005). Towards a new model of globalizing HRM. *International Journal of Human Resource Management*, *16*(6), 949–970.

Clemmons, S., & Simon, S. J. (2001). Control and coordination in global ERP configuration, *Business Process Management*, *7*(3), 205–215.

Denzin, N. K. (1978). *The Research Act: Theoretical Introduction to Sociological Methods*. New York: McGraw-Hill.

Doz, Y., & Prahalad, C. K. (1993). Managing DMNCs: A search for a new paradigm. In S. Ghoshal & D. E. Westney (Eds.), *Organization Theory and the Multinational Corporation* (pp. 24–50). MacMillan: Basingstoke.

Dörrenbächer, C., & Geppert, M. (2006). Micropolitics and conflicts in multinational corporations: Current debates, re-framing, and contributions of this special issue. *Journal of International Management*, *12*(3), 251–265.

Edwards, T., & Kuruvilla, S. (2005). International HRM: national business systems, organizational politics and the international division of labour in MNCs. *International Journal of Human Resource Management*, *16*(1), 1–21.

Edwards, T., Colling, T., & Ferner, A. (2007). Conceptual approaches to the transfer of employment practices in multinational companies: an integrated approach. *Human Resource Management Journal*, *17*(3), 201–217.

Ferner, A. (2000). The underpinnings of ‘bureaucratic’ control systems: HRM in European multinationals. *Journal of Management Studies*, *37*(4), 521–539.

Ferner, A., & Edwards, P. K. (1995). Power and the diffusion of organizational change within multinationals. *European Journal of Industrial Relations*, *1*(2), 229–257.

Ferner, A., & Quintanilla, J. (1998). Multinationals, national business systems and HRM: the enduring influence of national identity or a process of ‘Anglo-Saxonization’. *International Journal of Human Resource Management, 9*(4), 710–731.

Ferner, A., Almond, P., Clark, I., Colling, T., Edwards, T., Holden, L., & Muller-Camen, M. (2004). The dynamics of central control and subsidiary autonomy in the management of human resources: case-study evidence from US MNCs in the UK. *Organization Studies*, *25*(3), 363–391.

Ferner, A., Almond, P., & Colling, T. (2005). Institutional theory and the cross-national transfer of employment policy: the case of ‘workforce diversity’ in US multinationals. *Journal of International Business Studies*, *36*(3), 304–321.

Fisher, S., & Howell, A. (2004). Beyond user acceptance: an examination of employee reactions to information technology systems. *Human Resource Management, 43*(2-3), 243–258.

Forsgren, M. (1990). Managing the international multi-centre firm: Case studies from Sweden. *European Management Journal*, *8*(2), 261–267.

Geppert, M., & Mayer, M. (2006). Introduction. In M. Geppert & M. Mayer (Eds.), *Global, National and Local Practices in Multinational Companies* (pp. 1–14). Basingstoke: Palgrave Macmillan.

Geppert, M., & Williams, K. (2006). Global, national and local practices in multinational corporations: Towards a sociopolitical framework. *International Journal of Human Resource Management*, *17*(1), 49–69.

Ghauri, P. (2004). Designing and conducting case studies in international business research. In R. Marschan-Piekkari & C. Welch (Eds.), *Handbook of Qualitative Research Methods for International Business* (pp. 109–124). Cheltenham: Edward Elgar.

Ghauri, P., & Grønhaug, K. (2002). *Research Methods in Business Studies: A Practical Guide*. Harlow, UK: Financial Times and Prentice Hall.

Ghoshal, S., & Gratton, L. (2002). Integrating the enterprise. *Sloan Management Review*, *44*(1), 31–38.

Gill, R., & Wong, A. (1998). The cross-cultural transfer of management practices: the case of Japanese human resource management practices in Singapore. *International Journal of Human Resource Management, 9*(1), 116–135.

Gooderham, P. N., Nordhaug, O., & Ringdal, K. (1999). Institutional and rational determinants of organizational practices: human resource management in European firms. *Administrative Science Quarterly, 44*(3), 507–531.

Hannon, J., Huang, I-C., & Jaw, B-S. (1995). International human resource strategy and its determinants: the case of subsidiaries in Taiwan. *Journal of International Business Studies*, *26*(3), 531–554.

Hannon, J., Jelf, G., & Brandes, D. (1996). Human resource information systems: operational issues and strategic considerations in a global environment. *International Journal of Human Resource Management*, *7*(1), 245–269.

Hoobler, J. M., & Johnson, N. B. (2004). An analysis of current human resource management publications. *Personnel Review*, *33*(6), 665–676.

Kiessling, T., & Harvey, M. (2005). Strategic global human resource management research in the twenty-first century: an endorsement of the mixed-method research methodology. *International Journal of Human Resource Management, 16*(1), 22–45.

Lengnick-Hall, C., & Lengnick-Hall, A. (2006). HR, ERP and knowledge for competitive advantage. *Human Resource Management*, *45*(1), 79–94.

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.

Marschan, R., Welch, D., & Welch, L. (1997). Language: The forgotten factor in multinational management. *European Management Journal*, *15*(5), 591–598.

Martin, G., & Beaumont, P. (1998). Diffusing 'best practice' in multinational firms: prospects, practice and contestation. *International Journal of Human Resource Management, 9*(4), 671–695.

Martin, G., & Beaumont, P. (1999). Co-ordination and control of human resource management in multinational firms: the case of CASHCO. *International Journal of Human Resource Management, 10*(1), 21–42.

Mense-Petermann, U. (2006). Micro-political or inter-cultural conflicts?—An integrating approach. *Journal of International Management*, *12*(3), 302–317.

Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, *16*(1), 145–179.

Reddington, M, & Martin, G. (2007). Theorizing the links between e-HR and strategic HRM: A framework, case illustration and some reflections. *Proceedings of the First European Academic Workshop on Electronic Human Resource Management.*

Reddington, M., Williamson, M., & Withers, M. (2005). *Transforming HR: Creating Value Through People.* Oxford: Butterworth Heinemann.

Rosenzweig, P., & Nohria, N. (1994). Influences on human resource management practices in multinational corporations. *Journal of International Business Studies*, *25*(2), 229–251.

Ruël, H. R., Bondarouk, T. & Looise, J. K. (2004). E-HRM: Innovation or Irritation. An Explorative Empirical Study in Five Large Companies on Web-based HRM. *Management Revue*, *15*(3), 364–380.

Ruta, C. D. (2005). The application of change management theory to HR portal implementation in subsidiaries of multinational corporations, *Human Resource Management*, *44*(1), 35–53.

Schmitt, M., & Sadowski, D. (2003). A cost-minimization approach to the international transfer of HRM/IR practices: Anglo-Saxon multinationals in the Federal Republic of Germany. *International Journal of Human Resource Management, 14*(3), 409–430.

Schuler, R. S. (1992). Strategic human resources management: linking the people with the strategic needs of the business. *Organizational Dynamics, 21*(1), 18–32.

Shrivastava, S., & Shaw, J. B. (2003). Liberating HR through technology. *Human Resource Management*, *42*(3), 201–222.

Sippola, A., & Smale, A. (2007). The global integration of diversity management: A longitudinal case study. *International Journal of Human Resource Management*, *18*(11), 1895–1916.

Smale, A. (2007). *Mechanisms of Global HRM Integration in Multinational Corporations*. Unpublished dissertation, No.181, University of Vaasa, Finland.

Smale, A. (2008). Foreign subsidiary perspectives on the mechanisms of global HRM integration. *Human Resource Management Journal*, *18*(2), 135–153.

Sparrow, P. (2006). Global knowledge management and HRM. In G. K. Stahl & I. Björkman (Eds.), *Handbook of Research in International Human Resource Management* (pp. 113–138). Edward Elgar, Cheltenham.

Sparrow, P., Brewster, C., & Harris, H. (2004). *Globalizing Human Resource Management*. London: Routledge.

Stone, D., & Gueutal, H. (2005). *The brave new world of e-HR: human resources management in the digital age.* San Francisco: Jossey-Bass.

Tansley, C., Newell, S., & Williams, H. (2001). Effecting HRM-style practices through an integrated human resource information system. *Personnel Review*, *30*(3), 351–370.

Tayeb, M. H. (1998). Transfer of HRM practices across cultures: An American company in Scotland. *International Journal of Human Resource Management*, *9*(2), 332–58.

Taylor, S. (2006). Emerging motivations for global HRM integration. In A. Ferner, J. Quintanilla & C. Sánchez-Runde (Eds.), *Multinationals, Institutions and the Construction of Transnational Practices* (pp. 109–130). Basingstoke: Palgrave Macmillan.

Taylor, S., Beechler, S., & Napier, N. (1996). Toward an integrative model of strategic international human resource management. *Academy of Management Review, 21*(4), 959–985.

Walker, A. (2001). *The Technologies and Trends that are Transforming HR: Web-Based Human Resources*. NewYork: McGraw Hill/Towers Perrin.

Yin, R. K. (2003). *Case Study Research: Design and Methods.* 3rd edition, Thousand Oaks, CA: Sage.

KEY TERMS

Micro-Political Perspective: Turns the spotlight on the conflicts that emerge when powerful actors with divergent goals, interests and identities negotiate with each other locally and across national and functional borders.

Standardization: Establishing a standard procedure or practice for optimising the economic use of resources.

Localization: Adapting a system to take into account different languages, customs, symbols and legislation.

ENDNOTE

[1] For confidentiality reasons a pseudonym is used and certain details concerning the organisation's titles have been kept vague.

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The effects of 'language standardization' on the acceptance and use of e-HRM systems in foreign subsidiaries

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ABSTRACT

Electronic human resource management (e-HRM) systems are argued to be transforming the role of HR by facilitating the transfer of transaction processing responsibilities to employees, managers and other third parties. In multinational corporations, e-HRM systems must achieve this whilst accommodating regulatory and cultural differences, one of which being language. In light of scant empirical research on the role of language in the information technology and international HRM literature, this study investigates the effects of language standardization on the acceptance and use of e-HRM systems in foreign subsidiaries. The findings are based on 18 in-depth interviews with subsidiary HR managers from two European MNCs.

1. Introduction

According to company surveys on the use of information technology (IT) in providing HR services, generally referred to as electronic human resource management (e-HRM), the scope and extent of usage have been increasing rapidly in both US and non-US firms (e.g. CedarCrestone, 2007; CIPD, 2005; Florkowski & Olivas-Luján, 2006). In terms of scholarly activity, however, surprisingly little research has been conducted on the impact of IT on HR. In two separate reviews of the literature, Hoobler and Johnson (2004) show that as few as one percent of HRM articles published in the top HRM journals focus on this topic, and Strohmeier (2007) identifies only 57 relevant studies in peer-reviewed journals since 1995.

Whilst extant research has mostly focused on whether e-HRM is having a transformative effect on the HR function (e.g. Shrivastava & Shaw, 2003) or on HR professionals (e.g. Bell, Lee, & Yeung, 2006), few studies have examined the implications of delivering e-enabled HR services across different cultural and institutional contexts. More than a decade ago Hannon, Jelf, and Brandes (1996) commented that global HR information systems needed to better address the challenges involved in spanning social norms, customs and cultures. Examining the role that context has played in e-HRM research since then, still little is known about the effects of national and cultural differences (Bondarouk & Ruël, 2009; Strohmeier, 2007). Ruta (2005) suggests that this is an important omission since adapting e-HRM implementation plans to fit the local context will increase user acceptance and actual system usage. One culture-related issue that is likely to influence technology acceptance, but has attracted little research attention to date, is the issue of language.

It is now commonplace for MNCs to adopt English as their corporate language in order to facilitate "in house" communication, especially between headquarters and subsidiaries. Despite the increasing significance of language barriers as MNCs pursue greater levels of global co-ordination (Feely & Harzing, 2003), the difficulties presented by 'language standardization' and the implications for HR have not received much scholarly inquiry (Marschan-Piekkari, Welch, & Welch, 1999). Indeed, the subject of language is non-existent in recent reviews of research on user acceptance of information technology (Venkatesh, Morris, Davis, & Davis, 2003), Enterprise Resource Planning (Moon, 2007), human resource information systems (HRIS) (Ngai & Wat, 2006), HR outsourcing (Cooke, Shen, & McBride, 2005) and e-HRM (Strohmeier, 2007).

In light of this, the aim of the present study was to analyze the effects of language standardization on the acceptance and use of e-HRM systems in foreign subsidiaries. The specific users in this study are subsidiary HR managers from two European MNCs. The effects of language standardization on acceptance and use are explored using the four constructs of Venkatesh et al.'s (2003) Unified Theory of Acceptance and Use of Technology (UTAUT) – effort expectancy, performance expectancy, social influence and facilitating conditions – as a conceptual framework and guide in the analysis. Actual e-HRM system use is captured by examining the responses of the HR managers to the specific challenges presented by language standardization.

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The next sections provide a brief overview of e-HRM research and briefly discuss corporate language usage in MNCs, which lead into the presentation of the UTAUT conceptual framework. Following a description of the study's methods, the paper presents its findings of the qualitative analysis and concludes with empirically derived suggestions of how language standardization affects IT acceptance and use.

2. Literature review

2.1. Introduction to e-HRM

Firms using e-HRM technology can be said to have adopted at least one of the following 'innovations': HR functional applications, integrated HR suite applications, interactive voice responses (IVR), HR Intranet applications, Employee Self-Service (ESS) and Manager Self-Service (MSS) portals, HR extranet applications, or HR portals (Florkowski & Olivas-Luján, 2006). Reflecting the breadth and rapid development of these technologies, the concept of e-HRM has been defined in several ways. In line with Martin, Reddington, and Alexander (2008), we distinguish between the use of IT in HRIS and e-HRM. Whilst HRIS refers to the automation of systems for the sole benefit of the HR function, e-HRM is defined as the application of Internet and web-based systems to change the nature of interactions between HR professionals, line managers and employees from face-to-face relationships to ones that are increasingly mediated by technology.

The business case for the adoption of e-HRM technology has been argued on three main fronts (see, e.g. Martin et al., 2008). First, e-HRM can increase efficiencies by reducing HR transaction costs and headcount. Second, e-HRM can substitute physical capability by leveraging digital assets. That is HR information can be used flexibly on an infinite number of occasions at little or no marginal cost. And lastly, the effective use of integrated e-HRM systems can transform the HR "business model" by freeing up the HR executive to provide strategic value to the business that they previously could not do.

Perhaps due to its relative infancy in academic terms and the heightened interest amongst HR consultants, the e-HRM literature is described as mainly non-theoretical. It often draws on managerial rhetoric or 'pro-innovation bias' about the expected transformational impact of e-HRM adoption (Strohmeier, 2007). Indeed, perceptions regarding whether e-HRM is an 'innovation or irritation' (Ruël, Bondarouk, & Looise, 2004) will depend on where one stands. For example, HR headcount reduction can have potentially damaging consequences for knowledge transfer, line managers expecting personal HR service, and for those HR staff displaced by the reduction (Reddington, Martin, & Bondarouk, 2008).

e-HRM research also suffers from a strong national focus on the U.S. with limited empirical findings from other countries (Strohmeier, 2007). This has prompted calls for more comparative research that investigates how the local idiosyncrasies of specific host-country institutional and cultural environments, affect the use and effectiveness of e-HRM (e.g. Olivas-Luján, Ramirez, & Zapata-Cantu, 2007). The present study responds to this call by investigating the effect of language, a subject to which we now turn.

2.2. Corporate language usage in MNCs

Corporate language has been defined as "an administrative managerial tool" which is derived from the need of an international board of directors and MNC top management to run global operations (Piekkari, Vaara, Tienari, & Säntti, 2005). The decision to use a common corporate language in MNCs can be justified on many grounds. For instance, facilitating internal communication between units by using one common language is intended to overcome mistakes, reduce costs, avoid time-consuming translation. It also creates a sense of employee belonging to the firm (Fredriksson, Barner-Rasmussen, & Piekkari, 2006). From a managerial perspective, corporate language can facilitate formal reporting between foreign units, minimizing the potential for miscommunication and allowing for ease of access to company documentation. From an HR perspective, a common corporate language might also send an implicit message to employees that in order to climb up the corporate career ladder one is required to be fluent in English (Marschan-Piekkari et al., 1999). The intended effect is to put pressure on employees to adopt the corporate language because all internal communication, including international meetings, training and development programs are held in English.

The benefits of a common corporate language notwithstanding, the spread of the English language may contribute to the perception that language is not a problematic issue. As Harzing and Feely (2008, p. 50) state, "*one cannot escape the conclusion that in some way these problems of increasing communication intensity, increasing linguistic diversity, and increasing scale of operations must aggravate the problems presented by the language barrier*." The more extensive use of English is unlikely to remove the language barrier in light of the persisting need to use the local language for most local operations (Welch, Welch, & Marschan-Piekkari, 2001). Although top management may reinforce the use and adoption of a common language through strict policies, internal language diversity, or the "multilingual reality", in the form of home and host-country languages remains (Fredriksson et al., 2006).

The perception that language is not problematic would appear to be dominant insofar as the issue of language is widely neglected in the field of international business and international HRM in particular (Piekkari, 2006). Instead, language has been viewed as a medium of communication, aggregated under the umbrella concept of culture and not subjected to theoretical investigation (Piekkari et al., 2005; Welch & Welch, 2008). Harzing and Feely (2008, p. 52) suggest that one of the most serious obstacles to research on language in business has been the lack of systematic analysis concerning the problems associated with language differences and insufficient answers to the question of "*what exactly is it about language that creates the problem?*". This study seeks to address this question by investigating what it is about language standardization that affects the acceptance and use of e-HRM systems in foreign subsidiaries.

3. Conceptual framework

Several competing models have been developed that try to explain the conditions under which individuals will adopt new information technologies. One group of these, collectively referred to as acceptance models, focus on identifying users' reactions to IT, their intention to use IT and/or the actual use of IT (e.g. Davis, 1989). The conceptual framework adopted in this study is Venkatesh et al.'s (2003) Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT differentiates between intention to use (behavioral intention) and actual usage (use behavior) where the former is argued to influence the latter. The validated model, based on a broad review of constructs in the user acceptance literature, argues that there are four main determinants (or predictors) of technology use—*effort expectancy*, *performance expectancy* and *social influence* are direct determinants of behavioral intention, and *facilitating conditions* is a direct determinant of use behavior.

In broad agreement with the claims of Venkatesh et al. (2003, p. 467) themselves, UTAUT was adopted since it is "a definitive model that synthesizes what is known and [...] advances cumulative theory while retaining a parsimonious structure''. Not only will the conceptual underpinning of the study therefore be familiar to IT scholars, but technology acceptance models have also been used to inform recent work on e-HRM (see, e.g. Ruta, 2005; Stone, Stone-Romero, & Lukaszewski, 2006).

Taking each of the four constructs in turn, *effort expectancy* refers to the belief that a given system is simple and easy to use and therefore requires little effort (Davis, 1989). In UTAUT, the concept of effort expectancy is built on concepts from earlier models, such as perceived ease of use and complexity. Effort expectency has been shown to be particularly significant during the earliest phases of system implementation (Venkatesh et al., 2003). Employee users are generally willing to invest the necessary time and effort in mastering a new and complex IT system or interface if they perceive it to offer substantial functional benefits. Over time the influence of effort expectancy on users' behavioral intentions to use the system diminishes as users become familiar with it and eventually gets replaced by concerns over its instrumentality (Davis, Bagozzi, & Warshaw, 1989).

Performance expectancy is a user's belief that a given system will improve their work performance (Davis et al., 1989). This concept in UTAUT is based on five constructs from earlier models (e.g. perceived usefulness, job-fit, outcome expectations) and consistently emerges as the strongest predictor of user acceptance. The meaning of 'performance' refers not only to expectations about task improvements (e.g. productivity), but also expectations about individual outcomes (e.g. personal development) (Compeau & Higgins, 1995).

Social influence is defined as ''the degree to which an individual perceives that important others believe he or she should use the new system'' (Venkatesh et al., 2003, p. 451). Grounded in the constructs of subjective norms, social factors and image, social influence acknowledges that whilst user acceptance is an individual orientation, it is shaped and perceived through social interactions and the desire to conform (Davis et al., 1989; Thompson, Higgins, & Howell, 1991). Although social influence has been shown to have an influence on individual behavior via compliance, internalization and identification (Venkatesh & Davis, 2000), the relationship between social influence and technology acceptance is susceptible to a complex and wide range of contingencies. One such contingency is the role of organizational politics. Knights and Murray (1994) argue exists since organizational and technological realities are constructed in and through the exercise of power and the identity securing strategies of individuals and groups. This is because IT tends to give rise to complexity and uncertainty and is associated with new and powerful specialist and managerial groups.

Lastly, *facilitating conditions* refers to whether users perceive there to be sufficient organizational and technical infrastructure to support the use of the new system (Venkatesh et al., 2003). Drawing on existing constructs of facilitating conditions (Thompson et al., 1991) and compatibility (Moore & Benbasat, 1991), facilitating conditions in UTAUT includes the provision of training and computer support as well as the system's degree of fit with existing systems, work tasks, organizational values and the needs and experiences of users.

In keeping with user acceptance models, this study explores whether and how language standardization affects user reactions to e-HRM systems (i.e. opinions about use) and, in turn, their actual use of those systems (i.e. use behavior). In order to reduce the degree of complexity in the analysis, this study does not include 'behavioral intention' and refrains from discussions of whether effects on actual use are direct or indirect.

We now explain how we conducted the interview study and analyzed the qualitative data, drawing on the four concepts outlined previously.

4. Method

4.1. Data collection and analysis

The present study can be classified as an interview study with data coming from foreign subsidiary HR managers within two MNCs—one well-known western European MNC (POWERCOM) and one Finnish MNC (TECHNOCOM). A qualitative approach was selected based on the need to contextualize the research and draw on individuals' personal experiences (Gummesson, 2006). In terms of external validity, the purpose was not to generalize findings statistically, but to pursue theoretical generalization by using previously developed theory as a template with which to investigate cause–effect relationships (Yin, 2009); in this case UTAUT and its four constructs to assess the effect of language standardization.

Whilst there can be several users in e-HRM systems, the specific users and units of analysis in this study are subsidiary HR managers, i.e. the most senior person(s) responsible for HRM in the subsidiary who typically reports to the subsidiary president and/or someone in corporate/regional HR. They were deemed to be key informants owing to their intimate knowledge of old and new systems and their central communication role with other key e-HRM system end users (e.g. job applicants, employees, line managers, corporate HR). Data was collected via semi-structured interviews conducted either face-to-face or via telephone. The interview data was supplemented with company documentation on e-HRM implementation plans.

In TECHNOCOM, 13 interviews were conducted with HR managers in 11 different units: Brazil, Canada, Finland, Germany, Guatemala, Italy, Indonesia, Norway, Pakistan, Sweden and the UK. In POWERCOM, five interviews were conducted with three different HR managers from the Finnish unit only. The interview questions were originally intended to extract opinions about the implementation process, any associated challenges and the future development needs of the e-HRM system, for example: ''*please describe the system implementation process*'', ''*are there any needs for local modification of the system?*'' and ''*how would you like to see this system develop in the future?*'' During the first interviews the issue of language emerged as a dominant and recurring theme. In subsequent interviews language-specific questions were therefore added, for example: ''*what are your feelings on the system functioning in English*?'' and ''*how do you cope with language related challenges?*'' Interviews lasted between 30 and 90 minutes. Although interviewing in a respondent's native language is suggested to produce more authentic answers that capture ''*subtle nuances*'' (Welch & Piekkari, 2006, p. 428), all interviews were conducted in English. Aside from practical and cost issues of needing to hire several interpreters, the main reasons for using English were to achieve greater comparability of responses and the assumption that language competence would be high among senior managers in MNCs who work in English on a regular basis.

The interview data was *verbatim* transcribed and content analyzed. In the analysis of effects on user reactions the data was categorized into groups using the four constructs of the UTAUT framework as coding anchors (Ezzy, 2002). After several rounds of analysis it was apparent that the four categories were sufficient in capturing the main effects identifiable from the data and therefore no additional categories were deemed necessary. A separate category was created, however, for the purpose of organizing the data on the actual responses (i.e. behaviors) of the HR managers to the challenges presented by language standardization. The

Table 1
Summary findings on the effects of language standardization on the acceptance and use of two e-HRM systems.

	POWERCOM	TECHNOCOM
e-HRM system introduced	Globally integrated HRM software suite (SAP HR)	e-Recruitment system (The Recruiter)
Overview of language use in the MNC	*Formally*: Long policy history of English as the corporate language *Informally*: Multilingual reality among many older and blue-collar workers	*Formally*: English communicated as the corporate language, but not included in any policy documentation *Informally*: Not uncommon at HQ for meetings to be held in Finnish, Swedish or English
Effects of language standardization on user reactions (i.e. opinions)		
Effort expectancy (i.e. perceived ease of use)	English language interface relatively easy to use given their existing language competence Necessary translation of HRM policies considered difficult and time consuming due to complex legal terminology	Overall positive system expectancy in units already using English in a lot of their HRM processes
Performance expectancy (i.e. perceived usefulness)	Productivity gains via the reduction in HR enquiries and transactions perceived as being offset by provision of extensive language support Strict language fields prevented the accurate inputting of HR data leading to operational problems and resentment from disgruntled employees	Common language of applicant data makes search and reporting functions easier and less time consuming Considered useful in recruiting white collar staff, supporting the firm's high-tech image and increasing the global mobility of engineers and managers System not deemed suitable for filling 'local' (i.e. blue-collar) positions due to language competence of applicants and attracted lots of 'unwanted' CV's
Social influence (i.e. subjective norms)	Subsidiary HR felt the standardized use of English was mandatory by Group HR, except where illegal IT consultants perceived as enforcing linguistic compliance and unsupportive of linguistic idiosyncrasies Use of English in other units created sense of reassurance and identification, but also social pressure to conform	HQ perceived as encouraging the use of the system if benefits have been internalized, rather than requiring compliance Lack of shared norms between units about whether knowledge of English is essential in all positions
Facilitating conditions (i.e. support and compatibility)	Use of English viewed as contradicting corporate value of workforce diversity and inclusiveness Insufficient resources for language training and translation work Lack of language support in shared service centre	Use of English contradicted statements on inclusiveness and embracing cultural differences Disagreement between HR managers on whether the firm's image supports the sole use of English
Actual use (behavioral responses of users to language standardization)	Improve facilitating conditions by including English language skills in recruitment profiles, providing informal language support services to personnel with low language competence, and translating HRM policy documentation Exert own influence by 'filtering' messages during translation, negotiating with HQ about the legalities of language standardization, and benchmarking the language strategies of other units	Maintain system performance by using 'old' and 'new' systems selectively in parallel, and targeting younger applicants Exert own influence by negotiating with HQ about the extent of English usage, and benchmarking the language strategies of other leading MNCs

outcome of the analysis is summarized in Table 1. Direct citations of the raw data are used to illustrate and support the analysis.

4.2. e-Recruitment at TECHNOCOM

TECHNOCOM is a Finnish mechanical engineering group with 20,000 employees and a presence in around 70 countries. In 2000, as part of an overall streamlining process and in recognition of its geographical presence, all written and oral communication between units was required to be in English. The implementation of TECHNOCOM's web-based e-recruitment system (The Recruiter) commenced in 2005 in Finland and was rolled out globally throughout 2007. The main reasons for the introduction of The Recruiter were (i) ineffective internal handling of internal and external applications, (ii) insufficient information provided to potential applicants regarding how and where to apply, (iii) to increase the global mobility of managers, and (iv) to support the high-tech image of the company.

The Recruiter was designed to work as follows: job openings in English are announced on the company's internal and external websites. Potential applicants complete and submit their applications via the website. Applicant data in English is read and stored in electronic form in one database which is maintained by a single system provider. This data can then be accessed, searched, and sorted according to a selection of criteria. The database can be used by HR departments to pre-screen all applications in order to come up with shortlists of potential candidates who will be taken to the next step of the selection process.

4.3. Integrated e-HRM suite at POWERCOM

POWERCOM operates in over 100 countries employing more than 100,000 people. Due its size and worldwide presence English had been the corporate language for over a decade. In 2000, POWERCOM began to implement a corporate-wide, integrated HRM software suite (SAP HR)—a system that provides access to large databases through a variety of modules that automate diverse HR sub-functions (Florkowski & Olivas-Luján, 2006). The rationale for adopting the system were: (i) HRM process simplification, standardization and benchmarking as a step towards setting up HR shared service centers, (ii) to increase employee and manager self-service roles, allowing HR professionals to focus more on servicing lines of business, (iii) to improve HR strategic decision-making via more sophisticated management reporting tools, and (iv) to reduce compliance costs by assuming greater control over HRM processes.

After one failed attempt in 2001 to roll out the system simultaneously across all units, POWERCOM decided to implement the English language system in phases prioritizing the strategically most important subsidiaries. The Finnish unit, employing around

1700 people, was included in one of the latter phases that commenced in 2005. After two intensive years of working alongside a POWERCOM-designated team of IT consultants the e-HRM suite went live during 2007.

5. Findings

The effects of language standardization on the reactions (i.e. opinions) of HR managers are presented first followed by the findings on their actual use of the systems as captured by their behavioral responses to the challenges presented by language standardization (see Table 1).

5.1. Impact of language standardization on user reactions to the e-HRM system

At POWERCOM, HR managers at the Finnish subsidiary were not particularly daunted by the prospect of using English, generally regarding the system's ease of use (i.e. *effort expectancy*) as unproblematic due to their regular exposure to English. Instead, their major doubts were related to their expectations of the system's performance (i.e. *performance expectancy*) and how those that did possessed poor English skills, particularly older and blue-collar employees, would cope.

> "*The system is very easy to use [. . .] It is very straight forward, but it's in English and there is resistance:* "*Why is this in English?*" "*Everything is in English nowadays*". *We have many older people who resist it (the system) very much [. . .] and they don't want to use it.*"—HR Manager, Finland

Negative perceptions of *effort expectancy* did surface early on, however, when HR managers realized that a significant amount of translation work was going to be required. In order for the e-HRM suite to function in one language and to facilitate a smooth transfer of HR services to an English language shared-service centre, HR managers needed to establish whether to adopt the global HRM policy or a locally adapted variation, and translate it into Finnish or English accordingly.

> "*The (global) pay policy document is sixty pages and in addition to that we have a local policy for blue-collar workers. So that's really a challenge, how to balance the global and local policies and what to translate into English and what then to translate into Finnish.*"—HR Manager, Finland

Not only the lack of clarity about what to translate, but the difficult, time-consuming task of translating very technical legal jargon left HR managers questioning how easy this system was going to be to use.

In terms of expectations of the system's *performance*, assurances that the system would reduce the HR managers' administrative workload and simplify the management of HR data, were not viewed to have been achieved due to the knock-on effects of language standardization for two reasons. First, any administrative HR tasks that were taken off their hands were described as being quickly offset by the demand for extensive language support.

> "*The skill pool (terminology) for employees, for me, that's not such a big thing. But for our main payroll administrators, their English is not so good, and since the whole system is in English [. . .] we have to translate everything for them that is in English. I have been sitting next to them when they are hiring a person (into the system) and have written down instructions in Finnish, what they should enter in every field.*"—HR Manager, Finland

Second, some of the HR managers confessed to being shocked at the system's lack of flexibility concerning what could and could not be entered into the system. When employees started to complain about misspelt names and pay slips being sent to the wrong addresses, HR managers began to view the extent of language standardization as an obstacle in executing even simple tasks.

> "*It was very difficult to explain to the (IT) consultants that in Finnish we have Scandinavian characters and the system doesn't recognize them. And they said, "Well, if there's a name with dots, just write it without dots.*" *They didn't understand that the word could have a totally different meaning. [. . .] So that's something we will now have to enter in two places.*"—HR Manager, Finland

In terms of *social influence*, the subsidiary HR managers viewed pressure from "important others" (Venkatesh et al., 2003) as salient. It was primarily manifested in coercion-driven compliance from Group HR where local language usage was only permitted when proven to be a legal obligation. In addition, IT consultants were seen to enforce compliance by using technical explanations and a touch of ignorance to argue that linguistic adaptations were impossible, very costly or not important. Being one of the latter units to implement the e-HRM system, HR managers also felt subject to social influence from other units who were already using the system and who had already faced similar language-related challenges. Not only could HR managers identify closely with this group of 'important others', but the implementation of the system in most of POWERCOM's other units created pressure to conform.

The subsidiary HR managers held critical views on *facilitating conditions.* They felt that language standardization contradicted organizational values and was not compatible with the linguistic skills of all employees. The perceived contradiction was with POWERCOM's core value of diversity and inclusiveness, where the forced use of English was having precisely the opposite effect. Moreover, no extra resources were directed to HR departments for assistance in translation work or to compensate for the lack of Finnish speaking personnel at the shared service centre.

> "*This language issue comes up every time we have a staff council meeting. There are lots of people that feel excluded, because they can't understand what is being talked about and there are thousands of e-mails and intranet messages arriving in English. We really don't have the resources in HR, or in any other departments, to do the translating.*"—HR Manager, Finland

Similar to POWERCOM, the effects of language standardization in TECHNOCOM's e-recruitment system on HR managers' perceptions of *effort expectancy* were mostly positive, since their generally high linguistic ability allowed them to focus on the system's superior efficiency (e.g. in applicant screening and reporting). However, there were widespread concerns about the effect of language standardization on *performance expectancy*. This was based on the shared belief that if (potential and actual) applicants do not find the system easy to use because they cannot understand English language advertisements, company websites or application forms, then the system (and TECHNOCOM subsidiaries) would not be effective in attracting enough or the right people. This was not only a concern in subsidiaries from emerging economies such as Brazil, but also in units from developed European countries:

> "*The biggest problem is language really. We have only managed to receive 15 CV's in the whole of Brazil for technicians.*"—HR Manager, Brazil

"*The situation is improving of course, they are making more applications via our (English) website but there are still, for example, blue-collar workers who cannot apply because it is not easy for them to access the internet and they don't speak or write English.*"—HR Manager, Italy

"*Although we are always looking for English speakers, in the end they (local candidates) don't understand what's written. In reality, people here speak good English but they are often afraid of using it.*"—HR Manager, Germany

When explaining whether the 'old' versus 'new' system was more effective, several HR managers differentiated between 'local' jobs (e.g. technicians, electricians, machine operators) where English language competence tends to be low, and 'global' jobs for professionals and managers whose language competence is much higher. Expectations about the poor performance of the new e-recruitment system focused on its unsuitability to recruit 'local' people into 'local' jobs. For example:

"*Sometimes you have a vacancy in The Recruiter, but all you want is people who work in Holland already.*"—HR Manager, Holland

Language standardization was also explained to result in lots of unwanted CV's that were submitted without applicants fully understanding the details of the job, sent in the local language via email, or sent from places such as Africa, India and Pakistan, which as the Finnish unit's HR manager put it "*seem to employ English CV factories*". Hence, whilst the standardization of language in search criteria quickened the screening process, the sheer volume of applications, wanted and unwanted, made the final selection of good candidates more difficult.

"*I find it interesting that people who are able to speak English are the only people who can apply. It is clear that many people don't speak English here so it really limits the use of the system. If, for example, you want to hire a mechanical engineer, you post an advertisement (in English) and a lot of people will apply for that position, even people who are not familiar with that kind of work.*"—HR Manager, Guatemala

"*I expected to use The Recruiter as a CV database, but because of language we receive lots of CVs by e-mail. I thought we could put them into the system so it would help us to perform searches. But we cańt do that [. . .]. Currently, we have CVs (in Portuguese) on our computers – a lot of CV's.*"—HR Manager, Brazil

Perceptions of *social influence* were quite different at TECHNOCOM compared to POWERCOM. In TECHNOCOM, HR managers believed there to be much less social pressure from "important others", from headquarters as well as other units, to adopt the new system and one common language. This was reflected in an apparent lack of shared norms between the units regarding whether English was essential in all positions and The Recruiter only being used in situations where language was not perceived to be a major obstacle.

In terms of *facilitating conditions*, HR managers unanimously agreed that the new system better supports TECHNOCOM's modern, hi-tech image, but some expressed concerns that since TECHNOCOM was not a well-known company internationally its image would need to be "introduced" to potential applicants in their native language.

"*The only weakness I see in Germany is really the language. TECHNOCOM in Germany is not very well known except for people in [the industry]. [. . .] because it is a very specialist brand, I think we need to have the chance to create a local (recruitment) homepage.*"—HR Manager, Germany

Again similar to POWERCOM, there was also a perceived contradiction with organizational values. The argument was that an English language e-HRM system was being implemented in a firm that embraces cultural differences.

5.2. Impact of language standardization on actual use of the e-HRM system

At POWERCOM, subsidiary HR managers were unable to negotiate much flexibility in the system's mandatory use of English and system use was therefore mostly borne out of compliance. In the absence of meaningful organizational support, HR managers were pessimistic about the prospect of language problems being a temporary phase:

"*It won't help if you attend a basic English course because the terminology that we use here is so difficult [. . .] I think we will only resolve the language issue in maybe 10 years when these (older) people have retired.*"—HR Manager, Finland

Instead, HR managers responded by trying to improve facilitating conditions in order to ameliorate the effects of language standardization. For example, they included English language skills in recruitment profiles and job criteria for even lower level employees. During the transition to a linguistically competent workforce HR managers also provided language support, stepping back into roles that the e-HRM system (and service centre) should have taken off them.

"*Lots of my time goes to helping [the Payroll Administrator] and employees also call me several times a week [. . .] not many people are willing to call the service desk – there are no Finnish speaking people there, so they would rather call us.*"—HR Manager, Finland

HR managers also played an active role in translating HRM policy documentation. This not only served to provide the necessary infrastructure to support the system's use, but also allowed the managers to exert some of their own influence by assuming a 'filter' role. They made quick, subjective decisions on what to translate and integrating some of their own 'local' interpretations. Another means of exerting their own social influence was negotiation with headquarters regarding the legalities of language standardization and acceptable grounds for non-compliance.

At TECHNOCOM, and partly in response to perceptions of headquarters' more relaxed attitude towards compliance, subsidiary HR managers tried to maintain the performance of the new recruitment system by using it selectively in parallel with their old system, which outperformed the new system in cases where local language usage was considered essential (e.g. in lower-level positions typically filled by local applicants). This sometimes meant updating The Recruiter with the data headquarters needed and then using their old system for actual recruitment purposes. Some of the HR managers were quite open about not using The Recruiter.

"*I see no point of using The Recruiter. Our old software is tailored to our needs and is much more efficient. It has a much more developed database, search option and is linked to local websites in the local language.*"—HR Manager, Norway

"*Sometimes [applicants] are afraid to fill out applications and don't know how to write English. We actually just use paper copies for local applications. We have our own paper-based database for that. [. . .] The use of The Recruiter depends on the position – the higher the profile the more we use The Recruiter.*"—HR Manager, Italy

Whilst English language skills were already included in most job criteria, the HR managers indicated that they had narrowed the focus of their recruitment activities on younger applicants since the introduction of The Recruiter. Exerting their own influence took the form of negotiations with headquarters about the extent of language standardization, in which the need to create local language websites was a central theme.

"*So far we don't have a local (language) website, but The Recruiter would be much better with it. In China a lot of American companies have their own local websites and they link these to online-testers and upload a lot of selection criteria. It would make HR a lot easier.*"—HR Manager, China

This was argued on grounds of attracting more and better candidates, but also on grounds that it was best practice after benchmarking the recruitment systems of other MNCs that were perceived as 'role models'.

6. Discussion and conclusion

The main contribution of the present study has been to shed light on how language standardization affects user acceptance and use of IT, in this case e-HRM systems. It also represents one of few empirical studies to investigate e-HRM in an MNC setting. The implications of the study's findings are summarized below in the form of tentative suggestions, based on UTAUT, regarding how language standardization will affect the acceptance and use of e-HRM systems in foreign subsidiaries (see Fig. 1).

In terms of language standardization's effect on *effort expectancy*, user reactions and actual use will be heavily influenced by their degree of language competence. This will determine their ability to understand instructions and perceptions of the amount of simple versus complex translation required.

Opinions about *performance expectancy* will be positive to the extent that language standardization leads to improvements in, amongst other things, the consistency and functionality of search and reporting tasks. However, our findings suggest that these opinions may be overshadowed by perceptions about whether other key end users such as job applicants or line managers possess sufficient language competence to use the system as intended. This will be particularly salient in many of today's e-HRM systems where 'performance' is measured in terms of its ability to facilitate self-service and thus play a mediating role in relationships between employees, managers and HR (Martin et al., 2008).

The degree to which a user complies with, identifies with and internalizes an IT system operated in one language will be influenced by the opinions of 'important others' about language use. For some, the source of this *social influence* may be a powerful headquarters or compliant peer subsidiaries, for others it may be a strong host employee voice. In the present study, although the degree of headquarters-driven social influence on the subsidiaries, and the voluntariness of system use (Venkatesh et al., 2003), differed between the two MNCs, the reactions and use behavior of HR managers in both firms echoed the sentiments of Fredriksson et al. (2006), that decision-makers were unappreciative of their multilingual realities.

A user's perception about the pervasiveness of their multilingual reality is, in turn, likely to affect their opinion about *facilitating conditions* in the light of language standardization. For instance, in situations where use of the language is rare and competence in the language is low, users will view language standardization as inconsistent and will attach greater importance to linguistic support either in the form of

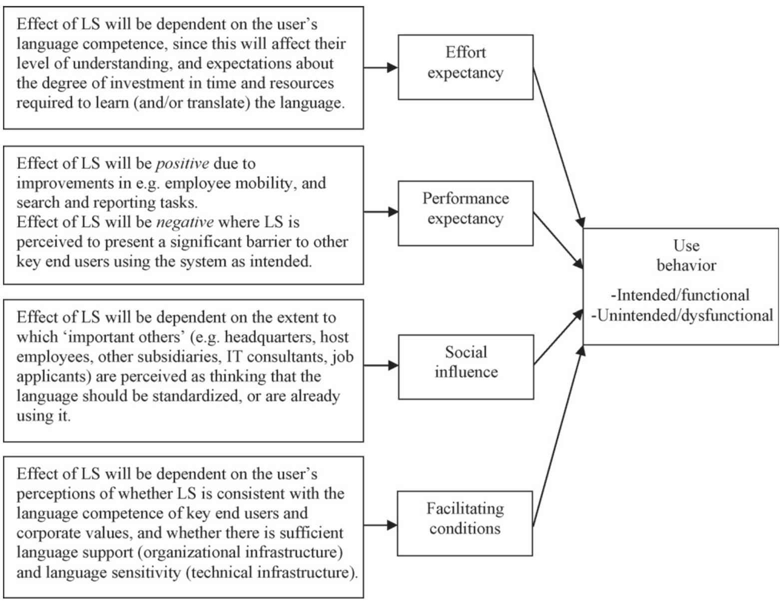

Fig. 1. Suggested effects of language standardization (LS) on acceptance and use of e-HRM systems in foreign subsidiaries (based on UTAUT by Venkatesh et al., 2003).

organizational infrastructure (e.g. language training or 'help desks') or technical infrastructure (e.g. a system's ability to cope with linguistic idiosyncrasies).

In terms of the responses of the HR managers (i.e. use behavior), language standardization was often shown to produce what Stone et al. (2006) refer to as dysfunctional consequences. For instance, in TECHNOCOM HR managers used old and new systems selectively based on their perception of the language competence of the intended users (blue-collar employees versus white-collar employees). Ruta's (2005) study also reports the "ad-hoc" use of old systems by HR to avoid increasing resistance and is framed as an issue of change management during the transition phase between old and new systems, especially ones that replace people with IT. However, it is questionable whether resistance based on language competence or the perceived language competence of others is something that can be addressed by changing attitudes given that mastering a corporate language requires considerable investments in learning and time (Piekkari et al., 2005).

Where social influence from headquarters was stronger (i.e. in POWERCOM), HR managers used the system as intended, but also responded by trying to improve facilitating conditions. This not only involved unanticipated language support and translation work, but also selective recruitment (see also Feely & Harzing, 2003). In support of what Marschan, Welch, and Welch (1997) suggest as drawbacks to acting as so-called 'language nodes', this role was perceived by HR managers as a barrier to the execution of their formal, more 'strategic' duties. It also occasionally went beyond their field of expertise (e.g. legal terminology), and was exploited as an opportunity to exert their own influence over how processes were carried out and what messages were passed on.

In both instances, the responses of the HR managers could be interpreted as 'unintended' user behaviors. This was partly driven by a desire to reduce undesirable 'spillover effects' where negative perceptions of an e-HRM system are transplanted onto the HR department as a whole (Fisher & Howell, 2004). By covering both intended and unintended reactions in connection with affective, cognitive and behavioral outcomes, we agree with Fisher and Howell (2004) that the study of reaction-formation processes and their antecedents, such as language standardization, will help to inform decisions on system design.

In terms of its contribution to the language standardization debate, this study has provided detailed insights into the positive and negative effects of language standardization and how they are likely to influence IT acceptance and use. Since the effectiveness of many current and new IT systems in MNCs relies on the behavioral intentions and use of multiple groups of end users, the debate over whether to standardize language therefore needs to consider not only individual user reactions based on their own degree of language competence, but also user reactions based on their perceptions of the language competence of other key end users.

6.1. Limitations and future research

The findings of this study must be interpreted in light of its limitations, which themselves offer fruitful directions for future research. First, the study investigates system acceptance and usage less than one year after implementation. Since perceptions of effort expectancy are generally more negative during the early phases of implementation (e.g. Davis, 1989; Ruta, 2005) and since experience is shown to have a moderating influence (Venkatesh et al., 2003), we might expect to see the negative effects of language standardization on acceptance and usage decrease over time. Longitudinal research would therefore be useful in investigating the longevity of language effects. Second, owing to the complex nature of relationships between key and moderating variables in UTAUT (Venkatesh et al., 2003), the reported effects of language standardization on acceptance and use may also include the effects of other individual or situational factors (e.g. IT literacy, self-efficacy or industry). Research is therefore welcomed that tries to dissect the relative importance of language standardization and other plausible causal antecedents in explaining user attitudes and behaviors, especially in MNC settings. Finally, subsidiary HR managers were used as single informants. To increase validity, future research would benefit from drawing on the experiences of other key e-HRM stakeholders as well as different types of data (e.g. system usage and HR performance data).

7. Managerial relevance

The apparent lack of appreciation for the multilingual realities of foreign operations in this study leads us to support the recommendations of Feely and Harzing (2003). They suggest that MNC top management try harder to understand the prevalence and consequences of language barriers, and tailor their solutions to the company context based on language check-ups and audits. Such audits, or the employment of a Language Officer (Marschan-Piekkari et al., 1999), should help in identifying both the functional and dysfunctional consequences of language standardization. This will not only act as an informed basis upon which to ensure appropriate facilitating conditions for system use, but also more importantly can be used to improve e-HRM system designs.

In their discussion on the impact of technology on global HRM, Sparrow, Brewster, and Harris (2004, p. 83) summarize the implications for HR managers:

> "*Country-level HR employees will have to think in terms of global line of business processes while being able to become the "care-takers of national culture." Rather than being part of an independent country-level organization, international HR specialists will need to become "brokers" between host country localization demands and global line of business consistency requirements. This new brokering role will be key in ensuring quality assurance of the e-enabled processes.*"

To the extent that multilingualism is likely to remain a reality in local operations, HR managers as "brokers" must assemble convincing arguments based on compelling evidence as to why headquarters should take language issues seriously, and as "care-takers" and 'language nodes' must decide how best to act in the interests of various e-HRM stakeholders without jeopardizing their new, e-enabled opportunity to play a more strategic role.

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References

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

Bondarouk, T., & Ruël, H. (2009). Electronic human resource management: Challenges in the digital era. *International Journal of Human Resource Management, 20*: 505–514.

CedarCrestone. (2007). *The CedarCrestone 2007–2008 HR Systems Survey: HR technologies, service delivery approaches, and metrics* (10th annual ed.).

CIPD (Chartered Institute of Personnel and Development). (2005). *People management and technology: Progress and potential*. London, UK: CIPD.

Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly, 19*: 189–211.

Cooke, F. L., Shen, J., & McBride, A. (2005). Outsourcing HR as a competitive strategy? A literature review and an assessment of implications. *Human Resource Management, 44*: 413–432.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technologies. *MIS Quarterly, 13*: 319–340.
Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science, 35*: 982–1003.
Ezzy, D. (2002). *Qualitative analysis: Practice and innovation*. London, UK: Routledge.
Feely, A. J., & Harzing, A.-W. (2003). Language management in multinational companies. *Cross Cultural Management: An International Journal, 10*(2): 37–52.
Fisher, S. L., & Howell, A. W. (2004). Beyond user acceptance: An examination of employee reactions to information technology systems. *Human Resource Management, 43*: 243–258.
Florkowski, G., & Olivas-Luján, M. R. (2006). Diffusion of information technology innovations in human resource service delivery: A cross-country comparison. *Personnel Review, 35*: 684–710.
Fredriksson, R., Barner-Rasmussen, W., & Piekkari, R. (2006). The multinational corporation as a multilingual organization: The notion of a common corporate language. *Corporate Communications: An International Journal, 11*: 406–423.
Gummesson, E. (2006). Qualitative research in management: Addressing complexity, context and persona. *Management Decision, 44*: 167–179.
Hannon, J., Jelf, G., & Brandes, D. (1996). Human resource information systems: Operational issues and strategic considerations in a global environment. *International Journal of Human Resource Management, 7*: 245–269.
Harzing, A.-W., & Feely, A. J. (2008). The language barrier and its implications for HQ-subsidiary relationships. *Cross Cultural Management: An International Journal, 15*: 49–61.
Hoobler, J. M., & Johnson, N. B. (2004). An analysis of current human resource management publications. *Personnel Review, 33*: 665–676.
Knights, D., & Murray, F. (1994). *Managers divided: Organisation politics and information technology management*. Chichester, UK: J Wiley.
Marschan, R., Welch, D., & Welch, L. (1997). Language: The forgotten factor in multinational management. *European Management Journal, 15*: 591–598.
Marschan-Piekkari, R., Welch, D., & Welch, L. (1999). Adopting a common corporate language: IHRM implications. *International Journal of Human Resource Management, 10*: 377–390.
Martin, G., Reddington, M., & Alexander, H. (Eds.). (2008). *Technology, outsourcing and transforming HR*. Oxford, UK: Butterworth-Heinemann.
Moon, Y. (2007). Enterprise Resource Planning (ERP): A review of the literature. *International Journal of Management and Enterprise Development, 4*: 235–262.
Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research, 2*: 192–222.
Ngai, E. W. T., & Wat, F. K. T. (2006). Human resource information systems: A review and empirical analysis. *Personnel Review, 35*: 297–314.
Olivas-Luján, M., Ramirez, J., & Zapata-Cantu, L. (2007). e-HRM in Mexico: Adapting innovations for global competitiveness. *International Journal of Manpower, 28*: 418–434.
Piekkari, R. (2006). Language effects in multinational corporations: A review from an international human resource management perspective. In G. K. Stahl & I. Björkman (Eds.), *Handbook of research in international human resource management* (pp. 536–550). Cheltenham, UK: Edward Elgar.
Piekkari, R., Vaara, E., Tienari, J., & Säntti, R. (2005). Integration or disintegration: Human resource implications of a common corporate language decision in a cross-border merger. *International Journal of Human Resource Management, 16*: 330–344.
Reddington, M., Martin, G., & Bondarouk, T. (2008). Manager perceptions of e-HR outcomes: A framework, case illustrations and some reflections. In *Proceedings of the 2nd European academic workshop on electronic human resource management*.
Ruël, H. J. M., Bondarouk, T., & Looise, J. C. (2004). E-HRM—Innovation or irritation: An explorative empirical study in five large companies on web-based HRM. *Management Review, 15*: 364–381.
Ruta, C. D. (2005). The application of change management theory to HR portal implementation in subsidiaries of multinational corporations. *Human Resource Management, 44*: 35–53.
Shrivastava, S., & Shaw, J. (2003). Liberating HR through technology. *Human Resource Management, 42*: 201–222.
Sparrow, P., Brewster, C., & Harris, H. (2004). *Globalizing human resource management*. London, UK: Routledge.
Stone, D. L., Stone-Romero, E. F., & Lukaszewski, K. (2006). Factors affecting the acceptance and effectiveness of electronic human resource systems. *Human Resource Management Review, 16*: 229–244.
Strohmeier, S. (2007). Research in e-HRM: Review and implications. *Human Resource Management Review, 17*: 19–37.
Thompson, R. L., Higgins, C. H., & Howell, J. M. (1991). Towards a conceptual model of utilization. *MIS Quarterly, 15*: 125–143.
Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *MIS Quarterly, 45*: 186–204.
Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Towards a unified view. *MIS Quarterly, 27*: 425–478.
Welch, C., & Piekkari, R. (2006). Crossing language boundaries in qualitative interviewing. *Management International Review, 46*: 417–437.
Welch, D. E., & Welch, L. S. (2008). The importance of language in international knowledge transfer. *Management International Review, 48*(3): 339–360.
Welch, D. E., Welch, L. S., & Marschan-Piekkari, R. (2001). The persistent impact of language on global operations. *Prometheus, 19*: 193–209.
Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

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An institutional theory perspective on e-HRM's strategic potential in MNC subsidiaries

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ABSTRACT

This paper extends the application of institutional theory to electronic human resource management (e-HRM), and strategic information systems (IS) more generally, in a multinational corporation (MNC) subsidiary setting. By adopting Scott's (2001) institutional theory perspective, this paper explores the effects of host-country institutional factors on strategic e-HRM practices in foreign subsidiaries. More specifically, the aims of this paper were, first, to shed light on how regulative, cognitive and normative institutional dimensions affect Western-based e-HRM practices in MNC subsidiaries in China, and second, to examine how these institutional factors influence the strategic potential of e-HRM in this setting. Based on interview data collected from key informants in 10 MNC subsidiaries from Beijing and Shanghai, the findings illustrate how institutional pressures create both positive transformational and negative dysfunctional consequences for subsidiaries, and that subsidiary responses to these pressures can substantially affect the ability of IS to achieve its strategic potential. Although observed local adaptations were seen to restrict the strategic potential of IS, in some cases responses seem to have enabled the transposition of a new set of strategic IS practices to this non-Western setting.

1. Introduction

Information systems (IS) are increasingly influencing human resource management (HRM) in multinational corporations (MNCs) as electronic human resource management (e-HRM) systems become more widely used. Previous research suggests that e-HRM, defined as the "application of IS for both networking and supporting at least two individual or collective actors in their shared performing of HR activities" (Strohmeier, 2007, p. 20), typically increases the efficiency of HR and IS processes, reduces costs, and decreases transaction times. By doing so it has the potential to liberate the HR function to focus more on strategic issues (Bondarouk and Ruël, 2009a; Marler, 2009).

Such positive consequences are also amongst the drivers of e-HRM adoption in MNC subsidiaries. However, there is a lack of empirical research on the effectiveness of e-HRM in MNC settings (Strohmeier, 2007), and only mixed results on e-HRM's strategic potential (Bondarouk and Ruël, 2009a; Marler, 2009; Parry and Tyson, 2011; Ruël et al., 2004; Ruta, 2005). One reason for this may be the historically low levels of e-HRM penetration in certain parts of the world until recently. For instance, Smale (2008) found that during 2006/2007 only a handful of Finnish MNCs were using e-HRM systems in China, although there were many indications that this was a growing area of interest. However, there are good reasons to view China as a fruitful location in which to study e-HRM today. First, many Western MNCs are typically intent on transferring e-HRM

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(and models of HRM) to units in China; second, there are significant institutional differences between China and the EU and USA; and third, the institutional context for e-HRM in China is undergoing significant change.

There is still a need to address issues arising from the MNC context in international IS research (Leonardi, 2008), and this is currently a topic of increasing interest. However, Currie (2009) argues that institutional theory has not been sufficiently applied in IS research and Weerakkody et al. (2009) conclude that the use of institutional theory is still comparatively narrow and limited in the IS domain, especially when considering its wider use in organizational studies of HRM. In the HRM field, institutional theory has been used to shed light on HRM practices in MNC subsidiaries, and the factors that influence them (e.g., Björkman et al., 2008; Myloni et al., 2004). Sumelius (2009) suggests that this theoretical approach still has the potential to increase our understanding of various aspects of subsidiary HRM.

Reviews of the extant e-HRM literature (Bondarouk and Ruël, 2009b; Burbach and Royle, 2010; Strohmeier, 2007) underscore a dearth of research in the investigation of institutional factors affecting e-HRM practices in MNCs. The only study by Burbach and Royle (2010) focuses on the factors affecting the diffusion of e-HRM practices between the parent and its foreign subsidiaries. This found that an MNC subsidiary's e-HRM practices, like its HRM practices, are influenced by a broad range of external institutional factors as well as pressure from the MNC headquarters. The study did not, however, shed light on the outcomes of institutional pressures on the effectiveness or strategic impact of e-HRM practices. This paper addresses this gap and investigates the effects of institutional factors on e-HRM practices and the consequences these have for e-HRM realizing its strategic potential.

More specifically, this paper explores national host-country institutional pressures on e-HRM practices in foreign subsidiaries in China. Accordingly, it seeks to contribute to the IS and e-HRM strategy literature on two main fronts. First, this paper sheds light on how institutional pressures affect Western-based e-HRM practices in MNC subsidiaries in China. Second, this paper examines how responses to these pressures influence e-HRM's strategic potential in this setting. By using e-HRM as the empirical focus of analysis, this paper contributes theoretically and empirically to our understanding of factors affecting the strategic potential of IS in an MNC subsidiary setting.

The next sections introduce the subject of e-HRM's strategic potential and e-HRM in MNCs. The subsequent sections present Scott's (2001) institutional theory dimensions, review the work from the IS field that applies an institutional approach, and conclude with a discussion of China's institutional setting that draws on work from the HRM and enterprise resource planning (ERP) literatures. Following a description of the study's method, the findings are presented and discussed. The paper is concluded with a discussion of the study's theoretical and practical implications.

2. E-HRM in MNCs

2.1. Strategic potential of e-HRM

A number of labels have been proposed regarding the phenomenon that is now commonly referred to as e-HRM. In broader terms, e-HRM has also been referred to HR Information Systems (HRIS) (Ngai and Wat, 2006), web-based HRM (Ruël et al., 2004), intranet-based HRM (Bondarouk and Ruël, 2009a) and HRIT (Florkowski and Olivas-Luján, 2006). The concept of e-HRM in this paper is different from HRIS. HRIS refers to the automation of systems for the sole benefit of the HR function, while e-HRM is concerned with the application of web-based systems, such as employee self-service (ESS) and manager self-service (MSS), to change the nature of interactions among HR personnel, line managers and employees from one characterized by face-to-face relationships to one that is increasingly mediated by technology (Martin et al., 2008). The definition of e-HRM that best fits the empirical context of the current study integrates discussion from the IS field, where a growing number of MNCs are reported to be using ERP systems. These are defined as "configurable information system packages that integrate information and information-based processes within and across functional areas of the organization" (Kumar and Hillergersberg, 2000, p. 22). These ERP-based e-HRM systems contain HRM modules that include ESS and MSS portals (see Florkowski and Olivas-Luján, 2006), which the subsidiaries in this study were using.

When looking at the strategic potential of e-HRM in MNCs, Hannon et al. (1996) mention cost reductions as the earliest motivation behind e-HRM adoption. This is still the primary justification of e-HRM, and the one of the most consistent outcomes of e-HRM system implementation (Marler, 2009). Another connection between e-HRM systems and strategic potential is freeing up time for HR. For instance, Lawler and Mohrman (2003) argue that being an HR strategic partner goes hand in hand with spending more time on organizational planning, design, and development, and spending more time fitting the development activities of the organization to its business needs. There is also evidence that supports efficiency and improved service delivery as being both goals and realized consequences of e-HRM use (Parry and Tyson, 2011; Ruël et al., 2004; Ruta, 2005). Another aim of e-HRM implementation has been to reduce the HR headcount, especially among administrative staff, in order to provide the HR department with an opportunity to improve its image and play a more consultative or strategic partner role (Ruël et al., 2004).

However, Parry's (2011) study examining the use of e-HRM in MNCs as a means of increasing the strategic value of the HR function suggests that e-HRM may help HR to increase its value to the company by becoming more strategic, but found no evidence of cost savings due to reductions in HR headcount. The study suggests that organizations are using e-HRM in order to redeploy HR practitioners from transactional work to more strategic and value-added activities. Parry and Tyson (2011) illustrate that barriers to the realization of its strategic potential may be attributed to the limited skill levels of the HR team

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since strategic outcomes invariably require new areas of expertise such as technical, consultancy or project management skills. Without corresponding skill development, it may not be possible for existing HR staff to step into more strategic roles. The capability of the e-HRM system to generate strategic data also depends on prior knowledge of what data is required, and the skills and knowledge of how to analyze the data meaningfully. In addition, for e-HRM data to be used strategically there should be organizational understanding of what is 'strategic e-HRM' during system design. Marler and Fisher (2013) suggest that despite the rhetoric in both the general and trade press, there is little evidence for, or academic research into, whether e-HRM contributes to strengthening the strategic role of HR. Marler (2009) suggests it is unlikely that examples of e-HRM delivering these strategic expectations will be found; rather, organizations where the HR function already plays a strategic role are more likely to turn e-HRM into a competitive advantage. With this in mind, Ruël and Van der Kaap (2012) argue that contextual facilitating factors in MNCs (e.g., data quality, technology competences, and HR policy consistency) make a significant contribution to HR's ability to create value.

In summary, one can conclude that the most commonly cited reasons for the strategic potential of e-HRM are cost reductions, time savings, improved service delivery, and the collective impact these have on allowing the HR function to step into more strategic HR roles and improve its image amongst key stakeholders. While these are important motives for domestic firms and MNCs alike, e-HRM in MNCs can also serve as a means to standardize, or at least harmonize, HRM practices (Ruël et al., 2004). Such harmonization across MNCs and their subsidiaries can be seen as essential to e-HRM realizing its strategic potential.

2.2. E-HRM in MNC subsidiaries

As early as 1996, Hannon et al. (1996) stated that the implementation of e-HRM had made progress in coping with the geographically dispersed nature of business, but needed to address the challenges involved in spanning social norms and different cultures more efficiently. Compared to other business functions in MNCs, HRM is considered more subject to the influence of local institutional environments, since HRM practices are strongly influenced by national cultural values and social structures (Myloni et al., 2004). According to Björkman et al. (2008), HRM practices in MNC subsidiaries face pressures for local adaptation often at the same time as having to respond to at least some degree of standardization. Regarding IT and HRM in MNCs, Ghoshal and Gratton (2002) indicate how MNCs are increasingly pursuing tighter integration by deploying IT-based mechanisms in conjunction with more traditional coordination and control mechanisms. International HRM research has also suggested that the adoption of IT-based integration mechanisms has accelerated the development and diffusion of e-HRM practices in MNCs (Sparrow et al., 2004). Bondarouk and Ruël (2009b) suggest that the main change is that HR must now consider whether the organization has sound e-HRM systems in place, and whether this provides the capability to deliver standard people-related practices without them having to pass through the hands of the HR function.

One of the effects of the standardization of e-HRM systems is that while many foreign units once had far more autonomy in terms of their HRM practices, now "there is a much stronger focus on cross-country and cross-business border integration issues" (Sparrow et al., 2004: 88). Parry et al. (2008) present four drivers underpinning why MNCs are likely to standardize HRM: HRM practices are more likely to be transferred from the headquarters if they are regarded as superior; HRM practices can be standardized in order to support a wider business strategy; ethical issues; and finally, knowledge transfer, quality standards, and creating an international network. These kinds of drivers can also be viewed as drivers of e-HRM standardization as suggested by Ruël et al. (2004) and Burbach and Royle (2010). According to Parry and Tyson (2011), the use of standardized e-HRM practices allows organizations to ensure that they are compliant with particular HR requirements and improves the process of management. This makes a strategic contribution by facilitating faster and more accurate decision making.

Much of the IS research takes an uncritical stance towards the global alignment of IT systems, assuming that increased standardization of IT systems is generally a good thing (Baptista et al., 2010). Leonardi (2008, p. 978), however, discusses the tensions of IS localization and standardization:

> *Users of a technology in the various units of an MNC hope to use the technology in line with cultural values to maintain their cognitive consistency; similar desires in multiple cultural settings produce divergent outcomes across units of the MNC. Managers, however, often wish to standardize practices and hope technology will be used in such a way to bring about convergence across units.*

Indeed, in most cases it seems that organizations have to adapt to the systems rather than the other way round.

Achieving standardization is likely to be problematic and has the potential to produce dysfunctional consequences (Stone et al., 2006), since it will be influenced by factors such as organizational culture, the headquarters–subsidiary relationship, authority structures, market characteristics, and work norms (Parry et al., 2008). Local factors that are likely to make standardization difficult are, for example, union presence, labor market structures and the legal and political context (Sparrow et al., 2004), as well as differences in language and language competence (Heikkilä and Smale, 2011). In addition, Leonardi (2008) argues that IT implementation in MNCs privileges the practices of those capable of producing them (typically Western managers) and marginalizes those actors in local units of the MNC (typically lower-power and non-Western employees), which might create grounds for micro-political conflicts in subsidiaries. Ruël et al. (2004) suggest that the introduction of e-HRM in MNCs is often accompanied by the standardization of HRM processes, where differences in cultures

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and languages between countries are obstacles. They go on to argue that the institutional aspects of an organization's environment represent a complication in strategic e-HRM initiatives, a subject explored in the following section.

3. Institutional theory and the Chinese context for e-HRM

3.1. Institutional theory and the MNC

Institutional theory postulates that the decisions of companies are not only the result of a rational decision-making process aiming to maximize effectiveness, but also that they are influenced by the institutional context in which they operate (Kostova, 1999). As applied to MNCs, this means that MNC subsidiaries are considered to exist in conditions of institutional duality, in that they experience pressures to obtain both internal legitimacy from the MNC and external legitimacy from their local environment (Kostova and Roth, 2002). MNCs try to attain internal legitimacy and consistency of practices to develop and sustain their corporate identity, while on the other hand they need to adapt their practices to suit the cultural, societal and legislative environment of the host country in order to achieve local legitimacy. Institutional duality, it is suggested, poses more challenges where the 'institutional distance' between home and host-country institutions is large (Kostova and Roth, 2002), as it is between China and the West. Amongst other things, the countervailing nature of distant institutional contexts will ultimately lead to micro-political conflict between the headquarters and subsidiaries (Morgan, 2001).

From these conflicts it therefore follows that both the external institutional context and relational context of the MNC will shape IS, HRM and e-HRM practices within a given subsidiary. More specifically, DiMaggio and Powell (1983) argue that organizations adopt different practices through three different processes of isomorphism: coercive, mimetic and normative. Scott (2001) later refers to these as regulatory (coercive), cultural-cognitive (mimetic) and normative, which are the terms used in this study. Referring to Scott's (2001) earlier classification of these 'three pillars', Kostova (1999) argues that the institutional profile of an MNC subsidiary's host country differs across these three dimensions. The regulatory dimension reflects existing laws, regulations and rules in a national environment that promote certain types of behavior and restrict others. The cognitive (i.e., interpretations and frames of thought) dimension constitutes the nature of reality and the frames through which meaning is assigned. Finally, the normative (i.e., values and norms) dimension focuses on the values and norms held by individuals in a given country (Scott, 2001). One should note that normative and cognitive dimensions are related to culture and might therefore overlap in some areas.

Regarding MNC business practices and institutional logics, Boxenbaum and Battilana (2005) propose an institutionalist account of innovation in which transposition across fields characterized by different dominant institutional logics plays a prominent role. Transposition is the "act of applying a practice from one social context to another and it occurs because practices can be applied to a wide and not fully predictable range of cases outside the contexts in which they are initially learned" (Sewell, 1992, p. 17). The act of transposition is one of diffusing a managerial practice to another organizational field. Whenever a practice is transferred from a field dominated by a different institutional logic, foreign practice is likely to break with the field frame that informs current practices, and thus lead to innovative management practices. According to Boxembaum and Battilana (2005, p. 365) the most important facilitating condition of transposition is the presence of a major problem in the field: "an acute sense of crisis and a questioning of the legitimacy of pre-existing institutional and structural arrangements".

Turning to the IS field, Baptista et al. (2010) suggest that the IS literature has been passive in using institutional theory and has not explored its underlying assumptions. This approach has only been adopted in strategic IS as a theoretical framework for studying organizational reactions to technological innovations, and then only modestly. For instance, Teo et al. (2003) suggest that Scott's model reveals the major drivers of an interorganizational linkage of technology adoption by organizations, thus providing strong support for the presence of an institutional influence in the context of IS adoption. This approach has also been used by Butler (2011) in explaining how a range of regulative, normative and cultural-cognitive factors influence IT manufacturers' strategic decisions on the design and manufacture of environmentally sustainable products.

Benders et al. (2006) study how and to what extent standardization coincides with the deployment of ERP systems and, using the work of DiMaggio and Powell (1983) on isomorphic pressures, introduce the term 'technical isomorphism' to refer to mechanisms that encourage actors (developers, consultants, and users) to conform to the centralistic philosophy and standards incorporated in ERP. In addition, Liang et al. (2007) propose that cognitive, coercive, and normative institutional pressures influence the assimilation of ERP systems. For instance, the normative pressure in an organizational field where suppliers, customers, consultants, and professional associations collectively assess and endorse strategic IS innovations will shape the implementation and assimilation of enterprise systems by providing institutional norms that guide top managers.

However, the institutional perspective also has its critics. For example, Oliver (1991) argues that there is a lack of attention both to the role of organizational self-interest and to active agency in organizational responses to institutional pressures. When discussing the deinstitutionalization of practices, Kang and Li (2009) suggest that the impact of institutional distance between home and host countries varies according to the international strategy adopted by parent firms and the international experience of executives. Moreover, the national business systems approach (Whitley, 1993) suggests that the institutional perspective provides only a 'snapshot', which does not take into account changes over time. Baptista (2009) argues that Scott's cognitive pillar is the root to understanding the process of IS institutionalization within the context of intranet use. According to Baptista (2009, p. 308), "*the role of cognition as a vehicle of institutionalization prevails [over] other*

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pillars because people treat cultural categories as the cognitive containers in which social interests are defined and classified, argued, negotiated, and fought out." From this perspective, behavior is driven not so much by the enforcement of rules, norms and values (i.e., regulative and normative pressures), but by unconscious behavior based on classifications and schemas in the minds of individuals. Despite this, and as evidenced in earlier empirical work, institutional theory still has significant potential to contribute to our understanding of various aspects of subsidiary e-HRM practices. It can help to shed light on the tensions involved in standardization versus localization in the Western-based MNC subsidiary setting, especially in turbulent and institutionally distant economies such as China.

3.2. The Chinese context for e-HRM

With regards to e-HRM in the context of China as the host country, research seems to be limited to e-HRM implementation in a local enterprise (Xin, 2010) or e-HRM implementation challenges in a state-owned enterprise (SOE) (Zhang and Wang, 2006). This review of the literature therefore draws on HRM and ERP literature, which suggest there are several features of the Chinese institutional environment that are likely to influence e-HRM deployment and utilization.

First, the Chinese *regulatory* context for e-HRM – comprising the national laws and regulations that promote and restrict various behaviors – has undergone dramatic changes in recent years (Dezalay and Garth, 2011; Hasan et al., 2009). For example, the introduction of new labor laws since 2008 has created fears that the improvements designed to protect workers from arbitrary firings will raise costs by raising requirements for severance pay (Chen and Funke, 2009) and increase the workload for HR. In addition, the continued application of the communist *hukou* system (the registration of households) has influenced HRM practices. This registration is the legal basis for identification, and an individual cannot acquire a legal permanent residence, benefits or privileges in any place other than the registered birthplace (*hukou*). Companies, in most cases their HR departments, are obliged to report *hukou* data to the authorities (Wang, 2005). Xue et al. (2004) argue that the most problematic function of ERP systems is thus the ability to generate reports that meet both the local government and central government requirements.

Second, with regard to social knowledge about e-HRM, the *cognitive* institutional environment has been characterized by a strongly hierarchical structure. This has been the result of centralized planning and has resulted in a historical absence of the Western HR concept (Björkman et al., 2008; Child, 1994). However, corporate investment in developing local HR managers and increased academic education in HRM seems to be elevating the status of HRM (Cooke, 2004). Although research suggests that HRM in China is not fulfilling executives' expectations and is still strongly associated with administrative work, longitudinal research offers a more positive view of an increasingly strategic role, including the progressive implementation of Western-style HRM practices (Sumelius, 2009). However, He (2004) argues that ERP use in China is especially challenging because of the lack of well-trained employees, information technology infrastructure, or due to the presence of high technical and cultural complexity, as well as differences between Western and Chinese management practices.

Third, representing values, beliefs about human nature and norms, the *normative* institutional context for e-HRM has been addressed in several studies. Chow (2004) presents tendencies towards familism and the use of networks (*guanxi*) in staffing practices. *Guanxi*, a social capital network which at its core is the continual exchange of services and favors within the network (Luo, 2002),) is still influential. Having the right connections and the good opinion of co-workers are considered important (Chow, 2004), and an applicant can often pass formal screening criteria within companies with the use of *guanxi*. It seems overall ERP use in the Chinese context is being influenced by informal planning and process modeling, which is highly dependent on *guanxi* and on language. This creates communication barriers between users and demands resources in terms of system modifications (Ge and Voss, 2009; Huang and Palvia, 2001). Other research has indicated a preference for sustaining harmonious Confucian-based relationships in how performance appraisals are conducted (Hempel, 2001). Furthermore, Huo and Von Glinow (1995) suggest that typical Chinese cultural characteristics such as the concept of 'face' and respect for authority determine the desirability of certain HRM practices. Cooke (2011) noted that Chinese culture respects seniority and hierarchy, values social harmony, and adopts an egalitarian approach to HR service distribution. Finally, compensation ideology among Chinese employees is reported to be converging with the West insofar as the Chinese are exhibiting more signs of a merit-based and cash-oriented mentality (Chiu et al., 2002).

It seems HRM in China has evolved from playing a purely administrative role towards falling more in line with the Western concept of HR (Warner, 2010). From an institutional perspective, this could be explained as being a result of mimetic and normative processes in the institutional environment driven by MNCs who view each other as role models in how they handle HRM and ERP in the Chinese context. Indeed, both He (2004) and Ge and Voss (2009) argue that ERP success in China depends on successful adaptation to the local context. To conclude, this literature review demonstrates a need to understand how standardization and adaptation to the local context affect e-HRM in terms of it realizing its strategic potential and the particular institutional forces that are influencing this.

4. Method

This research is exploratory in nature, and the use of this research approach is favored in fields within HRM such as information technology that are in their relative infancy (Strohmeier, 2007; Yin, 2009). The use of the qualitative method is justified by the need to contextualize the research and draw on individuals' personal experiences of e-HRM and a range of

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institutional pressures. In terms of external validity, and given its exploratory nature, the purpose of this study is not to generalize the findings statistically, but to pursue theoretical generalization by using institutional theory as a heuristic device (Yin, 2009) to study influences on e-HRM's practices and on e-HRM's strategic potential. This approach allows us to determine whether this theory is useful in explaining what affects e-HRM and its strategic potential in MNC subsidiaries, and therefore it's utility as a conceptual framework for future research.

The data for the study were collected via in-depth, personal interviews with 14 respondents the holding positions of national manager, HR manager or e-HRM expert in 10 different wholly-owned subsidiaries of MNCs in China. The data in this study were collected in 2010 and 2011. MNC units in this study were selected based on the following general criteria: (a) units shared similar key characteristics to facilitate comparison and generalizations about the institutional effects (e.g., they were wholly-owned subsidiaries of Western MNCs); (b) the e-HRM systems used were similar in all units and were capable of having a strategic impact in the ways the literature has presented it, as discussed above. More specifically, the criteria included that the units had been using their e-HRM systems for more than 2 years, and that the e-HRM systems were used for similar purposes, such as recruiting, training, performance management, talent management and compensation. In addition, the systems used were all Western-based, standardized ESS and MSS portals aimed at HR personnel, line managers and employees. Finally, the systems were intranet-based and HR data was communicated to the MNC headquarters.

The subsidiaries in this study had an average of 1200 employees and were located in or near Shanghai and Beijing. The interviewees had work experience with HR systems ranging from 2 to 10 years, and were very familiar with Chinese institutional arrangements, being Chinese nationals or expatriates who had lived in China for at least 2 years. Their rich experience provided important data to explore the research questions of this study, and interviewing key informants about the subject is the principal way to conduct exploratory research of this nature (Saunders et al., 2007). Table 1 summarizes the characteristics of the MNCs, the units and the interviewees.

Cooke (2009a) asserted that researchers working in China have noted that access to research informants is challenging. This was also the case in this study. Access to the subsidiaries was provided first through listings from European Chambers of Commerce and respondents were contacted via e-mail. However, this method proved to be inefficient since the respondents reported a lack of time and because of the large number of invitations to participate in academic research (see also Björkman et al., 2008). Therefore, the researcher found approaching HR experts familiar with e-HRM systems at various workshop events to be the most fruitful method. After contacting respondents via e-mail, interviews were carried out through personal site visits. Prior to each interview, a list of interview questions was sent to the interviewees via e-mail for preparation. Interviews were conducted in English, lasted between 60 and 90 min, and were all recorded and transcribed *verbatim*.

The interview consisted of several open-ended questions covering general e-HRM issues: Why, when and how was the e-HRM system implemented? Were there any issues regarding local adaptation? What were the various stakeholder roles, who was involved and why? How has the use of e-HRM influenced your work? Were the systems intended to increase the strategic impact of HR? How? In addition, more specific questions addressed the Chinese institutional context: Which laws influence e-HRM system use? To what extent have Chinese cultural characteristics had an impact on e-HRM?

The data were content analyzed, coded, and categorized into groups. First, the responses were carefully scrutinized to isolate important data from the unimportant data, and analysis followed the research purpose and questions (Saunders et al., 2007). Once data had been collected, the resulting information was coded and categorized into three themes using Scott's (2001) three pillars as coding anchors. When looking at e-HRM's strategic potential, the responses were coded under topics such as cost reduction or service delivery. The additional and final stage of analysis used 'featured syntheses' (Hart, 1998) – synthesizing all the data in one table under topics related to the research questions. All relevant interview data related to the

Table 1
Characteristics of subsidiaries and respondents.

Subsidiary	MNC origin	Industry	Subsidiary location	Interviewee position	Interviewee nationality	HR experience (years)
1[a]	Finland	Telecom	Beijing	Country Manager	Finnish	4
				HR Manager	Chinese	5
2	Finland	Engineering	Beijing	HR Manager	Chinese	5
3[a]	US	Consumer goods	Shanghai	HR Manager	US	2
4	US	Software	Shanghai	HR Manager	Chinese	8
5[a]	Netherlands	Consumer goods	Beijing	HR Manager	Dutch	6
				HR Manager	Chinese	5
6	Finland	Engineering	Shanghai	e-HR Expert	Chinese	8
7[a]	Finland	Telecom	Shanghai	Country Manager	Chinese	2
				e-HR Expert	Finnish	5
8	Finland	Forestry	Shanghai	e-HR Expert	Chinese	2
9[a]	Sweden	Consumer goods	Beijing	HR Manager	Swedish	12
				e-HR Expert	Chinese	7
10	Finland	Engineering	Shanghai	HR Manager	Chinese	3

[a] Two people were interviewed from these subsidiaries.

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Table 2
Summary of the findings.

Institutional dimension	Institutional factors affecting e-HRM	Impact on e-HRM practices	Implication for realization of strategic potential (−/+)
Regulatory	Complicated tax regulations	Payroll and recruiting modules localized	Limited benefits of standardized systems (−)
	Labor law changes	Need for continuous process updates	Reduced time for strategic activities (−)
	Differences within Hukou system	Additional system modifications	Decreased HR service delivery quality (−)
	Differences between national and local government legislation	Intentional circumventing of system rules	Limited control of processes (−)
	Lack of unions and IP laws	Tactical choices not to follow official policies	Decreased HR service delivery quality (−)
		Easy implementation of new systems	Reduced time for strategic activities (−)
		Need for more secure systems	Increased reaction speed to business needs (+)
Cognitive	Lack of people management skills in line management	Defensive attitude towards HR	Limited HR service quality from ESS and MSS (−)
	Low appreciation of HR profession by line managers	Devolving HR responsibilities created conflicts	Reduced time for strategic activities (−)
	Positive attitude towards new technology	HR staff assume more consultative roles	Realization of strategic activities (+)
	Money-orientated mindset resulting in high employee turnover rates	Need for continuous system updates and training	Increased costs (−)
		Heightened need for sophisticated talent management systems	Development of more strategic IS (+)
			Increased cost in updates and time spent on training (−)
			Development of more strategic IS (+)
Normative	Language	Increasing translation workload	Reduced time for strategic activities (−)
	Confucian values of harmony and respect for seniors	Misuse of performance management system	Decreased HR service delivery quality (−)
	Use of guanxi in promotions	Introduction of tighter monitoring functions to performance modules	Increased costs and time for monitoring (−)
	Use of guanxi and 'corrupt' values	Tighter monitoring of e-HRM systems and e-HRM vendor relations	Development of new IS approaches (+)
			Development of new IS policies (+)
			Increased costs (−)

regulatory dimension were listed under column headings and each response to the conditions was then compiled under the heading for further examination. This synthesizing process enabled conclusions to be drawn on the extent to which institutional dimensions were seen to affect e-HRM's strategic potential. The condensed output of this analytical process is presented in Table 2. The data that did not fit under specific criteria were subjected to additional rounds of analysis. Extracts from the raw data illustrating the institutional factors influencing the strategic potential of e-HRM were used to support the interpretations made in the next section.

5. Findings

A summary of the institutional factors, how they influenced e-HRM practices in the Chinese units, and their implications (positive or negative) for the realization of e-HRM's strategic potential are presented in Table 2.

All subsidiaries had adopted some form of 'hybrid' e-HRM approach that was a combination of global and local systems. More precisely, standardized Western-based e-HRM practices such as talent and performance management systems and local Chinese systems used for recruiting and payroll coexisted. The hybrid approach was described as being a 'complex', however, necessary system as multiple systems necessitated constant changes in HR practices, updates to the systems and complicated configuration requests to IT staff. There were numerous examples where the Chinese institutional environment had forced subsidiaries to make adaptations to their local systems which resulted in dysfunctional consequences (Stone et al., 2006). On the other hand, there was evidence that the Chinese institutional environment presented new opportunities for IS to realize its strategic potential.

5.1. Regulatory dimension

Respondents shared similar views on the influence of local legislation on the use of certain e-HRM modules. All subsidiaries used payroll and recruiting modules which were either considerably locally modified or provided by a local vendor. This was because the use of payroll systems is heavily influenced by local tax legislation and, in searching for strategic potential, standardizing the payroll did not seem feasible:

Payroll is affected very much by local regulations so in terms of efficiency, standardizing it may not be wise. Payroll in China is very complicated: there are so many items, so many cities, more than 40 or 50 big cities in the systems combined with insurances, taxes and policies. So we still keep it [the local payroll system]. (Chinese HR manager)

Another important factor, Chinese labor law, was described as undergoing frequent development, thus influencing the HR managers' workload on the systems. For example, major changes to the law were introduced during 2008 and HR staff had to review all employee contracts and policies in databases and request modifications to recruiting systems from IS personnel. Depending on the business sector, respondents suggested these reviews and modifications were almost continuous:

You have to review all the policies according to the law. For example, in the past, upon joining a company they would say 'OK, if you work here 5 years you will get 10 days of annual leave.' But now the law requires that if you work for 5 years then you will get 15 days of annual leave. So now you have to change it for everyone. That's the thing, you just have to review the policies and contracts more often [than before system adoption]. (Chinese e-HRM expert)

The overall effect of these additional manual tasks was to reduce the time available for other HR tasks such as developing systems and they therefore limited the strategic potential of e-HRM; however, the use of these systems and additional IT tasks were necessary in order to gain legitimacy in daily business operations. In addition, the communist era *hukou* system created demand for additional system modifications, especially in units with business operations outside greater Shanghai and Beijing. Inserting and updating employees' *hukou* status in the system was described as an exhausting task because there were too many locations with different *hukou* policies. The chosen solution was to purchase systems from local vendors capable of meeting the demands of the *hukou* system with all necessary locations, all local government needs, and at 10% of the cost of systems from Western vendors. Chinese interviewees suggested these systems might have the potential for wider adoption in the near future.

However, Western HR managers familiar with such systems suspected them of being subject to a certain level of corruption (discussed later). It is important to note that some interviewees said rules and laws change considerably when operating outside of Shanghai or Beijing, referring to the rest of the country as the '*real*' China. Critical decisions could depend on local government officials whose perceptions of laws and rules may be subject to somewhat dubious agreements, which then resulted in e-HRM systems not being used as intended, for example, in standardized recruitment and screening:

Local officials might demand the recruitment of a non-skilled relative in exchange for a certain service or permit. This contradicts group policy and recruiting standards, but doing this kind of recruiting for non-key positions can be a good business decision with little cost. (Western HR manager)

On the other hand, discussion with respondents did not reveal exactly what increases strategic potential more; using the standardized IS as intended, or subjecting it to intentional misuse when searching for strategic potential for other business functions. This kind of intentional IS misuse (i.e., not documenting the recruiting process in the system) was seen to be opposed to official MNC policies. However, the action was necessary in order to recruit sufficient new personnel, thus improving the effectiveness of local business strategies, for example in terms of better talent management.

The lack of trade unions backed by labor law made modifications and system implementation easier than in Western countries, suggesting that a non-Western subsidiary setting might offer a novel stage for the strategic potential of IS in terms of, for example, reacting to changing business needs more efficiently and improving the overall performance of the MNC. However, respondents were concerned about the recent establishment of unions within MNCs. This was seen as a development likely to result in lengthy negotiations about what system should be used and how, which in turn would increase the non-strategic activity workload. In addition, the absence of data privacy legislation was also said to make for easier system implementation and modification, which again suggested increasing reaction speed to business needs and overall improvement of strategic IS in the subsidiaries. On the other hand, in units with a focus on sensitive technological manufacturing, the absence of these laws resulted in excessive use of secure connections via MNC headquarters when line managers had difficulties in logging in to the corporate HR intranet from factory sites, thus limiting the efficiency of systems in terms of decreased data flows.

In summary, data security, *hukou* and labor laws seemed to necessitate substantial local modifications to the e-HRM systems and to create additional work and costs for the HR function, reducing the opportunity to dedicate more time to strategic tasks. On a more general note, locally-sourced IS such as the payroll system seemed not to be in conflict with the MNC headquarters' policy, which suggests limited conflict between internal and external isomorphic pressures. Interestingly, the regulatory environment supported the transposition of new types of "hybrid" systems because it forced subsidiaries to implement and use local IS for strategic purposes. Finally, respondents suggested the lack of legislation permitted subsidiaries to react more efficiently to changing business needs than would be possible in a Western, more tightly regulated institutional setting.

5.2. Cognitive dimension

In all subsidiaries, behaviors and attitudes towards HR were affected by the use of e-HRM. However, some of this came across as being influenced by social desirability bias, whereas in fact Chinese line managers, who were suggested to lack people management skills, had been starting to question the role of HR after the introduction of new systems. Even if the role of

HR was regarded as more strategic after its introduction, interviewees were concerned about the amount of learning (i.e., IT skills) required before HR could claim a more strategic status, and the change towards a more IT-based mindset was not always viewed as a positive thing. For example, all respondents indicated that there were too many IT tasks, such as data inputting and analysis, amongst the daily workload, and many suggested that HR staff were now spending less time with people than they felt was optimal. Paradoxically, IT use was therefore viewed as limiting the opportunities to make the kind of strategic impact that e-HRM introduction was supposed to have created.

Overall, the findings highlighted the significance of the Chinese mindset in the configuration of e-HRM practices prescribed by Western advisors. There were role conflicts in situations where previous systems had allowed HR the time to focus on talent management issues. Although moving responsibility to line managers via ESS is a major trend in e-HRM, this activity could produce negative outcomes, as Cooke (2009b) reports that line managers in China lack people management skills. There were conflicts regarding the roles of system end-users and devolving certain activities to the line managers. These role conflicts consumed considerable HR function resources and had an impact on the realization of e-HRM's strategic potential. For example:

> *[Line] managers take more care of people issues and the question we now face from managers is: If this is what we do, what does HR do now? You have more people, you have more time and good systems - you should provide this service to us! My answer to them is that HR can now provide more management tools for managers and put more time into consulting and training work. We don't want to be the hire and fire department for them. We can provide support in retaining their key talent; provide information about whether their structure is right, and whether they have the right mix of people.* (Chinese HR manager)

There was insufficient understanding of the importance of HRM policies and practices by line managers and the deficit in HR skills was commonly reported as the major obstacle to the implementation of strategic HRM such as talent management. Finally, while an increasing number of subsidiaries were becoming more systematic and trying to become more strategic in their e-HRM, it was clear that they were aware of labor market changes, particularly the erosion of organizational loyalty amongst the younger and well-educated workforce, and had started to adopt high-performance HRM practices to align the interests of the employees with those of the firm.

Although the literature has suggested that HRM in China is moving towards a more Western model, respondents commented that the status of the HR function is still viewed as administrative and that the HR profession suffers from the lack of respect shown by staff of other business functions. Interestingly, however, it seemed that e-HRM use was at least viewed as a key opportunity to begin changing this attitude:

> *I think people in China still think HR is a back-office for administrative tasks. With these (e-HRM) systems we are changing towards a more consulting and business partner role. When HR has data and knows the business, then we can make the change....from the systems we get the numbers, and power.* (Chinese HR manager)

There were clear indications of HR functions assuming more strategic and consultative roles after the introduction of e-HRM which was supported by more efficient IS use. The next example describes a situation regarding the role of HR and the hierarchical mindset before and after e-HRM use became common practice.

> *Before the (e-HRM) systems our expatriate managers just recruited whoever they wanted and our young HR girls always said 'yes, that's OK', because they simply respected Westerners too much and couldn't say no. But after the system was introduced our HR staff can now say to managers 'Hey, you have to take care of this and this now in the system.' So recruiting is now more transparent and we get better quality people.* (Chinese HR manager)

In contrast to some Western countries, analysis suggests that it has been easy to implement and provide ongoing training for systems and to increase system usage rates because of the hierarchical structure of Chinese society, the continuous transition in the economy, and people's generally positive mindset towards new technology. As with the absence of certain legislation, this suggests a non-Western setting presents new opportunities to exploit the strategic potential of e-HRM, when there is likely to be more pressure to implement new IT- systems successfully.

> *Implementing systems is very easy because the Chinese have a great desire to learn new technology skills...the mindset is really there...on the other hand it puts pressure on systems...people switch jobs quickly if they are not happy with how things are done.* (Western HR manager)

All respondents mentioned that one of the most critical tasks for HR was keeping talented people in a climate where an excessively 'money-oriented' mindset was contributing to high employee turnover rates. This created additional pressure on systems, especially in situations where e-HRM use was being positioned to adapt quickly to business requirements for new programs and service delivery in a market that continually demands innovations for talent management systems. HR managers indicated that salary increases *per se* were no longer determining the turnover rates among white-collar employees. Instead, local talent seemed to place more value on training and overall career development opportunities, which then created additional constraints on the intended strategic impact. This was especially the case for talent management systems, which needed to be updated, sustained and developed more often than administrative systems to remain in line with other MNCs' e-HRM systems in the 'war for talent' thus enabling the development of new strategic IS. Indeed, the Chinese environment seems to offer an opportunity for e-HRM realizing strategic potential, because the local market demands more resources for talent management and the use and development of these systems seemed critical.

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That's where the focus is, it's all about keeping the talents and these are the systems you really need to develop and offer something unique. Of course it's difficult and expensive but by doing it right you win the game. (Western HR manager)

Developing new systems was seen as critical, since as failing to keep systems up-to-date was reported as resulting in higher employee turnover rates and negatively affecting the image of HR as being efficient. This also concerned recruiting systems, where the Chinese mindset has earlier been found to produce local adaptations of recruiting practices. Efficient IS use supported by line manager involvement was seen as a way for HR to dedicate time to critical recruitment and talent management tasks, increasing the strategic importance of HR.

Although there were several barriers in the cognitive dimension affecting the use of Western-based e-HRM, the relative ease of implementing new IS as a result of technology-orientated mindset and the recognized need to develop better talent management systems can be seen as evidence that the Chinese environment was on the other hand also helping e-HRM to realize its strategic potential and overall creating more strategic IS solutions.

5.3. Normative dimension

With regard to the normative dimension, the Chinese language created a large increase in translation work for HR since English was the *lingua franca* in each of the MNCs. All policies coming from head office had to be translated into Chinese; sometimes this was outsourced, but translation was usually performed by HR staff and sometimes critical HR and IS policy information was 'lost in translation'. This kind of activity was seen to be restricting the e-HRM system's ability to offer high-quality HR service delivery, as reducing the time available to focus on strategic HR tasks and to jeopardize system security. In contrast to HR professionals in Europe, who saw policy translation as additional work (Heikkilä and Smale, 2011), in the Chinese context it was considered a routine part of daily activity. Nevertheless, it was felt that the time being used for basic translation work could have been better spent producing strategic output. There was also an increased need for employee language training. The issue of language was regarded as ongoing, for example in terms of daily personal data input tasks, which demanded more time being spent with the systems and created confusion in data search. For example:

You do the usual translation work. . .and you also notice the pronunciation can be the same in English but the Chinese character might be different. So you always have this language issue. . . you have different names with Chinese characters and pronunciation in English when you join the company. . . you document it in the system, but then there are so many with the same name. (Chinese HR manager)

In terms of Confucian values, the concept of equality seemed to influence the use of performance management systems. The original systems were modified by local HR to create situations where there was only a one or two percent performance difference among evaluated employees, thus preventing the use of *guanxi*. As a result of equality appreciation and restricting corrupt behavior among individuals, the majority of the evaluations had to be based on hard-data, where line managers had only a minor involvement in evaluation, and the systems were not used as strategically intended.

There is a strong cultural influence in performance management systems. We have a culture of equal treatment, managers don't want to say bad things to people...so it's very difficult to make them differentiate between people. Everybody is graded as 'good', all average, but that is not the purpose of performance management. (Chinese e-HRM expert)

The influence of *guanxi* was seen as important when HR worked together with internal networks (e.g., IT or the legal department) or with external networks (e.g., vendors or government officials). Suddenly, the strategic outcomes of e-HRM related operations, for example IS implementation or updates, could be influenced by certain employees' *guanxi* networks, which were seen as a positive outcome of using *guanxi*. On the other hand, the pressure to perform was described as being so high that the meaning of *guanxi* was seen to be losing its importance, especially among younger employees. Again, it was suggested that the situation was different outside of Shanghai and Beijing. Nevertheless, the potential influence of *guanxi*, for instance in unmerited promotions, was seen as being restrained through the use of e-HRM, although that demanded additional time and costs, it enabled the development of new IS approaches.

For that kind of thing we have clear mapping and we also have a maximum level in the system. . .so you can't use guanxi. When people want to change level, HR needs to know why this person is being promoted and then we double or triple check it. (Chinese HR manager)

Although corruption was a sensitive topic among the Chinese respondents, Western respondents claimed that corruption related to social context was an issue. This was especially the case in the local e-HRM vendor business. Various gray deals had been exposed where the person responsible for buying updates and piloting local software had bought software from relatives or people within their *guanxi*-network in contravention of MNC purchasing standards. Such actions led to stricter, however, more transparent IS purchasing policies resulting in certain stages of IS transposition. There were also reports of the creation of fake employee identities, necessitating more work for global HR in screening out such misuse.

Finally, even with the issue of corrupt behavior detected in the vendor business, three subsidiaries surprisingly reported that they were piloting Chinese systems and that their systems were being prepared for global piloting. This again suggests early stages of transposition where certain Chinese e-HRM systems have the potential to provide a template for e-HRM systems in other MNC subsidiaries. In the wider context, this could be seen as evidence of deinstitutionalization of IS practices,

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in the sense that foreign subsidiary managers are challenging organizational routines within the MNC with the intention of delegitimizing current routines and substituting them for new practices, which themselves are responses to 'crisis situations' such as detecting corrupt behavior, circumventing official policies and needing more sophisticated systems (Kang and Li, 2009).

6. Discussion

The main objectives of this study were, first, to shed light on how institutional pressures affect Western-based e-HRM practices in MNC subsidiaries in China, and second, to investigate how these pressures influence the strategic potential of e-HRM in this setting. Regarding the first objective, this study provides evidence that e-HRM practices are subject to similar pressures for local adaptation as other business practices, since host-country institutions seem to present a clear counterforce to the drivers of standardization (i.e., centralized control, reporting and decision making). More precisely, this study demonstrated this to be the case by drawing on the work of Scott (2001), and contributes to the IS and e-HRM literature by examining how external institutional pressures influence strategic IS and strategic e-HRM in particular. This finding is broadly in line with findings from within the IS literature on the use of ERP systems (e.g., Liang et al., 2007; Teo et al., 2003) and the international HRM literature (e.g., Björkman et al., 2008; Myloni et al., 2004).

The conclusion arising from the pursuit of the second objective of this study is that institutional arrangements, particularly in transitional contexts such as China, influence the strategic potential of e-HRM and strategic IS more generally. Indeed, the findings present a dilemma which has not been explicitly discussed in the strategic IS or e-HRM literature. On the one hand, strong host-country institutional pressures strongly emphasize the local adaptation of e-HRM. This is necessary not only in order to gain local legitimacy, but also in order to increase the acceptance and use of e-HRM systems amongst host-country nationals (Ruta, 2005). However, this study has also shown how such local adaptations, which lead to hybrid e-HRM systems and a blended framework embedded with multiple HRM configurations (Zhou et al., 2012), can potentially jeopardize the ability of e-HRM and IS to have a strategic impact on the work of HR in MNC subsidiaries.

More precisely, tasks that are generated in response to external institutional pressures (e.g., translation, role conflict, system misuse and adhering to regulations) influence the standardized, Western-based IS delivery model and prevent e-HRM realizing its originally intended strategic potential. In this study, such responses to institutional pressures were at least partly responsible for e-HRM not being able to meet expectations regarding cost reductions, time saving efficiencies, improvements in HR and IS service delivery, and freeing up time for more strategic work. However, these responses seem to have enabled the transposition of new strategic IS practices to this non-Western setting.

7. Conclusion

Through its empirical focus on e-HRM in MNC subsidiaries, this study contributes to the discourse on international strategic IS by illustrating how the local adaptation of IS, while necessary in order to confer legitimacy and increase user acceptance, has also been responsible for increases in costs, time consuming administrative tasks, and in some cases a decrease in the perceived quality of system service delivery. This should alert us to the possibility that too much IS adaptation may reduce the benefits of globally standardized IS and the ability, in this case, of e-HRM systems to transform the role of HR towards being more strategic. While some of the localization issues identified in this study might be specific to China; legislation, networks, corruption and language standardization are also likely to be relevant in the institutional settings of a number of other countries.

Interestingly, the findings of this study also suggest that a non-Western institutional environment is not always a barrier to strategic IS realizing its strategic potential. Evidence of the relative ease of implementation, a focus on better talent management systems, issues regarding corruption, and the global piloting of some Chinese-based systems suggests that the Chinese environment can, to a certain extent, be seen as facilitators of increasing strategic IS potential in MNCs through the transposition of IS-based activities to the Chinese environment. With regard to the strategic IS literature and the usefulness of institutional theory, Leonardi (2008, p. 981) also discusses the dilemma of localization and standardization, stating that:

> *When technologies developed in Western industrialized countries are implemented in non-Western countries, there is far greater potential for mismatches between the (Western) cultural logics inscribed in the technologies and those (non-Western) cultural logics through which the technologies are perceived and used and around which work is structured.*

In line with this argument, and due to its adoption of an institutional theory perspective, this study contributes to the discussion that this dilemma is also inherent in the strategic IS practices of MNC subsidiaries, thus confirming the validity of applying the institutional approach as a macro-theoretical foundation to understand the nature of Western-based e-HRM practices and their strategic potential across different institutional arrangements. Moreover, the usefulness of institutional theory in IS and e-HRM fields is also evident when investigating sources of innovative IS practices in foreign subsidiaries. Through the institutional lens the study evidenced both positive transformational and negative dysfunctional consequences, which enabled us to show that in response to the attempted transfer of IS and foreign managerial practices, a foreign practice can become de-institutionalized and become a new, innovative practice applicable to a local problem.

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To conclude, this paper emphasizes the need for the strategic IS, HRM and e-HRM fields of research to acknowledge the existence of institutional dualities in the international context, while remaining cognizant of the potential limitations attached to excessive localization. Social constructivist research (e.g., Jackson et al., 2002) suggests that the uses of technologies are the result of a complex series of interactions between the material IT elements and the practices that constitute the national and organizational contexts in which they are implemented. For strategic IS and e-HRM to realize its strategic potential, MNCs face the complex challenge of implementing typically standardized systems, which have produced strategic benefits in familiar institutional settings, in less familiar settings, and deciding which aspects they are willing to sacrifice in order to achieve greater legitimacy, acceptance and usage.

7.1. Limitations and future research

The current research does have some limitations that dictate that any conclusions drawn from its findings should be treated with caution. First, strategic IS and e-HRM processes in China differ across regional locations, by sector, and according to the size of the MNC, which was evident in this study. For example, high-tech industry MNCs seemed to suffer less from language issues and manufacturing MNCs faced more challenges with local legislation. With this in mind, this paper suggests studies either focus on certain industries and regions in China, or perform well-designed comparisons across them. Second, the conclusions in this paper are drawn from one national context. Therefore, any generalizations from these findings should take into account the unique characteristics of the Chinese institutional environment and the rapid changes they are undergoing. Some of these characteristics might be shared by other emerging economies, so this study should encourage scholars to examine the impact of institutional environments in other countries in transition, such as India, Brazil and Russia. Third, if isomorphic pressures associated with the host-country and the MNC are not necessarily conflicting (Björkman et al., 2008), comparative studies are needed to develop our understanding of the processes of interaction between the emerging host country, the internal MNC processes and also the global institutionalization processes of strategic IS practices. That is to say, studies should look more closely into the issue of technical isomorphism found in the IS literature (Benders et al., 2006). Fourth, with regard to methodological limitations, interviewing Chinese managers may be subject to cultural misunderstandings (e.g., with the concept of *guanxi*). In line with Cooke (2009a), this study suggests that researchers collaborate with a Chinese researcher to counter cultural and language issues.

7.2. Managerial implications

In terms of this study's practical implications, the HR department was viewed as an 'assistant' before e-HRM adoption; Cooke (2009b) also finds that HR departments still typically play a supporting role to execute the top management thinking. Adopting e-HRM systems might be one part of the solution to this prevailing image problem, and might also serve to increase the number of strategic opportunities However, extensive use of ESS and MSS might decrease line managers' and top managers' perceptions of the relevance of the HR department in a country where HR is still viewed as an assistant. Although e-HRM has had an impact on behavior and the attitudes towards HR, devolving HR responsibilities to line managers represents a significant challenge, and role conflicts may have to be addressed. More seriously, if the prevailing assumption in a given institutional setting is that HR's role is not intended to be strategic, it is difficult to imagine that IS possess the capacity to help HR realize its strategic potential. In institutional settings as seen in China, e-HRM first has to overcome this kind of institutional barrier if it wants to be strategic. Of course, this can also be seen (as it was by some respondents) as an opportunity for HR. However, even if the HR role is regarded as more strategic after the introduction of e-HRM, the amount of learning required for HR to achieve strategic status, and the change towards a more IT-based mindset are likely to yield further unexpected challenges.

Zhou et al. (2012) show that *guanxi* is useful, for instance in talent management and achieving strategic business advantages from government officials. However, the findings of this study highlight the paradox of Western-based e-HRM systems; while performance management was positively associated with organizational performance, adopting it as a strategic e-HRM tool could present a serious challenge to the values of harmony and egalitarianism. It seems that when e-HRM fits the local context, it will increase user acceptance and actual system usage in MNCs (Ruta, 2005). However, whilst local adaptation is costly, can add layers of complexity and reduce the strategic potential of global IS, it can also open up possibilities for a new set of strategic IS practices. Therefore, managers must be acutely aware of their institutional surroundings and seek the optimal balance between localization, standardization and new innovative IS solutions.

References

Baptista, J., 2009. Institutionalisation as a process of interplay between technology and its organizational context of use. J. Inform. Technol. 24, 305–319.

Baptista, J., Newell, S., Currie, W., 2010. Paradoxical effects of institutionalization on the strategic awareness of technology in organizations. J. Strategic Inform. Syst. 19, 171–183.

Benders, J., Batenburg, R., van der Blonk, H., 2006. Sticking to standards; technical and other isomorphic pressures in deploying ERP-systems. Inform. Manage. 43, 194–203.

Björkman, I., Smale, A., Sumelius, J., Suutari, V., Lu, Y., 2008. Changes in institutional context and MNC operations in China subsidiary HRM practices in 1996 versus 2006. Int. Bus. Rev. 17, 146–158.

Bondarouk, T.V., Ruël, H.J., 2009a. Electronic human resource management: challenges in the digital era. Int. J. Hum. Resour. Manage. 20, 505–514.

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Bondarouk, T.V., Ruël, H.J., 2009b. Structuring the IT-enabled transformation of HR: an HRM frames analysis in an international company. In: Sparrow (Ed.), Handbook of International Human Resource Management. John Wiley, New York.
Boxenbaum, E., Battilana, J., 2005. Importation as innovation: transposing managerial practices across fields. Strategic Organ. 3, 355–385.
Burbach, R., Royle, T., 2010. Global integration versus local adaptation of an e-HRM systems in a US MNC. In: Proceedings of 3rd European Workshop on E-HRM. Bamberg, Germany.
Butler, T., 2011. Compliance with institutional imperatives on environmental sustainability: building theory on the role of Green IS. J. Strategic Inform. Syst. 20, 6–26.
Chen, Y.-F., Funke, M., 2009. China's new labour contract law: no harm to employment? China Econ. Rev. 20, 558–572.
Child, J., 1994. Management in China during the Age of Reform. Cambridge University Press, Cambridge.
Chiu, R.K., Luk, V.W.-M., Tang, T.L.-P., 2002. Retaining and motivating employees: compensation preferences in Hong Kong and China. Pers. Rev. 31, 402–431.
Chow, I.H., 2004. The impact of institutional context on human resource management in three Chinese societies'. Employee Relat. 26, 626–642.
Cooke, F.L., 2004. HRM in China. In: Budhwar, P. (Ed.), Managing Human Resources in Asia–Pacific. Routledge, London.
Cooke, F.L., 2009a. A decade of transformation of HRM in China: a review of literature and suggestions for future studies. Asia–Pac. J. Hum. Resour. 47, 6–36.
Cooke, F.L., 2009b. Performance and retention management in Chinese private firms: key challenges and emerging HR practices. In: AIRAANZ Annual Conference, 4–6 February, Newcastle, Australia.
Cooke, F.L., 2011. Human Resource Management in China: New Trends and Practices. Routledge, London.
Currie, W., 2009. Contextualising the IT artefact: towards a wider research agenda for IS using institutional theory. Inform. Technol. People 22, 63–77.
Dezalay, Y., Garth, B., 2011. Lawyers and the Rule of Law in an Era of Globalization. Routledge.
DiMaggio, P., Powell, W., 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. Am. Sociol. Rev. 48, 147–160.
Florkowski, G., Olivas-Luján, M.R., 2006. Diffusion of information technology innovations in human resource service delivery: a cross-country comparison. Pers. Rev. 35, 684–710.
Ge, L., Voss, S., 2009. ERP application in China: an overview. Int. J. Prod. Econ. 122, 501–507.
Ghoshal, S., Gratton, L., 2002. Integrating the enterprise. Sloan Manage. Rev. 44 (31), 38.
Hannon, J., Jelf, G., Brandes, D., 1996. Human resource information systems: operational issues and strategic considerations in a global environment. Int. J. Hum. Resour. Manage. 7, 245–269.
Hart, C., 1998. Doing a Literature Review: Releasing the Social Science Research Imagination. Sage, London.
Hasan, I., Watchel, P., Mingming, Z., 2009. Institutional development, financial deepening and economic growth: evidence from China. J. Bank. Finance 33, 151–170.
He, X., 2004. The ERP challenge in China: a resource-based perspective. Inform. Syst. J. 14, 153–167.
Heikkilä, J.-P., Smale, A., 2011. The effects of 'language standardization' on the acceptance and use of e-HRM systems in foreign subsidiaries. J. World Bus. 46, 305–313.
Hempel, P.S., 2001. Differences between Chinese and western managerial views of performance. Pers. Rev. 30, 203–226.
Huang, Z., Palvia, P., 2001. ERP implementation issue in advanced and developing countries. Bus. Process Manage. J. 3, 276–284.
Huo, YP., Von Glinow, MA., 1995. On transplanting human resource practices to China: a culture-driven approach. Int. J. Manpower 16, 3–15.
Jackson, M.H., Poole, M.S., Kuhn, T., 2002. The social construction of technology in studies of the workplace. In: Lievrouw, L.A., Livingstone, S. (Eds.), Handbook of New Media: Social Shaping and Consequences of ICTs. Sage, London.
Kang, J., Li, N., 2009. Understanding diverging isomorphic pressures on foreign subsidiary managers: a contingency model. Multinatl. Bus. Rev. 17, 1–22.
Kostova, T., 1999. Transnational transfer of strategic organisational practices: a contextual perspective. Acad. Manage. Rev. 24, 308–324.
Kostova, T., Roth, K., 2002. Adoption of organisational practice by subsidiaries of multinational corporations: institutional and relational effects. Acad. Manage. J. 45, 215–235.
Kumar, K., Hillergersberg, J., 2000. ERP experiences and evolution. Commun. ACM 43, 23–26.
Lawler E.E., Mohrman, S., 2003. HR as a Strategic Partner: What does it take to make it happen? Working Paper. CEO Publication (430). Marshall School of Business, University of Southern California.
Leonardi, P.M., 2008. Indeterminacy and the discourse of inevitability in international technology management. Acad. Manage. Rev. 33 (4), 975–984.
Liang, H., Saraf, N., Qing, H., Yajiong, X., 2007. Assimilation of enterprise systems: the effect of institutional pressures and the mediating role of top management. MIS Quart. 31, 59–87.
Luo, Y., 2002. Corruption and organization in Asian management systems. Asia–Pac. J. Manage. 22, 88–112.
Marler, J., 2009. Making human resources strategic by going to the net: reality or myth. Int. J. Hum. Resour. Manage. 20, 515–527.
Marler, J., Fisher, S., 2013. An evidence based review of e-HRM and strategic human resource management. Hum. Resour. Manage. Rev. 23, 18–36.
Martin, G., Reddington, M., Alexander, H. (Eds.), 2008. Technology, Outsourcing and Transforming HR: Potentials, Problems, and Guidance for Practitioners. Butterworth-Heinemann/Elsevier, Oxford.
Morgan, G., 2001. The multinational firm: organizing across institutional and national divides. In: Morgan, G., Kristensen, P.H., Whitley, R. (Eds.), The Multinational Firm: Organizing across Institutional and National Divides. Oxford University Press, Oxford, pp. 1–24.
Myloni, B., Harzing, A.-W.K., Mirza, H., 2004. Host country specific factors and the transfer of human resource management practices in multinational companies. Int. J. Manpower 25, 518–534.
Ngai, E.W.T., Wat, F.K.T., 2006. Human resource information systems: a review and empirical analysis'. Pers. Rev. 35, 297–315.
Oliver, C., 1991. Strategic responses to institutional processes. Acad. Manage. Rev. 16, 145–179.
Parry, E., 2011. An examination of e-HRM as means to increase the value of HR function. Int. J. Hum. Resour. Manage. 22, 1146–1162.
Parry, E., Tyson, S., 2011. Desired goals and actual outcomes of e-HRM. Hum. Resour. Manage. J. 21, 335–355.
Parry, E., Dickmann, M., Morley, M., 2008. North American MNCs and their HR policies in liberal and co-ordinated market economies. Int. J. Hum. Resour. Manage. 19, 2024–2040.
Ruël, H., Van der Kaap, H., 2012. E-HRM usage and value creation. Does a facilitating context matter? Ger. J. Res. Hum. Resour. Manage. – (Z. Personalforsch.) 26, 260–281.
Ruël, H.J.M., Bondarouk, T., Looise, J.C., 2004. E-HRM: Innovation or irritation. An explorative empirical study in five large companies on web-based HRM. Manage. Rev. 15, 364–381.
Ruta, C.D., 2005. The application of change management theory to HR portal implementation in subsidiaries of multinational corporations. Hum. Resour. Manage. 44, 35–53.
Saunders, M., Lewis, P., Thornhill, A., 2007. Research Methods for Business Students. Prentice Hall, London.
Scott, W.R., 2001. Institutions and Organizations, second ed. Sage, Thousand Oaks, CA.
Sewell, W.H., 1992. A theory of structure: duality, agency, and transformation. Am. J. Sociol. 98, 1–29.
Smale, A., 2008. Foreign subsidiary perspectives on the mechanisms of global HRM integration. Hum. Resour. Manage. J. 18, 135–153.
Sparrow, P., Brewster, C., Harris, H., 2004. Globalizing Human Resource Management. Routledge, London.
Stone, D.L., Stone-Romero, E.F., Lukaszewski, K., 2006. Factors affecting the acceptance and effectiveness of electronic human resource systems. Hum. Resour. Manage. Rev. 16, 229–244.
Strohmeier, S., 2007. Research in e-HRM: review and Implications. Hum. Resour. Manage. Rev. 17, 19–37.
Sumelius, J., 2009. Developing and integrating HRM practices in MNC subsidiaries in China. Doctoral Dissertation 205. Publications of the Hanken School of Economics, Helsinki.

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Teo, H.H., Wei, K.K., Benbasat, I., 2003. Predicting intention to adopt interorganizational linkages: an institutional perspective. MIS Quart. 27 (1), 19–49.
Wang, F.-L., 2005. Brewing tensions while maintaining stabilities: the dual role of the hukou system in contemporary China. Asian Perspect. 29, 85–124.
Warner, M., 2010. In search of Confucian HRM: theory and practice in greater China and beyond. Int. J. Hum. Resour. Manage. 21, 2053–2078.
Weerakkody, V., Dwivedi, Y., Irani, Z., 2009. The diffusion and use of institutional theory: a cross-disciplinary longitudinal literature survey. J. Inform. Technol. 24, 354–368.
Whitley, R., 1993. European Business System: Firms and Markets in their National Context. Sage, London.
Xin, M., 2010. A framework of E-HRM information systems in fashion enterprise, information technology and computer science. In: Second International Conference, pp. 305–308.
Xue, Y., Liang, H., Boulton, W., Snyder, C., 2004. ERP implementation failure in China: case studies with implications for ERP vendors. Int. J. Prod. Econ. 97, 279–295.
Yin, R.K., 2009. Case Study Research: Design and Methods, fourth ed. Sage, Thousand Oaks, CA.
Zhang, L., Wang, H., 2006. Intelligent information processing in human resource management: an implementation case in China. Expert Syst. 23, 89–108.
Zhou, Y., Yingying, Z., Jun, L., 2012. A hybridism model of differentiated human resource management effectiveness in Chinese context. Hum. Resour. Manage. Rev. 22, 208–219.

EXPLORING FUTURE E-HRM TRENDS: A DELPHI STUDY

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Abstract

Information and communication technology (ICT) is changing human resource management (HRM), therefore forecasting trends causing various implications is crucial for the preparation of successful business. This paper explores the coming ICT trends and its implications to HRM by applying Delphi technique and drawing on a panel of anonymous experts comprising electronic HRM (e-HRM) academics and e-HRM practitioners. Over three rounds of interchange, these experts analysed futures´ ICT trends and debated what implications these trends will have for how HRM is organised, the role played by HR, the knowledge and skills needed by HR professionals and the implications for HRM in multinational corporations (MNCs). Findings indicate that there will be an era of social media, HR will be decentralized and delivered via social media, HR department´s which open to technology will increase their role, skills for HR professionals will be social networking skills and finally social media will have strong influence on staffing and information sharing in MNCs. This paper also proposes ideas for future research and presents practical implications.

Keywords: E-HRM, ICT, future studies, Delphi technique, social media

1 INTRODUCTION

Much of the change in today´s business and even more of it in the future will be driven by information and communication technology (ICT). This is becoming more and more the case for human resource management (HRM) processes as well. According to DeSanctis (1986), HRM adopted ICT somewhere between the late 1970s and early 1980s and was used for administrative tasks like payroll solutions. From the early 1980s the focus shifted from single HR applications to more complicated HR portals, which in theory has allowed HR staff to differentiate interventions, profile the workforce taking into account individual differences, preferences, capabilities, roles within the organization and future organizational (Ruta, 2009). A survey by CedarCrestone (2010) reported organisations investing more resources in e-HRM, which in this study is 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 and Ruël, 2009a).

Despite the fact that e-HRM is a common feature in most organizations, e-HRM research still remains silent about rapid changes occurring in HRM due to the use of e-HRM. Studies generally examine single e-HRM applications, focusing on the changes in HRM processes and functions following automation (Bondarouk and Ruël, 2009A; Strohmeier 2007) and reliable empirical data on the consequences of e-HRM are lacking. According to Strohmeier (2009) research is needed to provide a general understanding of e-HRM implications that support practice in its decisions and to shed light on the potential negative consequences of e-HRM adoption for various stakeholders. In addition, Sparrow (2009) calls for e-HRM research to look at the implications of technical developments and process streamlining for the design and conduct of international HRM activity in companies. This study seeks to answer these and other similar calls for research (Bondarouk and Ruël, 2009a; Sparrow et al. 2004; Sparrow, 2009; Strohmeier, 2007) by applying the futures perspective and extracting expert opinion about future developments in ICT and their implications for HRM. More specifically, this study identifies key ICT trends and their implications for how HRM is organised and delivered, the roles played by HR, the knowledge and skills needed by HR professionals and finally the implications for HRM in multinational corporations (MNCs) are also studied.

Studies using the Delphi technique – a systematic, interactive forecasting technique which relies on a panel of experts (Linstone and Turoff, 1975) – have not attracted much scholarly inquiry within the field of HRM compared to the ICT field (Nevo and Chan, 2007). Management studies using the Delphi technique have focused on future tools used in corporate management (Schwarz, 2008) and the future of knowledge management systems (Nevo and Chan, 2007). The technique has also been used as a more practical business approach (Addison, 2003; Czinkota and Ronkainen, 2005; Kaynak, Bloom and Liebold, 1994). It seems that the Delphi technique has been applied and critically discussed most in studies regarding healthcare (Beretta 1996; Green et al. 1999; Keeney, Hasson and McKenna, 2006). The scattered evidence concerning HRM future studies varies, for example, from the field of strategic HRM (Lepak and Shaw, 2008) towards developing new tools for HRM futures analysis (Robinson et al. 2007), a survey predicting future HR trends (Hays and Kearney, 2001), future HRM perspectives and research ideas (Roehling et al., 2005), scenarios of web 2.0 technology adaptation for HR personnel (Martin et al., 2009) and linking work/life policies and practices to future trends (Lobel et al., 1999).

Delphi studies in HRM include human resource development (HRD) (McGuire and Cheh, 2006), country-specific studies (Lin, 1997) and a workplace stress study among HR professionals (Loo, 1996). Based on a search of scholarly databases, published books, e-HRM conference proceedings, an HRIS review (Ngai and Wat, 2006), an e-HRM review (Strohmeier, 2007, de Witt 2011), a review on e-HRM in MNCs (Ruël and Bondarouk, 2010) and a review of Delphi studies (Nevo and Chan, 2007), Delphi studies in the field of e-HRM are non-existent. This is somewhat surprising as the Delphi method is extensively and successfully used in other disciplines.

The contribution of this cross-disciplinary study can be argued on three fronts. Firstly, based on assumption that research lags behind the use of ICT in organisations, this research is proactive in predicting ICT implications for HRM. Secondly, positive implications (such as reducing HR costs and speeding up HRM processes) are the foundations of e-HRM adoption and therefore an important topic to study. At the time of writing there appears to be little research or consensus on ICT's implications for HRM (Stone et al. 2006; Strohmeier, 2009; Sparrow et al., 2004; Sparrow, 2009). Thirdly, this research offers a basis for the development of HRM strategies and policies for practice based on the future trends identified by academics and practitioners.

The next section introduces e-HRM implications for HR delivery, HR roles, the skills of HR professionals, and the MNC context, and discusses the potential impact of social media on HRM in the near future. The Delphi technique is then discussed which leads to the description of the study's data collection process. Following the presentation of the findings, the paper discusses future trends and their implications for HRM. The paper concludes with a discussion of its limitations, areas for further research and practical implications.

2 ICT'S IMPLICATIONS FOR E-HRM

The term e-HRM has been referred to with different labels. Alternative labels in the academic literature include virtual HRM (Lepak and Snell, 1998), web-based HRM (Ruël et al., 2004) and human resource information systems (HRIS) (Haines and Petit, 1997). Although HRIS, the label for the early information systems for HRM, is still in use, this study distinguishes between the use of ICT in

HRIS and e-HRM. In line with Martin et al. (2008) and Bondarouk and Ruël (2009a), whereas HRIS refers to the automation of systems for the sole benefit of the HR function, e-HRM is concerned with the application of web-based systems changing the nature of interactions between HR professionals, line managers and employees from face-to-face relationships to ones that are increasingly mediated by technology.

The motivation for the adoption of e-HRM technology in HR delivery has been argued, for example, based on the possibility of better customer satisfaction through better service specification and overall better management of information (Bondarouk and Ruël, 2009a; Strohmeier, 2009, Marler, 2009). In addition, e-HRM can increase efficiencies by reducing HR transaction costs and headcount in terms of organising HR. E-HRM can also substitute physical capability by leveraging digital assets, i.e. HR information can be used flexibly on an infinite number of occasions at little or no extra marginal cost (Stone, 2005). According to Snell et al. (2001) developments in ICT have led to the "virtualisation" and/or "leaning" of HR by reducing substantially the numbers of specialists required to deliver HR services whilst simultaneously improving the quality of these services. To support this, Florkowski and Olivas-Luján (2006) describe improvements in the speed and quality of HR services resulting from a shift from labour-intensive to technology-intensive service delivery after e-HRM adoption.

In terms of HR's role, there has been a strong focus on the "strategic partnership" role within the e-HRM literature. However, Bondarouk and Ruël (2009a) raise doubts about the 'magic' transformation of HR in adopting a strategic role due to the introduction of e-HRM, since... organizations are definitely silent whether their HR departments are more strategic because of the e-HRM. To support this, Marler (2009) reports that an administrative HR function is unlikely to become more strategic through the introduction of e-HRM. On the other hand, e-HRM can become more strategic as a consequence of an existing strategic HR function. Recently Parry (2011) examined the use of e-HRM in as a mean to increase the value of the HR function and suggests that e-HRM may help HR to increase its value by becoming more strategic, but found no evidence of cost savings due to reductions in HR headcount. The study suggests that organizations are using e-HRM in order to redeploy HR practitioners from transactional work to more strategic and value-added activities.

The required skills and knowledge of HR professionals have changed over time (Ulrich, 1997) and according to Bell et al. (2006) ICT has the potential to play an important role in this change process. ICT has allowed the HR function to focus less attention on routine, administrative tasks and dedicate more energy to delivering services that add value to the business. In addition, Bell et al. (2006) indicate that the introduction of e-HRM requires HR professionals to achieve a greater understanding of the business and ability to consult and work closely with management in solving business problems. In addition, in order to provide ICT activities, Gardner et al. (2003) support the notion that ICT is changing the needed skill mix for HR professionals in the direction of greater desirability of ICT training and HR professionals may need to constantly update their ICT skills. Finally, Ancona and Bresman (2007) suggest that user-generated web-content has the potential to change the way of thinking in organizations and suggest the role of the manager will demand new skills; managers will act as enablers and supporters who link other actors in management processes.

For global “e-enabled” HRM in MNCs, Sparrow et al. (2004) suggest the main change has been that HR now considers whether the organization has good HR systems in place and whether this gives them the capability to deliver people-related services without having to pass through the hands of the HR function. However, implementation has been fraught with problems because the process of implementing e-HRM across countries is under-theorized and because the e-HRM implications for HR managers in the MNC are not well understood. Sparrow (2009) presents four ICT developments that are impacting companies HRM success and potential unique competitive advantage; the advent of shared service thinking, the removal of various intermediaries in the delivery of HR services, the continued adoption of ERP system and finally, the e-enablement of HR service delivery and more towards self service models. Sparrow et al. (2004) and Sparrow (2009) argue that these developments will have a significant impact on existing international HR functions and HR personnel’s work and suggest that the e-enablement of HR in MNCs can fragment the HR function.

On a more general note, Stone (2005) suggest that technological changes influencing e-HRM during the end of this decade will include intelligent self-service systems and the convergence of the internet and wireless technology communication into a “vibrant social network”. Indeed, social media, defined as a group of internet-based applications that build on and allow the creation and exchange of user generated content (Kaplan and Haenlein, 2009), has been suggested by Kluemper and Rosen (2009), Girard and Fallery (2009) and Martin et al. (2009) to be the technology that will have a great impact on HRM. The potential tools for HR are, for example, blogs, social network platforms, virtual worlds, video platforms and wikis. Used inside organisation firewalls (McAfee, 2006), this technology is argued to have the potential to increase knowledge sharing, improve collaboration and employee voice, and connect with new generations of employees (Martin et al., 2009). Technologies, such as wikis are suggested to be highly engaging and facilitative of collaboration for sharing knowledge and employee voice expression (Martin and Reddington, 2009).

Finally, consultancy surveys (McKinsey 2007 and 2008, CIPD, 2009; Birkman International 2010) show that approximately 25% of respondent organisations globally were making use of some commonly used social media technologies, with a growing interest in organisations using blogs, wikis, podcasting and RSS. Research concerning social media and HRM seems to be behind reality in organisations, except for a few preliminary studies focusing on social media and recruiting (Kluemper and Rosen, 2009; Girard and Fallery (2009), innovations (Martin and Reddington, 2009), the ethicality of firing employees who blog (Valentine, Fleischman, Spragure and Godking, 2010) and framework web 2.0 strategies for HR professionals (Martin et al., 2009). The lack of research regarding social media is surprising as the report from CedarCrestone (2010) in line with Martin et al. (2009) suggests that social media is going mainstream in the corporate world and this will have many implications for HRM. To explore such potential future implications, we now turn to the use of the Delphi technique as a futures research tool.

3 METHOD

The overall purpose of a forecasting Delphi study is to obtain consensus from a panel of experts using repeated answers from questionnaires and controlled feedback. The core of the Delphi technique is that a pool of experts deals with a certain problem that lies in the future. For example, Delphi could be used to forecast future economic, social, labour and organizational conditions to help organizations design HRM programs for the next five years or more (Loo, 1996). In other words, the method used allows the grouping and subsequent analysis of the ideas of experts in order to gain a closer understanding of issues that would not be offered by other qualitative or quantitative studies.

The reasons for conducting a Delphi study have been summarized by Dawson and Brucker (2001). Firstly, there is no other group communication process that can elicit the same data; secondly, the researcher can identify and access the "experts" to discuss this problem; and finally, the researcher can forecast the type of results that may be obtained from these experts through the Delphi method (Linstone and Turoff, 1975). In addition, Turoff (1970) identifies four possible research objectives that call for the use of Delphi studies. Firstly, Delphi studies can be used to explore or expose underlying assumptions or information leading to differing judgments. These can also be used to seek out information which may generate consensus on the part of the respondent group. The third use of Delphi studies relates to the correlation of informed judgments on a topic spanning a wide range of disciplines. Finally, Delphi studies are valuable in educating a respondent group as to the diverse and interrelated aspects of a topic.

There are no set rules for Delphi studies (Evans, 1997; Keeney et al., 2006) although they are characterised by a structured process of questionnaires or rounds of discussion until a group consensus is reached (Beretta, 1996; Green et al., 1999). The popularity of this method arises especially because it can be conducted semi-anonymously amongst respondents who are geographically dispersed. For example, from the field of public relations research, Synnott and McKie (1997) covered 13 nations in Asia-Pacific and study by Van Ruler et al. (2004) included between 22 and 25 European countries, therefore method it suitable for this study´s purposes as well. A Delphi study typically has two or three rounds of contact with the experts in which comments are first elicited, then summarised and returned for further discussion. The reality is that most Delphi studies are completed by a third and final round because of time constraints, participant fatigue, funding for the research and the design of the study (Keeney et al., 2006). Similarly to Nevo and Chan (2007), Delphi studies can include qualitative methods, such as follow-up telephone interviews with each panel member.

The experts, panel members, are selected for the perceived expertise they can contribute on the research question. According to Schwarz (2008) panel members must be selected from stakeholders who will be directly affected, experts with relevant experience and facilitators in the field under study. In addition, Spencer-Cooke (1989) suggests the composition of the panel relating to the validity of the research results. Panel size can range from a few, to fifty, or even a hundred. Research on Delphi performance has suggested that groups with 10-20 have produced more accurate predictions than groups with more than 50 members (Brockhoff, 1975; Colton, 2002). In addition, some studies have found errors decreasing with larger groups (Loughlin and Moore, 1979). Panel members are always anonymous. The reasons for this are: (a) an expert making a commitment to a stand then being reluctant to change it, (b) the different academic standings of the participants, (c) not losing face, and (d) elimination of the usual biases found in present society such as gender, racial, and age biases. Anonymity of responders allows consensus to take place without the influence of rank, power, personality or persuasive speaking which is common to group meetings (Brockhoff, 1975; Dawson and Brücker, 2001).

Out of 32 experts invited to this study, a total of 11 practitioners from 11 companies, and 13 academics from 11 universities around Europe participated. The number of participants was deemed acceptable since it was below the maximum number of 30 recommended by Delbeq et al. (1975). In selecting the respondents, the main criterion used was to find respondents who possess expertise in e-HRM systems. More specifically, it is critical to secure the participation of the right kinds of experts, who understand the topics, have ideas, and represent a substantial variety of viewpoints. Experts in this study were contacted in an academic e-HRM seminar and in a practitioner future HRM workshop, with the criteria of business expertise in e-HRM. Most of the academic members held position of assistant professor or above and have published e-HRM related research in international peer-reviewed journals. Practitioners were mostly e-HRM consultants with business expertise of more than five years.

The present study followed the approach of McGuire and Cheh (2006), Schmidt et al. (2003) and Zhang and Salaba (2009) who distinguish between three separate stages with answer ranking. The first stage is labelled as the brainstorming phase, where respondents generate lists of relevant items by replying to research questions. In the present study, after collecting contact information in the academic seminar and the professional e-HRM future workshop, respondents were sent an e-mail invitation to participate in the study which also contained an explanation of the process. The e-mail also contained the Delphi instrument where respondents were asked to respond to the following five open-ended questions:

1. What development(s) in ICT will influence HRM between now and the year 2015?

2. What implication(s) will these developments in ICT have for how HRM is organised/ delivered in firms between now and the year 2015?

3. What implication(s) will these developments in ICT have for the role played by HR between now and the year 2015?

4. What implication(s) will these developments in ICT have for the kinds of knowledge and skills needed by HR professionals between now and the year 2015?

5. What implication(s) will these developments in ICT have for HRM in the context of multinational corporations between now and the year 2015?

A three-week time frame was assigned to round one and a reminder letter was sent after two weeks. Final responses arrived five weeks after invitation during December 2009 and 75% of invited respondents responded to the first round. At this stage, data was analysed by grouping similar items together. Duplicates were removed and data was reviewed by three independent researchers not participating as panel members.

The second round was conducted during January 2010. Schmidt et al. (2003) and Zhang and Salaba (2009) describe round two as the narrowing down phase, where respondents were asked to identify items which they considered to be most important from the responses to stage one. The panel members were contacted individually by e-mail with a direct URL link to the round two survey site, an explanation of the procedure for responding, and the deadline for this round. In round two, the issues raised in round one were presented and the participants were asked to rank the importance of these issues and introduce additional ones after reviewing their peers' suggestions and rationales. For rankings, the participants were asked to rank five responses which they considered to be most important from responses to stage one. The response rate for round two was 100 percent (n=24).

In the present study, the relative importance of each of the answers in the instrument was calculated according to the indications of the respondents and all the answers formed the basis for round three. Schmidt et al. (2003) and Zhang and Salaba (2009) refer to the third stage as the ranking stage where respondents are asked to rank answers in order of importance from responses to stage two. The third round was conducted during March 2010 and 23 respondents participated (response rate of 96%) and ranked the five most important answers based on round two rankings. The analysis of this round forms the basis of the results section that follows, 5 being highest value and 0 lowest. Kendall's Tau (τ) (-1 = total disagreement, 1= total agreement) was used to measure the degree of consensus among respondents between round two and three in line with McGuire and Cheh (2006), and Nevo and Chan (2007).

4 RESULTS

This section presents the main empirical results from the Delphi panel. The focus of the following analyses lies in the results obtained in the second Delphi round because these judgments were formed under consideration of all responses given in the first round. The results are presented separately for each of the six questions and the corresponding tables summarize the final ranking as well as their means and standard deviations. In addition, Kendall´s tau (τ) is presented for the three most highly ranked answers and direct citations of the qualitative raw data are used to illustrate and support the analysis.

ICT developments influencing HRM between 2010- 2015

As noted in Table 1, almost every panel expert sees social media (τ =0.148) as being the main ICT trend likely to impact HRM. This answer was ranked highest among all the ranked answers in this study. This finding is in line with Martin et al. (2009) and McAfee (2006) who argue that social media is the technology trend likely to have a major impact on HRM. Respondents had broadly similar views regarding the importance of social media:

> *"Social media are already influencing HR and I think that it is just the beginning. The HR department must adapt to this phenomena."* Researcher

> *"Web 2.0 is becoming much more widely diffused and its advantages along with mobile (technology) will converge to produce a new HR business model."* Practitioner

The increased use of mobile communication technology (τ = 0.219) was ranked second and increased interaction between audio and visual technologies (τ = 0.302) was ranked as being the third most important development in ICT influencing HRM between now and 2015. The strong presentation of mobile communication and increased interaction between audio and visual technologies is hardly surprising, given the existence of this technology since 1990s. However, the high mean ranks of social media and mobile communication technology could indicate the possibility of mobile social media being the dominant technological trend in the near future.

Table 1. Developments in ICT that will influence HRM

Technological development	Mean rank (5=highest)	Overall rank	Stardard deviation
Increased use of Web 2.0 (social media)	4,3	1	1,55
Increased use of mobile communication technology	3	2	1,53
Increased interaction between audio & visual technolgoies	1,82	3	1,3
Increased use of SaaS (software as a service)	1,56	4	1,72
Shift from document centric to communication centric	1,34	5	1,52
Increased data processing speed	1,08	6	1,44
Virtual worlds become common practice	1,04	7	1,22
The possibility to easily change the database and update information	0,69	8	1,52

Note: Top 3 Kendall´s = 0,223

Implications for how HRM is delivered in organisations between 2010–2015

HRM delivery was the focus of the second research question. The responses in Table 2 indicate that social media and collaboration will fundamentally change the competence and knowledge management paradigm ($\tau = 0.3$). In addition, HR departments will become more virtual (fragmented nets of changing external providers, HR professionals, line managers and employees) ($\tau = 0.337$). This situates social media as being a major driver of change towards more virtual HRM involving various stakeholders from different levels outside and inside of the more fragmented organisation. This view is supported by the third most highly ranked issue, namely HR becoming more decentralized. However, this answer of HR becoming more decentralized by giving more responsibilities to local managers and employees generated a negative Kendall´s tau ($\tau = -0.118$), which means that respondents disagreed about this. The respondents explained the reasons behind their answers with the following comments:

> *"Social media utilization will be broad and deep. This is a revolution, not evolution! " Practitioner*

> *"There are parallel centralization/decentralization trends. Many tasks of administrative HR performance by in-house HR function will move to the line and centralized/outsourced services. There has been talk about this for the last 15 years. It is slowly happening. Number 1 may describe the direction, but 2015 comes fast. Fundamental change in this paradigm requires more time. If the statement had been 'social media and collaboration start changing the competence and knowledge management paradigm' then I would strongly agree." Researcher*

> *"Major changes in HR and how it will be perceived is driven by business. The majority of companies still try to solve the same issues with the same tools and behaviors as today. However, agile companies (10%) have drastically gained competitive edge in implementing technologies to automate HR business and bring business intelligence reporting tools close to business users (executives, managers, HR, controllers etc.)." Researcher*

Table 2. Implication for how HRM is organised / delivered in firms

Implications for how HRM is organised/delivered	Mean rank (5=highest)	Overall rank	Stardard deviation
Social media will fundamentally change management paradigm	2,82	1	2,2
HR departments will become more virtual	2,78	2	1,95
Hr will become more decentralized	2,65	3	1,77
A mostly automated HR function	2,13	4	1,42
Increase devolution of HRM to the line	1,52	5	1,44
Compeletely bought HRIS service, managed by provider	1,08	6	1,59
HR will be more centralized	0,65	7	1,52
ICT developments as such will not have an impact on HR	0,46	8	1,44
HRM will become more and more a managerial burden	0,43	9	0,94
Nothing much changes, HRM issues not easy to measure	0,3	10	1,06
SaaS will enable but also necessitate a different HRM approach	0,26	11	0,86

Note: Top 3 Kendall´s = 0,173

Implications for the role played by HR between 2010–2015

The exploring of roles played by HR provides an important view in identifying the scope and purpose of the HR in the future. The results presented in Table 3 indicate that conventional HR departments will lose some of their influence, recognition and resources, and for HR departments that open up to ICT developments power and recognition will increase (τ = 0,166). Secondly, HR will drive things like organizational agility (through performance management, learning and collaboration) while traditional HR administration is already tackled and ready for optimization (τ = 0,029), which could mean the mass customization of practices mentioned earlier. In addition, HRM practices will be more useful for line managers; a new cadre of middle and senior managers capable and prepared to handle people issues (τ = 0,004). This statement seems to be in line with Sparrow (2009) and Bondarouk et al. (2009) who suggest successful HRM practices require line manager support:

> *"There are several HR functions that do now believe that a new generation of line managers are people-centric enough to understand that they need to take responsibility for these issues. Much has been said about the capability of HR Business Partners. Everyone knows that it is the capability of line managers to handle these issues on which the overall success ultimately depends."* Researcher

Finally, the panel did not believe that HR would become a strategic partner, an issue which received the second lowest ranking. Indeed, the answer "*Not much will change - in 2015 we will still be discussing the issue of how to turn HR into a strategic business partner*" achieved the highest overall mean score. However, it is challenging to define what is 'strategic' and some panellists had strong opinions regarding this topic:

"The role of HR will change to become more strategic and an active developer; talent and organizational development. Administrative tasks will be handled by line managers." Practitioner

Table 3. Implications for the role played by HR

Implications for the role played by HR	Mean rank (5=highest)	Overall rank	Stardard deviation
Conventional departments will lose their influence	2,61	1	1,92
HR will drive things like organizational agility	2,52	2	1,8
HRM practices will be more useful for line managers	2,26	3	1,88
Higher employee satisfaction with HR services	1,82	4	1,55
Not much will change, 2015 still taking strategic partnership	1,43	5	2,04
HR will play active role in the design & development of ICT	1,39	6	1,75
Not many implications; HR will still want to work with people	0,95	7	1,52
HR will become strategic partner	0,78	8	1,27
ICT platforms lead to a HR information market places	0,47	9	1,08

Note: Top 3 Kendall´s = 0,066

Implications for the knowledge and skills needed by HR professionals between 2010–2015

Interestingly, the two most highly ranked options for this question produced the highest degree of consensus amongst the panel members of all the answers in this study (Table 4). According to the panellists, the most important knowledge and skills needed by HR professionals was knowledge of social networking, the importance of social networking, and the ability to work in a 'virtual' network (τ = 0,458). Similar to Bell et al. (2006), these findings suggest that it is increasingly important for HR professionals to demonstrate technological expertise. In particular, HR professionals need to be able to use HRM technology and, in the light of our results, social media channels in the future to deliver services to employees which is in line with the second highest ranking for skills and knowledge needed – statistics and business analytics, faster, deeper, and more insight about sourcing, buying and managing service providers (τ = 0.645). Ranked third, but generating disagreement, was the statement "*knowledge of what the technologies can do is important, but more important is their capacity to handle all of the new data that will become available, especially on engagement and knowledge sharing*" (τ = -0,323). Finally, the panel did not believe in the creativity of HR practitioners being important in the future, being the only answer among all the answers in this study which was not ranked at all. Respondents commented on the ranked skills being critical in the future in the following ways:

"Social networking is a mindset – its important to have that mindset in a world where being connected is core. Such a mindset is needed." Researcher

"ICT people don't take ownership and that is why HR has to be on top of HR-related ICT issues." Practitioner

Table 4. Implications for the knowledge and skills needed by HR professionals

Implications for knowledge & skills needed by HR professionals	Mean rank (5=highest)	Overall rank	Stardard deviation
Knowledge of social networking, realizing importance of SN	3,21	1	1,78
Statistics & business analytics: insightful about sourcing	2,08	2	2,06
Capacity to handle all data that will become available	1,95	3	1,74
Combination of HR expertise with core IT literacy	1,82	4	1,89
HR professional are consuntants, need consultancy skills	1,52	5	1,87
Understanding how ICT changes work in organisations	1,47	6	1,72
More general education will be required	1,08	7	1,9
HR professionals will need to have a good sense of time	0,82	8	1,64
Understandeing present essential trends	0,65	9	1,52
HR service providers will be fewer in number	0,6	10	1,43
Requires highly skilled and consequently higher paid individuals	0	11	1,26
No administrative knowledge, creative is the most important	0	12	0

Note: Top 3 Kendall´s = 0,26

Implications for HRM in multinational corporations between 2010–2015

Respondents ranked social media as being the most important implication in the multinational context (Table 5) in relation to the statement, "*social media will have far-reaching implications for staff: sharing of confidential information; its use in recruitment; training and educational issues; ethical issues*" (τ = 0.326). To shed more light on this possible implication, Martin et al. (2009) propose a scenario where social media could alter the choices available to employees and organizations to collaborate and exercise their respective voices and argue that social media could have the potential to transform the business model, especially in organizations that are multi-site or multi-country.

The second most important trend identified by the respondents was multinational corporations will especially use ICT to better control and evaluate their subsidiaries (τ = 0.111). Sparrow et al.'s (2004) view of future ICT trends include mass customization of policies as variations and combinations which can be recorded and monitored – a view that seems to support findings on increased control. Finally, respondents ranked "*multinational organizations will outsource operational HRM on a global basis to a larger extent. This includes payroll. Global HRIS solutions implemented in the last 5–10 years are the enabler. This development has started and it will be accelerated*" as being the third most important (τ =

0.254). Comments regarding the MNC context reflected the complex environment in which MNCs operate:

> *"MNEs will use ICT and Web 2.0 to help resolve the integration-responsiveness problem. Technology will enable MNEs to integrate and decentralize simultaneously." Researcher*

> *"Although there will be huge complexity in implementation, as local cultural factors and differences in subsidiary power impact the pursuit of a globally consistent HR delivery model, the inevitable pull for corporate HR is that this enables them to redraw 'the line in the sand' between standardisation (as opposed to optimisation) of HR systems." Researcher*

Table 5. Implications for HRM in the context of multinational corporations

Implications for for HRM in the MNC context	Mean rank (5=highest)	Overall rank	Stardard deviation
Social media will have far-reaching implications for staff	3,3	1	2,03
MCN will particularly use ICT to control and evaluating	3,17	2	1,33
MNCs will outsource HRM to a larger extent	2,17	3	1,99
Data privacy issues will become more severe	1,43	4	1,72
Subsidiary units will become more locally responsive	0,86	5	1,71
Companies that SAP will enchange solutions with SaaS add-ons	0,86	6	1,51
Systems such as SAP and Oracle will be out of use	0,69	7	1,32
It will tend to strengthen the notion of standardization	0,69	8	1,55
Because of the inventments made, ICT developments have only minor influence	0,6	9	1,37
Its not ICT, its institutional context that surrounds the attaractiviness of sourcing	0,52	10	1,03
SAP or Oracle will be a driver towards convergence of HRM	0,52	11	1,08
There will be no difference. Social networking will remove the borders	0,26	12	0,91

Note: Top 3 Kendall´s = 0,23

5 CONCLUSIONS

This study provided an overview of what a panel of experts believe to be the most important and relevant trends in ICT influencing HRM in the near future. To shed light on the future trends in e-HRM, this study applied the Delphi method with a panel of e-HRM experts through a three-round issue identification and consensus-building process. What makes the results particularly interesting is its unusual combination of insight between the academic and business e-HRM expert communities. While some of the issues presented here are already at the early stage of public recognition, many of the dimensions addressed seem to have escaped widespread attention so far.

In this study, future trends and implications for HRM were suggested and ranked in five areas. More specifically, this study looked at what ICT developments will influence HRM, what implications these developments have for how HR is delivered in firms, what implications ICT has for the role played by HR, what implications ICT has for the kinds of knowledge and skills are needed by HR professionals and finally study looked what implications developments in ICT will have for HRM in the context of multinational corporations. Among the issues raised and later rated in both round two and round three, an acceptable degree of consensus was reached in all these areas.

The Era of Social Media

The main finding in this study was the importance of social media technology as a technological trend. This answer was the highest ranked of all answers in this study. Therefore, this paper suggests that we are about to enter the era of social media in HRM technology. In addition, by combining the two most highly ranked answers in this topic, one could argue further that mobile social media will be the most significant technological trend in the near future. In support of the findings of this study, Cooke and Nick (2008) and Li (2010) analyzed technology trends affecting business and suggest the use of social media tools will continue to grow rapidly and this will provide the business community with new and innovative ways to explore the changing business environment.

According to consultant surveys, organizational support for social media is increasing. The use of wikis for knowledge sharing is supported in 13%, the use of internal blogs in 14% and the use of social media tools for recruiting is reported in 9% of US organizations (CedarCrestone, 2010) representing a 50% increase from 2009. In everyday HR work, social media will have an impact in more HRM domains than just recruiting; it can be used for training and development, rewards and HR planning. To support this argument, Sarner, Drakos and Prentice (2008) forecast the implications of social computing by 2012 will include volunteered data input in wikis, blogs and the like, than mandatory, traditional knowledge management and employee opinion techniques. These tools have the potential to improve communication, increase efficiency, create innovative knowledge sharing and learning environments and collect more data from employees' interests and motivations, thus increasing the strategic potential of e-HRM systems.

However, these highly ranked technologies also have a “dark side”. Levy (2009) suggests that social media is adopted more in the field than in headquarters, therefore it might create issues in the control of employees. Scepticism about social media is understandable. A recent survey by Miller et al. (2011) found that 64% of companies implementing social software faced resistance from management and 72% faced resistance from users. Many senior executives are sceptical that social software can improve performance and are concerned that it will be a distraction and undermine traditional authority structures. Although many organizations are implementing or considering implementation, usage of applications remains low and few organisations can point to measurable results in business performance and most have focused on adoption as a proxy for success (Kaplan and Haenlein, 2009). Miller et al. (2011) suggest that the consequences of social media are likely to be negative if its advocates focus on anything other than tangible improvements to operating performance as a primary indicator of success. Adoption metrics do not address what matters most to each tier of participants (employees, managers and executives).

In addition, social media could be prevented from being implemented because of resistance by the wider HR community in the organization and line managers who feel their concerns have not been taken into account, or end-users such as line managers have previous negative experiences of ICT-based HR applications (Martin et al., 2008). Furthermore, Levy (2009) reports organizations add social media applications to their set of tools, but most usage is not “production”, rather it is a playground or a specific use by pioneers. Young employees use these applications more than their elders, an issue which could then have an impact on system acceptance at more senior levels. There are also some growing concerns about privacy and the potential to violate employee confidentiality with the use of e-HRM (Ruël and Bondarouk, 2010), a concern which should be the focus of more research. Finally, adopting this technology in organisations will offer more flexibility to employees in terms of when and where work can be done. This could then infringe on time previously devoted to non-work activities, especially with mobile social media.

Decentralized HR Delivery via Social Media

The results indicate that social media and collaboration will change the competence and knowledge management paradigm and secondly, HR departments will become more virtual (fragmented nets of changing external providers, HR professionals, line managers and employees), and HR will become more decentralized.

In terms of HR delivery then, the ability to efficiently transmit information and training content with social media could have a strong positive influence on HR effectiveness. This is achieved by streamlining user-generated content processes, where system improvements and overall usage is measured often with relevant tools (i.e. not just the usage levels). These social service delivery applications could also allow employees to access information and prominent tracking applications could include the ability to track applicants through the staffing process faster and more accurately. It has also been argued that since organizational capabilities are deeply rooted in human resource capabilities (e.g. employee attitudes), HR is best positioned to deliver these outcomes (Haines III and Lafleur, 2008) and according to our results, delivery could be facilitated through the support of social software tools.

A report from McKinsey (2008) suggests that organisations use social media internally to manage knowledge and collaboration, but also in engagement and training, and in developing new products and in internal recruiting. With this in mind, networks – the core of social media, could then improve HR delivery through a more decentralized user model where connectivity and knowledge sharing are more cost-effective and with increased speed. However, there are again many "dark sides" in the use of social media tools in organisations for the purposes of service delivery. According to Welbourne (2010) "new media" brings an opportunity for employees to express themselves and give voice in a new way, meaning that new media could benefit the morale of employees. However, communication in social portals may bring with it the risk to the organisation of publicising things that should not be discussed in public. Despite this, the possible negative feedback, for example in internal social media platforms, could enable HR to improve its delivery of practices more efficiently than before. Finally, when systems collect more accurate data on people's behavior and locations, this paper is in agreement with Bondarouk et al. (2009b) insofar as systems possessing the potential to decrease employee satisfaction with the services provided by HR departments. Employees may be less likely to accept e-HRM when they perceive that these systems invade privacy which then reduces the acceptance level of the HR service delivered.

"Open" HR Department Supported by Empowered Line Managers

Regarding implications for the roles played by HR, the results indicate that with the use of social media conventional HR departments will lose their influence. However, HR departments that open up to ICT developments will see their power and recognition increase. HR will drive things like organisational agility and HR will be more useful for line managers. The effective use of integrated e-HRM systems including social media-based systems could transform the HR "business model" by freeing up the HR function to provide value to the business that it previously could not do (Lengnick-Hall and Moritz, 2003). This added value could come in the form of more efficient and open knowledge transfer or more efficient and open employee communication via social media platforms. However, the findings of this study do not support HR becoming a "strategic partner", which is a testament to the ongoing debate in the HRM and e-HRM literature.

When "opening up" HR departments to technical innovations, the ultimate outcomes will depend on how the enacted HRM frames are constituted by employees, f.agers (Bondarouk, et al. 2009b). As the role of line managers in HRM will increase, the challenge for HR is to adopt a proactive "technology push" stance and to develop systems which are customised and interactive despite the fact that end-users may not realise the benefits of such capabilities (Alleyne et al. 2007). This "push" can be communicated via social media as the features of social media allow HR to request fast feedback from system users, a factor considerably recognized in the literature as necessary for HR to improve its customer orientation in service delivery (Alleyne et al., 2007).

The "dark side" of this relates to situations where feedback channels are not controlled. Employees might adopt this technology to express their individual voice and if these issues are not managed, the role of HR in organizations might decrease. In addition, there might evolve a concern of information becoming too public outside the organisation and 'openness of HR' where ICT experts are suggesting a move towards employee 'voice' and pluralism. The majority of HRM is still a unitarist project designed at aligning/engaging people towards a common direction and set of goals within the organisation. Therefore, the fundamental question of 'openness' might create severe political conflicts between HR and ICT stakeholders.

Social Networking and Business Intelligence as Crucial Skills for HR Professionals

Knowledge of social networking, importance and attitude towards social networking, and ability to work in a 'virtual' network was one of the highest ranked issues, thus supporting the case regarding the importance of social media's implications for HRM and HR personnel. Similar to Bell et al. (2006), this paper suggests ICT transformation is reshaping the competencies that define HR professionals' success. Whilst "traditional HR competencies will not go away in the future, these competencies must be updated with additional skills, such as a better understanding of social media and virtual networks, captures the need for strategically managing data/stats for business purposes.

In the light of results, the professional skills that need to be fostered and developed are for example, the skills of data-handling (i.e. manage data for strategic business purposes) and traditional ‘soft-skills’ needed in social media usage support, such as gaining the trust of employees. It seems the extent to which people use or will engage in social media within the organization depends on the level of trust with managers from various business functions. For instance, Li (2010) identifies the different levels of engagement and trust where HR is influenced by organizational values, and strategies, and in turn influences many organizational processes such as HRM. HRM in turn influences culture and other significant organizational processes, and employee behaviour.

By adapting and training the skills ranked highest in this study, HR professionals are able to create new, efficient and ethical, social media-based ways for delivering HRM practices to end-users. In support of this view, Gardner et al. (2003) found that HR professionals were able to connect to more external professional links as a result of more extensive use of ICT, thus suggesting that ICT has the potential to help HR practitioners learn of more innovative ways in which to deliver HR activities. While “traditional” HR competencies will not go away in the future, these competencies must be updated with additional skills, such as a better understanding of social media and virtual networks. captures the need for strategically managing data/stats for business purposes

Regarding the “dark side”, it is open for discussion what impact the increased need, for example for social media and statistic skills, have on HR professionals’ evaluation of their own work identity and careers. The impact of learning these skills may result in fewer personal communications which might be valued by HR professionals and this leads to lower commitment and satisfaction. Indeed, our results encourage managers to think how these predictions affect the attitude of HR professionals toward their jobs and profession. It is possible that HR professionals and end-users resist adoption of the latest technology if they perceive that this technology lessens their status. Despite this, Hussain et al. (2007) report that the use of e-HRM and adopting ICT skills has increased the status of the HR profession as a whole.

Social Media as a Facilitating Technology in Recruitment, Information sharing, Training and Control in the MNC

The findings in the MNC context suggest that social media will have a strong influence on staffing and information sharing, and MNCs will particularly use this technology for the purposes of better control and evaluation. There is evidence that companies are using social media in recruiting (Kluemper and Rosen, 2009; Girard and Fallery, 2009). However, many recruiting systems are developed based on Western cultures and consequently the HR processes inherent in these systems are rooted in Western cultural values. As a result, the system used may be less effective when used in nations with significantly different cultures (Stone, 2005).

As suggested in the literature review, social media could facilitate more efficient knowledge transfer via globally integrated company wikis and blogs and manage expatriates with mobile geo-tagging devices. However, effective technology use, particularly in MNCs, must be supported with constant discussion and information. Similarly to Morris et al. (2009) this paper suggests that the HR function in MNCs should implement systems which require HR to discuss and especially to listen each others´ opinions across the company before using social media technology in more advanced, such as talent management, systems.

In addition, global standardization of e-HRM could facilitate effective standardized communication and knowledge transfer channels between any parts of the organization. However, having a monolithic, global e-HRM system with social media tools could put severe constraints on the agility of HR. In addition, the dynamic nature of national business systems further complicates an accurate assessment of the factors shaping the circumstances of e-HRM practices. Regarding the "dark side", the range of institutional and cultural factors that account for differences in e-HRM practices creates pressures for resource capabilities of subsidiaries (Burbach and Royle, 2010) despite technological progress. Indeed, previously mentioned or any other future technological trends should not be taken granted in the MNC context since, as Reilly (2000) notes, "*the speed of technological progress will probably not be determined by technological capability but by culture*" and keeping global MNC operations in mind, HR is generally regarded to be most culture-specific function (Tayeb, 1998).

Limitations and Future Research

This study is not without limitations; however these limitations offer fruitful avenues for future research. Firstly, it is necessary to discuss the accuracy and reliability of this study. The Delphi method has gained acceptance across various disciplines mentioned earlier and those experienced with the Delphi technique report that "*the method produces accurate results which are accepted and supported by the majority of the expert community*" (Turoff, 1975: 23, Czinkota and Ronkainen, 2005). In the business field, this method has been appreciated as a systematic thinking tool; however, there has been discussion about its ability to recognize strategic issues (Schoemaker, 1993). Such a discussion might be understandable during an era in where effectual quantification of analyses is admired by many.

To evaluate the accuracy of the Delphi technique, Czinkota and Ronkainen (2005) compared existing Delphi studies in the similar discipline. We could not scrutinize any similar Delphi studies forecasting e-HRM trends or study focusing to similar issues in the field of HRM because the lack of research with this method. However, the findings of this first attempt to forecast trends are heavily dependent on the in-depth thoughts and evaluation of thought-leader experts. Therefore, similar to Czinkota and Ronkainen (2005), the informed trends and implications are more likely to indicate future directions than the opinions of many uninformed survey participants.

To increase the accuracy of these studies then, this paper suggests more research with Delphi method in this area. In addition, this research will mature in short period of time. Therefore this research could be repeated over time with similar methods and sample sizes so that there would be a rolling benchmark of the issues and topics that contribute to develop the e-HRM knowledge and results could be tested with line managers with argument Delphi tool. With previous statements in mind, and similar to Strohmeier (2007), this paper suggests researchers to adopt these kinds of non-traditional methods when studying the cross-disciplinary field of e-HRM, for example, by applying the future studies approach and building scenarios from the findings of this study.

A second limitation lies in the prospective nature of the data. In a typical empirical study, one documents something about the past, in the hope that it will generalize in some modest way into the future. In contrast, the Delphi technique used in this paper projects directly into the future. The experts are caught in a dilemma: The likelihood of a very general prediction coming true is much higher than the likelihood of a very specific prediction. On the other hand, very general predictions might not be actionable. Experts have provided quite general predictions, and the paper emphasizes trends that are quite likely to be accurate, but at the expense of being able to use the results for specific action.

Thirdly, the use of social media in HRM will vary widely on size of firm, and especially accessibility of workers to computers. The results do not mean that all organizations and professionals are using e-HRM and their functionalities to a similar extent and for similar purposes. For example, a study by Ball (2001) showed that there is a significant relation between the use of information systems and the size of an organization and which modules it adopts. Research could seek more knowledge on social media´s actual use and user acceptance in organizations of different sizes, sectors and countries and shed light what kind of organizations and departments adapt social media technology and what are the implications of the use for various stakeholders.

Fourth, the present study had a positivist orientation, and critical questions regarding negative aspects of e-HRM were not widely addressed by expert panel. Therefore future research could seek more knowledge on negative aspects of ICT and HRM.

Finally, the implications have a more complex nature than this study reported. Implications, referred to as consequences by Strohmeier (2009) can be both (un-)expected and (un-)desired. Often, actual occurring consequences are desired and expected. For instance, the desired consequences of cheapening and accelerating a recruiting system can be anticipated in the use of a certain recruiting system. As mentioned, these expected and desired consequences form the central reason for using e-HRM systems. However, unexpected and undesired consequences may also occur. For example, intended misuse of individual users may constitute a serious variety of unexpected usage. Intended misuse can range from smaller fraudulences to malicious sabotages such as launching viruses that attack the information system. This kind of usage will also yield unexpected and undesired results. In terms of researching these kinds of consequences, Strohmeier (2009) suggests research based on the suggested concept implies several complications and adds complexity to research. As this study focused on a variety of future implications, the detailed specification of this or other concepts by Strohmeier (2009) to panelists was beyond the scope of this study.

Practical Implications

The main managerial implication of the study's findings is that HR practitioners can use links between these trends and implications to demonstrate how ICT could add value to various HRM stakeholders in the coming era. In addition, HR practitioners need to critically consider the adoption and desirability of social media technology supported e-HRM systems. Indeed, one should not be too optimistic on the potential benefits of social media (e.g. in reducing more cost, increasing the speed of knowledge transfer or the quality of training) and HR practitioners should consider the “dark side” of social media (i.e. where employees are too open, for example, with micro-blog posting) when implementing new systems, policies and practices. Similarly for developing blogging standards (Valentine et al., 2010), this paper suggests organisations should develop social media policies (e.g. social media handbook) and be pro-active with these policies. Policies should identify what kind of behaviour is acceptable and issues of privacy regarding, for example, what is monitored. Organisations should also include disciplinary processes with examples of unethical behaviour in social media to both work-related tasks and non-work related tasks. However, HR should also consider fairness and privacy issues when developing these policies. In addition, it is important to note that organizations can't fully control social media usage, as employees can engage in organizational chatter in a cloaked identity as well as their real identity. According to Mangold and Miles (2007) the only thing organizations have control over is influencing the organizational context and help to set the stage for increasing the desire of employees to reflect the desired brand image of the company.

As discussed earlier, e-HRM implementation, especially in MNC context is often fraught with problems because the implications of technology are not discussed. This study recommends to implement new technology inside organisational firewalls, in line with McAfee (2006) who suggests implementing technology behind firewalls is the most promising way forward for organisations seeking the benefits of social media, minimising the “dark side” by making it easy to be protected. In addition, MNCs should avoid replication by engaging with existing technologies before developing in-house ones and used systems should be regularly evaluated. Moreover, the increasing presence of mobile social media in the future might be critical for workforce planning (e.g. where, how and when people work, geo-tagging) HR practitioners need to consider whether same systems to a location specific employees have similar impact for dispersed employees. Finally, in order to react pro-actively to technological change around us, HR needs to predict trends. Therefore, the method of this study offers a means of advanced response. In situations where trends are challenging to predict, tools such as Delphi can help to create a flexible mindset that is predicated on the certainty of evolving trends.

REFERENCES

Ancona, D. and Bresman, H. (2007). X-teams: How to Build Teams h at Lead, Innovate and Succeed. Boston: Harvard Business School Press.

Addison, T. (2003). E-commerce project development links: evidence from a Delphi survey. International Journal of Information Management, 23, 25–40.

Alleyne,C., Kakabadse, A., and Kakabadse, N. (2007). Using the HR intranet An exploratory analysis of its impact on managerial satisfaction with the HR function . Personnel Review, 36, 295–310.

Ball, K.S (2001). The use of human resource information systems: a survey. Personnel review, 30, 677–693.

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

Beretta, R. (1996). A critical review of the Delphi technique. Nurse Researcher, 3, 79–89.

Birkman International (2010). Human Resources 2.0: How HR Professionals and HR Consultants Use Social Media and Web 2.0 Technologies. Available at: www.birkman.com/news/BMI_WP_SocialMedia2.pdf

Bondarouk, T.V. and Ruël, H.J. (2009a). Electronic Human Resource Management: challenges in the digital era. The International Journal of Human Resource Management, 20, 505–514.

Bondarouk, T.V and Ruel, H.J. (2009b). Structuring the IT-enabled Transformation of HR: An HRM Frames Analysis in an International Company. In Sparrow (Eds.) Handbook of International Human Resource Management. John Wiley.

Bondarouk, T., Looise J.K. and Lempsink, B. (2009). Framing the implementation of HRM innovation HR professionals vs line managers in a construction company. Personnel Review, 38, 472–491.

Brockhoff, K. (1975). The performance of forcasting goups in computer dialogue and face-to-face discussion. In Linstone, H. A. & Turloff, M., (Ed.), The Delphi method: Techniques and applications (pp. 291–321). Reading, MA: Addison- Wesley.

Burbach R.B. and Royle T.R (2010). Global integration versus local adaption of an e-hrm system in a US MNC. Proceedings of 3rd European workshop on e-HRM, May 2010, Bamberg Germany.

CedarCrestone (2010). The CedarCrestone 2009–2010 HR Systems Survey: HR Technologies, Deployment Approaches, Value and Metrics. 12th Annual Edition. CedarCrestone.

CIPD (2009). Web 2.0 and Human Resource Management ‘Groundswell’ or hype? The Chartered Institute of Personnel and Development, Reading. British Library Cataloguing in Publication Data: Reading.

Colton, S. (2002). Developing an instrument to analyze the application of adult learning principles to world wide web distance education courses using the Delphi technique Doctoral dissertation, University of Louisville.

Cooke, M. and Nick, S. (2008). Web 2.0, social networks and the future of market research. International Journal of Market Research, 50, 21–38. 26

Czinkota, M.R. and Ronkainen, I.A (2005). A forecast of globalization, international business and trade: report from a Delphi study. Journal of World Business, 40, 111–123.

Dawson, M.D. and Brücker, P.S. (2001). "The utility of the Delphi method in MFT research", The American Journal of Family Therapy, 29, 125–140.

Delbeq, A., Van De Ven, A. H. and Gustafson, D. H. (1975). Group techniques for program planning. Glenview, IL: Scott Foresman.

DeSanctis, G. (1986). Human Resource Information Systems: A Current Assessment. MIS Quarterly, 10, 15–27.

Evans, C. (1997). The use of consensus methods and expert panels in pharmacoeconomic studies. Pharmacoeconomics, 12, 121-129.

Florkowski, G. and Olivas-Luján, M.R. (2006). Diffusion of Information Technology Innovations in Human Resource Service Delivery: A Cross-Country Comparison. Personnel Review, 35, 684–710.

Gardner S.D, Lepak, D. P and Bartol K.M (2003). Virtual HR: The impact of information technology on the human resource professional. Journal of Vocational Behavior, 63, 159–179.

Girard, A., and Fallery, B. (2009). E-recruitment: new practices, new issues. An exploratory study. In: The third International Workshop on Human Resource Information Systems, 6–7 May 2009, Milan, Italy.

Green, B., Jones, M., Hughes, D. and Williams, A. (1999). Applying the Delphi technique in a study of GPs information requirements. Health & Social Care in the Community, 7, 198–205.

Haines, V.Y. and Petit, A. (1997). Conditions for Successful Human Resource Information Systems. Human Resource Management, 36, 261–275.

Haines III, V.Y. and Lafleur, G. (2008). Information technology usage and human resource roles and effectiviness. Human resource management, 47, 525–540.

Hussain, Z. , Wallace J. and Cornelius, N.E. (2007). The use and impact of human resource information systems on human resource management professionals. Information & Management, 44, 74–89.

Kaplan, A. and Haenlein, M. (2009). Users of the world, unite! The challenges and opportunities of Social Media. Business Horizons 53, 59–68.

Kaynak, E., Bloom, J. and Liebold, M. (1994). Using the Delphi technique to predict future tourism potential. Marketing Intelligence & Planning, 12, 18–29.

Keeney, S., Hasson, F., and McKenna, H. (2006). Consulting the oracle: ten lessons from using the Delphi technique in nursing research. Journal of Advanced Nursing, 53, 205–212.

Kluemper, D. and Rosen P. (2009). Future employment selection methods: evaluating social networking web sites. Journal of Managerial Psychology. 24, 567-580.

Lepak, D.P. and Snell, S.A. (1998). Virtual HR: Strategic human resource management in the 21st century. Human Resource Management Review, 8, 215–234.

Lepak, D.P. and Shaw, J. D. (2008). Strategic HRM in North America: looking to the future. The International Journal of Human Resource Management,19, 1486–1499. 27

Lengnick-Hall, M.L. and Moritz, S. (2003). The Impact of e-HR on the Human Resource Management Function. Journal of Labor Research, 24, 365–379.

Levy, M. (2009). Web 2.0 implications on knowledge Management. Journal of knowledge management, 13, 120–134.

Li, C. (2010) Open Leadership: How Social Technology Can Transform the Way You Lead. Jossey-Bass.

Linstone, H. and Turoff, M. (1975). The Delphi method: Techniques and applications. Reading, MA: Addison-Wesley.

Lin, C.Y.Y. (1997). Human resource management in Taiwan: a future perspective. The International Journal of Human Resource Management, 8, 29–43.

Lobel, S A., Bradley K. G. and Bankert, E. (1999). The future of work and family: Critical trends for policy, practice and research. Human Resource Management, 38, 243–254.

Loo, R. (1996). Managing workplace stress: a Canadian Delphi study among human resource managers. Work & Stress, 10, 183–189.

Loughlin, K.G. and Moore, L.F. (1979). Using Delphi to achieve congruent objectives and activities in a paediatrics department. Journal of Medical Education, 54, 101-6.

Mangold, G. and Miles, S. (2007). The employee brand: Is yours an All Star? Business Horizons, 50, 423–433.

Marler, J.H. (2009). Making human resources strategic by going to the Net: reality or myth? The International Journal of Human Resource Management, 20, 515–527.

Martin, G., Reddington, M. and Alexander, H. (2008). Technology, Outsourcing and Transforming HR (Eds). Oxford: Butterworth-Heinemann.

Martin, G., Reddington M., Kneafsey, M.B. and Sloman, M. (2009). Scenarios and strategies for Web 2.0. Education & Training, 51, 370–380.

Martin, G. and Reddington, M. (2009). Reconceptualising absorptive capacity to explain the e-enablement of the HR function (e-HR) in organizations. Employee Relations, 31, 515–537.

McAfee, A.P. (2006). Enterprise 2.0: the dawn of a new collaboration. Sloan Management Review, 47, 21–28.

McGuire, D. and Cheh, M (2006). The development of the field of HRD: a Delphi study. Journal of European Industrial Training, 30, 653–667.

McKinsey (2007). How businesses are using Web 2.0: a Mckinsey global survey. McKinsey Quarterley online version available at: www.mckinseyquarterly.com/article_abstract.aspx?ar=1913&l2=16&l3=16&srid=27&gp=0.

McKinsey (2008). Buidling the Web 2.0 enterprise: a Mckinsey global survey. McKinsey Quarterley Online version available at: www.mckinseyquarterly.com/PDFDownload.aspx?L2=16&L3=16&ar=1913.

Miller, M., Marks, A. and DeCoulode, M (2011). Social software for business performance. Deloitte Insights.

Morris, S.S., Wright, P.M., Trevor, J., Stiles, P., Stahl, G.K., Snell, S. Paauwe, J. and Farndale, E. (2009). Global challenges to replicating HR: The of people, processes and systems. Human Resource Management, 48, 973–995.

Nevo, D. and Chan, E. (2007). A Delphi study of knowledge management systems: Scope and requirements. Information & Management, 44, 583–597.

Ngai, E.W.T. and Wat, F.K.T. (2006). Human resource information systems: a review and empirical analysis. Personnel Review, 35, 297–314.

Parry, E. (2011). An examination of e-HRM as means to increase the value of HR function. International Journal of Human Resource Management, 22, 1146–1162

Reilly, R. (2000). The future of success. New York: Alfred Knopf.

Robinson M, Sparrow, P, Chris C. and Birdi, K. (2007). Forecasting future competency requirements: a three-phase methodology. Personnel Review, 36, 66–89.

Roehling, M.V, Boswell, W.R., Caligiuri,P. Feldman D., Graham, M.E, Guthrie, J.P Morishima, M. and Tansky, J.W. (2005). The future of HR management: Research needs and directions. Human Resource Management, 44, 207–216.

Ruël, H.J.M., Bondarouk, T. and Looise, J.C. (2004). E-HRM: Innovation or irritation. An explorative empirical study in five large companies on web-based HRM. Management Review, 15, 364−381.

Ruël, H.J.M., and Bondarouk, T. (2010). The intersection between information technology and Human Resource Management from a cross-national perspective: towards a research model. In: C.J. Brewster (Eds.), Handbook on Comparative HRM, Edward Elgar, United Kingdom. Forthcoming.

Ruta, C.D. (2009). HR portal alignment for the creation and development of intellectual capital. The International Journal of Human Resource Management, 20, 562–577.

Sarner, A., Drakos, and Prentice, S. (2008). The business impact of social computing [online]. [registration required] Gardner consulting. Available at: http://www.gartner.com/DisplayDocument?id=758947

Schwarz, S. (2008) Assessing the future studies in management. Futures, 40, 237–246.

Schmidt, R., Lyytinen, K., Kiel, M. and Cule, P. (2003). Identifying software project risks: an international Delphi study. Management Information Systems, 17, 5–37.

Schoemaker, P.J.H. (1993). Multiple scenario development: Its conceptual and behavioral foundation. Strategic Management Journal, 14, 193–213.

Snell, S.A., Steuber, D. and Lepak, D.P. (2001). Virtual HR departments: getting out of the Middle. In Henan, R.L. and Greenberger, D.B. (Eds), Human Resource Management in Virtual Organizations, Information Age Publishing, Greenwich, CT.

Sparrow P., Brewster, C. and Harris, H. (2004). Globalizing human resource management. Routledge, London.

Sparrow. P (2009). Handbook of international human resource management. (Eds.) Wiley, Chippenham.

Spencer-Cooke, B. (1989). Conditions of participation in rural, non-formal education programs: A Delphi study. Educational Media International, 26, 115–124.

Stone, D.L. (2005). The brave new world of eHR: Human resources management in the digital age. (Eds.) San Francisco: Jossey Bass

Stone, D., Stone-Romero, E. and Lukaszewski K. (2006). Factors affecting the acceptance and effectiviness of electronic human resource systems. Human Resource Management Review, 16, 229–244.

Strohmeier, S. (2007). Research in e-HRM: Review and Implications. Human Resource Management Review, 17, 19–37.

Strohmeier, S. (2009). Concepts of e-HRM consequences: a categorisation, review and suggestion. The International Journal of Human Resource Management, 20, 528–543.

Synnott, G. and McKie, D. (1997). International issues in PR: researching research and prioritizing priorities. Journal of Public Relations Research, 9, 259–82.

Tayeb (1998). Transfer of HRM across cultures: An American company in Scotland. International journal of human resource management, 9, 332–370.

Turoff, M. (1970). The design of a policy Delphi. Technological Forecasting and Social Change 2, 149–171

Turoff, M. (1975). The policy Delphi. The Delphi Method: Techniques and Applications, Addison-Wesley, Reading.

Ulrich, D. (1997). Human resource champions: the next agenda for adding value and delivering results. Harvard Business School Press. Boston Massachuttes.

Valentine, S., Fleischman, G.M, Spragure, R. and Godking, L. (2010). Exploring the ethicality of firing employees who blog. Human Resource Management 49, 87–108.

Van Ruler, B., Vercic, D., Bütschi, G. and Flodin, B. (2004). A first look for parameters of public relations in Europe. Journal of Public Relations Research, 16, 35–63.

Welbourne, T. (2010). New media: Editor-in-chief ́s note: Opportunity of curse for HR? Human Resource Management, 49, 1–2.

de Witt, M. (2011) Where the light is: A review of the literature on factors and consequences of e-HRM success and a contingency framework. Master thesis. University of Twente.

Zhang Y. and Salaba, A. (2009). What is next for functional requirements for bibliographic records? A Delphi study. Library Quarterly, 79, 233–255.