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**THE IMPACT OF E-HRM ON THE ROLES
AND COMPETENCIES OF HR**

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TERMINOLOGY

E-HR	Electronic Human Resource
E-HRM	Electronic Human Resource Management
HRM	Human Resource Management
HRIS	Human Resource Information System
HRIT	Human Resource Information Technology
ICT	Information Communication Technology
MNC	Multinational Corporation
RBV	Resource Based View

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ABSTRACT

Since the emergence of the internet, a new era of HR termed as E-HRM has begun, dramatically reengineering the HR practices and processes to operate in a highly competitive market. As a result, HRM has undergone a change process in terms of HRM functions over the last decade. The study aims to investigate the impacts of E-HR to HRM function in organizations, particularly to the changes in roles and competencies of HR specialists as well as non-HR staff (line managers and employees).

This research is a qualitative single case study based on semi-structured interview conducted via phone calls. Data was collected during semi-structured interviews with 10 middle management executives including 4 HR managers and 6 other functional managers in a successful MNC in the industry of milk and dairies in Vietnam.

The case company is in the first phase of strategically transforming HR department at different levels and has just adopted ICTs in recent years. There is a trend to continue the automation of HR service in the next few years. In addition, the findings suggest that the delivery of HR services with a small range of web-based tools used hardly enables the expected changes in HR's role toward a strategic partner though it supports the shift of HR focus to the role as employee champion. The initiation of E-HRM practices is pushing HR to move from a traditional bureaucratic department to a client-friendly approach which potentially targets at the role of an employee champion. Another tangible effect caused by E-HRM is the devolvment of HR responsibilities to line management though the support from HR technology to their daily work is unobvious. However, improvements in competencies of HR professional after the implementation of E-HRM were found to be inconsiderable. A preference of developing people related skills such as communication, teamwork, consultancy and negotiation to other types of competencies existed among HR professionals, though they were suggested to focus on upgrading the business knowledge, critical thinking and leadership.

KEYWORDS: E-HRM, HR roles, HR competencies

1. INTRODUCTION

1.1 Background of the study

The application of advanced technology in organizations of all sizes has become trendy until recently and inspired a large number of changes in the business world. It affects the business in two main categories: (1) the improvement of business in efficiency, effectiveness and productivity; (2) the transition of business in the way people create, organize, manage and operate an enterprise (Zhang & Wang 2006). Managerial executives show more interests in effectively exploiting and utilizing the power of technology, especially in the management of human capital. There is a growing awareness of the role of human resource management (HRM) in providing a competitive advantage for the corporate. Since the emergence of the internet, a new era of HR termed as E-HRM has begun, dramatically reengineering the HR practices and processes to operate in a highly competitive market. According to Gürol (2010: 530 – 540) the application of information systems in HRM is not a new issue but it is the evolution and improvement in the use of such technology that impressed us. As a result, HRM has undergone a change process in terms of HRM functions over the last decade. Kemske (2008) confirms that it is the pressure and priorities facing HR departments that change the traditional practices and create the organizational innovation. HR executives nowadays have been required to be more strategic, flexible, cost-efficient and customer-oriented (Snell, Stuebner & Lepak 2002). Yeung, Brockbank and Ulrich (1994) argued that HR functions have been in the process of reinventing itself in many companies. The interviews with top executives in 10 major corporations revealed that the roles and responsibilities of HR professionals and line managers were redefined; many transactional activities were automated, streamlined and reengineered and more important HR professionals saw the link between the delivery of HR services and business needs. Ruël, Bondarouk and Van der Velde (2007) were very positive towards the possibility of HR to become more strategic with the support of IT to perform administrative tasks. Wright and Dyer (2000) present the similar view: HR functions

can become critical partner in driving success as long as HR changes its focus, its role and its delivery system.

The tension underlying the challenges of cutting HR costs and administrative burdens as well as becoming more strategic drives HR executives excited and enthusiastic to seek the increased application of “e” to HR. Guetal and Stone (2005: 16) argue that advanced technology has enabled sub-functions of HR to be automated ranging from, training and development, compensation to performance management. The results of applying technology to HR operations are quite striking. Two reports (CIPD 2004, Martin 2005) show that about 60% of interviewees rated “improving productivity” and “reducing operational cost” to be “as expected”. As this trend continues, not only HR itself but everyone in the business will engage in sharing the burden of HR jobs, putting HR in the position of supporting the business and partnering with key managers to “make the right business-focused workforce decisions at the right time” (Fletcher 2005: 14). From the global perspective, Sparrow, Brewster and Harris (2004: 65 – 84) confirm that above discussed developments impact enormously the existing international HR functions. International HRM has been ambitious to become a strategic partner who can add value to the real business rather than a manager of the organization’s global workforce. HR is “moving towards a world where it has to satisfy line of business – and not just country – needs and this is shifting the way that HR professionals think about problems” (Sparrow et al. 2004: 71). Consequently, academic interest in E-HRM has increased noticeably (Strohmeier 2007).

Many researchers (Cedar 2004, Lengnick-Hall & Moritz 2003, Strohmeier 2007, Watson Wyatt 2002, Wright & Dyer 2000) emphasized the importance of technology developments in transforming the role of HR department from administrative to strategic one. This strategic role not only adds a valuable dimension to the HR function, but also changes the competencies that define the success of HR professionals (Bell, Lee & Yeung 2006). Ruël, Bondarouk and Looise (2004) developed an E-HRM model based on the HR literature to describe the E-HRM strategy used by five multinational firms operating in the Benelux region (Belgium, The Netherlands and Luxembourg): DOW, ABN-AMRO, Ford Motor Company, IBM, and Belgacom. They concluded that

the utilization of E-HRM helps corporate to gain administrative efficiency, cost reduction as well as to standardize HR policies and processes but hardly improve employee competences. However, E-HRM can become irritated “when goals are neither clear nor realistic to line managers and employees; when the aimed for E-HRM type does not fit the real needs of line managers, employees, and HR departments; when expected results do not emerge or are shown to be unrealistic; when the implementation route map is not clear; and when it all is too technology-driven” (Ruël et al. 2004). They also added that the research in E-HRM is only in its preliminary stage, and a proper theory linking the relationship between technology and HR departments is still lacking as the model does not take into account the cultural, socio-demographic, political and economical factors that could affect the adoption and use of E-HRM. Lengnick-Hall and Moritz (2003) study the contribution of E-HRM to the organizational effectiveness through a variety of means such as knowledge management, the creation of intellectual and social capital. In the research and review of E-HRM, Strohmeier (2007) suggests a framework distinguishing the “context – configuration – consequences” of E-HRM while considering many levels of analysis, actors, strategies, activities, and technologies. His study also reveals that “current research shows a strong national focus on the USA, with only scattered results from other countries” and that the extant literature is mainly non-theoretical, employs diverse empirical methods, and refers to several levels of analysis and to diverse focal topics of e-HRM. In the recent study, Strohmeier and Kabst (2009) examine factors influencing the cross-national organizational adoption of E-HRM based on a large-scale survey with a sample of 2,336 organizations in 23 European countries. Observations through previous studies lead us to the interest of seeking for both positive and negative impacts of E-HR to HRM function in organizations, particularly to the changes in roles and competencies of HR specialists as well as non-HR staff (line managers and employees).

However, doubts remain among practitioners. Regardless of the confirmation from academics about the benefits of E-HRM, practical evidence suggests that the potential of E-HRM has been underexploited in many companies. Stone, Stone-Romero and Lukazweski (2006) stressed that E-HRM has been largely used in the United States and other countries but unfortunately, “their use is often predicated on unproven claims

about their functional consequences”. It demonstrates a fact that many practitioners have a modest understanding about the value of E-HRM and HR technology beyond administrative outcomes. In a survey conducted by Watson Wyatt (2002), the four most important metrics to support E-HRM investments included productivity improvements within the HR organization, cost reductions, return on investments and enhanced employee communications. Foster (2008) as an experienced HR consultant commented that organizations nowadays regard technology no more than an “electronic filing cabinet” or a “basic repository of data”. He blamed the lack of leadership and a vision from senior levels for the failure of e-enabling their HR organization. The idea that E-HRM only serves “a narrow range of administrative decisions” (Broderick & Boudreau, 1992) has been supported by a study by CIPD (2007) which announced that a limited number of organizations used technology for a transformational objective. Foster (2010) also illustrates the emergent perception of technology among practitioners with an interesting statistics of a famous book in 2005 – “The future of HRM: 64 thought leaders explore the critical HR issues of today and tomorrow” (Losey, Meiseinger & Ulrich 2005) and sadly concluded that 64 “thought leaders” did not see technology as a significant part of future for HR (if any). Ruël, Bondarouk and Looise (2004) revealed that their empirical study in five large companies on web-based HRM presented a limited evidence of E-HRM outcomes which led to improvements or changes in the competencies of the workforce. Reviewing E-HRM research, Strohmeier (2007) question the ability of E-HRM to transform HR into a real business partner that create value to the organization. Bondarouk and Ruel (2009) also added that organizations often refused to announce their actual achievement of E-HRM goals as HR becoming a strategic partner.

In light of all these, this study attempts to provide several specific and critical points which will hopefully contribute to a better understanding of E-HRM. In a context of a MNC operating in a developing country, the perception of E-HRM and its impact will be carefully looked at under various views from both HR professionals and line managers.

1.2 Research gaps

There are two basic research gaps that inspire the initiation of this study. First of all, as mentioned above, research on E-HRM is still in its “youth-phase” (Ruël et al. 2007). Despite the widespread interest of E-HRM among academics and practitioners, little research has focused on issues such as the impact of E-HR on the role and competencies of HR. It is not until recently that the topic has received a modest attention. For example, Yusoff, Ramayah and Ibrahim (2011) examined the influence of HR roles on E-HRM in Malaysia. Interestingly, their study analyzed the relationship between E-HR and HR role in a converse way that HR roles caused some certain effects on the use of E-HRM. Gardner, Lepak and Bartol (2003) investigated how HR professionals are influenced by extensive use of IT within the HR department. Specifically, they examined how HR professionals handle HR information as well as the expectations placed on them resulting from an increased reliance on IT. Consequently, to gain a clearer understanding of how IT impacts the role and competencies of HR, this thesis was conducted with the expectation to close that gap.

Secondly, as stated in the background of the study, a large body of research has been performed in USA and Europe compared to very few studies on the same area in Asia (Ruël & Bondarouk 2010). Hooi (2006) investigated the readiness of Malaysian small and medium sized manufacturing companies to adopt E-HRM. Zhang and Wang (2006) observed the evolution of information systems and information processing in the HRM domain in a large Chinese factory. They, furthermore, analyzed a few emerging trends in E-HRM in China and suggested solutions to some problems in E-HRM development. Ramayah and his colleagues (Ramayah, Nornina, Noorliza & Normalini 2006) studied the adoption and usage of a HR information system (HRIS) among HR executives and HR professionals working in companies in Penang, Malaysia. He later proposed a model based on Technology Acceptance Model and HR Roles that examine the relationship between HR roles and E-HRM adoption (Yusoff, Ramayah & Haslindar 2010). However, up until now, there is no official research conduct in Vietnamese context though the adoption of E-HRM has been made in recent years at various levels in MNCs and large organizations in Vietnam. Even though there is a growing consensus

in mainstream management literature of the link between E-HRM implementation and the achievement of business strategies, companies in Vietnam are yet reluctant to adopt it.

Because of many differences in the market environment and the management mechanisms between developed countries and Asian countries, the research in a particular country in Asia will promise a result which embraces Asian specific characteristics. Hence, this study will try to address the extent to which technology innovations affect the role and competencies of HR professionals within a particular MNC operating in Vietnam. The thesis will focus on the influence of technology in four main areas of HRM, namely, recruitment, training, performance appraisal and compensation.

1.3 Research questions and objectives of the study

The research aims to conceptualize E-HRM and hopes to explore to what extent E-HRM has been practiced in a MNC in Vietnam. In addition, it attempts to propose recommendations to HR and non-HR managers in order to overcome challenges in a new technology-embedded workplace. In reference to the research gap mentioned above, the corresponding research questions are as follows:

- To what extent is the introduction of E-HRM in Vietnam changing the role of HR professionals?
- To what extent is the introduction of E-HRM in Vietnam leading to the devolvement of HR responsibilities into line managers?
- To what extent is the introduction of E-HRM in Vietnam perceived as requiring new competencies for HR professionals?

1.4 Scope of the study

The main study is to examine the impact of E-HRM on the shift of roles and responsibilities of HR and new competencies required for new roles. The case study will

be conducted in a foreign-owned MNC in Vietnam in order to support the theoretical aspect. The study will not only look at the issue from HR professionals' perspective but also investigate under the line managers' viewpoint as E-HR now plays an important part in transferring new roles and responsibilities to non-HR staff. More and more non-HR professionals have access to E-HR tools while at the same time new roles have been created for HR professionals. However, employees of the case company have not been listed as interviewees as a common limitation of a qualitative research.

1.5 Structure of the study

The study consists of five main parts. The first part aims at introducing the topic of the research and providing some background for previous research concerning E-HRM and its influences. The second chapter refers to the reviewed literature theory. The first aim is to conceptualize E-HRM by defining it and its components. The second aim is to explore various effects of E-HRM on the work of HR professionals. The third chapter is to describe the research methodology which justifies the selection of the qualitative single case study. The next part discusses the empirical findings of the study. Finally, the fifth chapter ends the research with a discussion of findings and some conclusions. The limitations of the research, managerial implications and directions for future research will be addressed at the end of the thesis.

2. LITERATURE REVIEW

2.1 The history and definition of E-HRM

2.1.1 The history of E-HRM

The use of computer in HRM dates back to the 1940s. Payroll systems and employee information storage are among the first processes to be supported by the technology (Walker 1980). In America, by 1943 federal tax came into practice and payroll clerks struggled with manual processes which failed to avoid human errors. The urge to increase the efficiency of the auditing department led to a revolution where automated payroll systems were adopted to reduce the burden of HR staff (Fletcher 2005: 11). Walker (1980: 560) describes four stages in the revolution of computers for personnel use. The stages include “the primitives forerunners of the 1940s and early 1950s, systems based on the number crunchers available in the mid-1950s and early 60s, overly ambitious efforts to include data from personnel in master plan management information systems in the 1960s, and external developments, primarily in government reporting requirements, that made personnel data systems a necessity rather than a luxury in the 70s”. The developments continued strongly in 1980s when companies recognized the huge benefits of IT application and new areas like accounting and finance were gradually mechanized (DeSanctis 1986). That is when the term HRIS (Human Resource Information System) has been widely used by both researchers and practitioners. As the 1990s approached, the internet started to emerge and shed a new light on HRM activities. A survey conducted by CedarCrestone (2006) showed that companies broadened the scope of HRM applications and increased their budgets to invest in HR technology. In addition, E-HRM applications have become more sophisticated as a part of enterprise resource planning (ERP) system with the integration of financial and other modules (Bondarouk & Ruël 2009). The diffusion of E-HRM in organizations calls for an urgent change among HR to meet the increasing demands of this profession.

2.1.2 Definitions of E-HRM

Since the early research on the relationship between web-based technologies and HRM, a number of definitions have been proposed to explain the phenomenon named E-HRM which was interchangeably used with HR Information System (HRIS), virtual HR or web-based HRM (Bondarouk & Ruël 2009). The term has been in official use since the early 1990s referring to conducting Human Resource Management (HRM) “transaction” using the internet (Lengnick-Hall & Moritz 2003). The term was initially inspired by the emergence of e-commerce in the business world and wrongfully adopted the “e-” prefix, signifying “electronic”, even if e-HR is very specific to the use of the internet. So Panayotopoulou, Vakola and Galanaki (2007) suggest “online HRM” as a more accurate term. Interestingly, potential users usually find themselves confused between HR information system (HRIS) and E-HRM. However, HRIS involves systems used within HR department itself to improve the HR processes while E-HR aims to serve non-HR staff such as employees and managers (Ruël et al. 2004). For most purposes, the terms E-HR and E-HRM appear to be interchangeable. E-HRM has been popular for academic usage, while the terms “self-service” and E-HR are more likely to be used by practitioners, IT teams and software suppliers (Foster 2009).

The understanding of E-HRM varies depending on specific perspectives each researcher wants to focus on and there is little agreement on definitions of E-HRM (Strohmeier 2007, Bondarouk & Ruël 2009). Some prefer the transactional functionality which merely refers to what the system does. Kettley and Reilly (2003: 3) see E-HRM as “the application of conventional, web and voice technologies to improve HR administration, transactions and process performance”. Voermans and Van Veldhoven (2007: 887) share the same point when stating that it is “the administrative support of the HR function in organizations by using internet technology” and emphasize the importance of understanding that the introduction of E-HRM may lead to change in content and positioning of the HR function.

Other researchers such as Strohmeier (2007) view E-HRM as 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”. E-HRM is also known as “the application of any technology enabling managers and employees to have direct access to HR and other workplace services for communication, performance reporting, team management, knowledge management and learning...in addition to administrative applications...” (Watson Wyatt 2002: 43). The clear similarity among definitions lies in the reference of a “fully integrated, organization-wide electronic network of HR related data, information, services, databases, tools, applications and transactions” (Foster 2009).

A final group of definitions aims at a more strategic approach to E-HRM stressing what technology enables and E-HRM is now considered as a way of performing HRM rather than a collection of technologies. Bondarouk and Ruël (2009) conclude that E-HRM is “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.” It suggests the integration of four aspects: the content of E-HRM (focus on the type of HR practices and IT used, and the match between them), the implementation of E-HRM (focus on the process of adoption and appropriation of E-HRM by organizational members), targeted managers and employees who are actively involved in using E-HRM applications and finally E-HRM consequence (Bondarouk & Ruël 2009). This definition will be used throughout the thesis because it seems to include not just the administrative elements of e-HRM but also the wider strategic outcomes, which cover adequately the themes of this study.

By all means, E-HRM can be seen as an intersection between HRM and IT. E-HRM or the use of web-based technologies for human resource management practices and policies is strongly growing within organizational life. Even though people define electronic HR in different ways, E-HRM is nothing more than a concept – a way of doing HRM (Ruël et al. 2004).

2.2 Development stages of E-HRM

E-HRM is, rather than a particular stage in the development of HRM, a choice to approach HRM. Aiming at discover the effects of E-HRM on the work of HR professionals and non-HR staff and managers, it is critical to investigate the ways in which HRM is conducted within companies. E-HRM is argued to develop through three main stages. Though there are different ways to categorize E-HRM stages, they all have one thing in common: the highest level of E-HRM is always presented under the name of “transformation”. It implies that there is a high consistency in identifying the maturity stage of E-HRM. Table 1 summarizes the key development stages of E-HRM.

Table 1: Development stages of E-HRM.

Author	Development stages		
Lepak & Snell (1998)	Operational HRM	Relational HRM	Transformational HRM
Wright & Dyer (2000)	Transactional HRM	Traditional HRM	Transformational HRM
Lengnick-Hall & Moritz (2003)	Publishing	Automation of Transactions	Transformation
Ruël et al. (2004)	Cost reduction	Improve HR Services	Improve strategic orientation
Foster (2009)	Replication	Enhancement	Transformation

According to Lepak and Snell (1998), three ways in which HRM is conducted include operational HRM, relational HRM and transformational HRM. Wright and Dyer (2000) also jumped to a similar conclusion, namely transactional HRM, traditional HRM, and transformational HRM. Lengnick-Hall and Moritz (2003) view E-HRM as a process of maturity and development. The first form of E-HR involves the publication of HR information, a one way communication from the company to employees and managers. The next level enables the automation of transactions, workflow and supply-chain integration and finally it matures into full transformation of HR function.

2.2.1 Operational human resource management

Reducing costs and increasing efficiency are two main goals each organization aims to reach when taking the first step in automating HRM. At first, people paid more attention

to the needs of lessening the heavy administrative burden within HR thanks to the assistance of automated and computerized transaction processing system (Lepak & Snell 1998). Then, operational HRM extended activities since the birth of intranets which form a one-way communication channel between an organization and its employees. This way of information delivery helps to cut down paper costs and improve the delivery and updating speed more effectively than other traditional methods (Lengnick-Hall & Moritz 2003).

As a consultant working in the e-HRM field, Foster (2009) has a slightly different viewpoint regarding to e-HRM development compared to other authors'. From his observation, organizations typically choose one of three paths when implementing HR technology: replication, enhancement or transformation. The most simplistic form of e-HRM - replication - is all about updating the content and functions of the existing systems which was viewed, by Foster (2009), as "an IT refresh activity". This form, accordingly, creates very few business values and has no strategic approach to improve HR processes and services.

2.2.2 Relational human resource management

According to Bondarouk and Ruël (2006), relational HRM stresses the importance of the way HR tools support such basic processes as performance management, recruitment or selection. E-HRM brings a choice to each organization to conduct HRM practices in a new modern form or stick to traditional methods which soon show disadvantages to the long-term development of the organization. Through the use of intranets, extranets, HR portals, employee/manager self-service, etc. the relationship between users of the systems are facilitated and improved. Remote access to HR databases is established with view to support HR related decisions, enhance flexibility and customization as well as communications between users (Lepak & Snell 1998).

Foster (2009) sees this second stage – enhancement – as an functional improvement of existing systems, for example, self-service, better integration or reporting which intend

to put an “evolutionary” effect on overall HR service delivery model. However, he added that this approach ignores competitive advantage when designing strategies.

2.2.3 Transformational human resource management

The real business value will be created by HR professionals in the highest stage when the transformation of HRM changes people’s viewpoint about HR work and contributions. The transformation typically includes strategic partnering with the business, creating centers of expertise and outsourcing (Walker 2001) aiming at more strategic initiatives. Technology has the power to transform HR processes and roles to a higher level to ensure organizations with enormous benefits. A “revolutionary restructuring of the HR service delivery model” will involve the effort of not only HR staff but also the cooperation of line managers and employees when part of HR workload is transferred to non-HR professionals (Foster 2009). LeTart (1998) added that the transformation in HR may foster a new culture or mindset as a result of “outside the box” thoughts and also lead to innovative practices in HR service delivery.

However, according to Ruël et al. (2004), interestingly, a combination of these types of e-HRM exists in reality. The authors also warn that a good transactional foundation is an important basis for preparing a successful transformational E-HRM. “None- of the types can be judged as good or bad but their qualities. It was shown that there is a ‘gap’ between E-HRM in a technical sense (the available functionality) and the use and adoption of it by employees and line managers. The actual adoption lags behind what is possible” (Bondarouk & Ruël 2005). In other words, whether which form of E-HRM an organization adopts or how it is adopted will vary from organization to organization depending on the availability of and access to personal computers, number of human resource professionals, information technology specialists available and several other factors (Lengnick-Hall & Moritz 2003).

2.3 Changes in HR service delivery: from traditional to E-HRM

Until recently, more and more researchers tend to pay more attention to the unprecedented changes in HR functions, typically the shift in HR role and priorities.

Evidences of this shift have been found in studies conducted by a number of researchers (Mohrman, Lawler & McMahan 1995) in which they confirmed that HR executives spent more time on value-added activities like strategic HR planning, organization design or change management rather than operational/transactional work such as record keeping or auditing. As described in Figure 1, operational administrative activities used to account for the majority of an HR professional's time (65 – 75%), followed by the time spent on basic relational functions such as training, recruitment, performance management and compensation (15 – 30%). Consequently, not much time for higher value activities such as knowledge management, strategic redirection and renewal, cultural change, etc. is available (Wright & Dyer 2000).



Figure 1: Traditional delivery of HR services (Wright & Dyer 2000).

Contributive changes have just occurred to HR functions over the past 15 – 20 years. The burden of transactional HR activities have been released thanks to outsourcing some operational functions and achievement in implementing technology in running HR processes, which gives HR an opportunity to challenge with a more strategic role in the organization (Wright & Dyer 2000). Lepak and Snell (1992) suggested that HR could

meet the challenge of becoming more strategic as well as more customer focused and cost efficient by using information technology. Bussler and Davis (2002) proposed that “with the use of technological solutions, HR is no longer transactional and reactionary but strategic and proactive”. This has been depicted clearly in Figure 2.

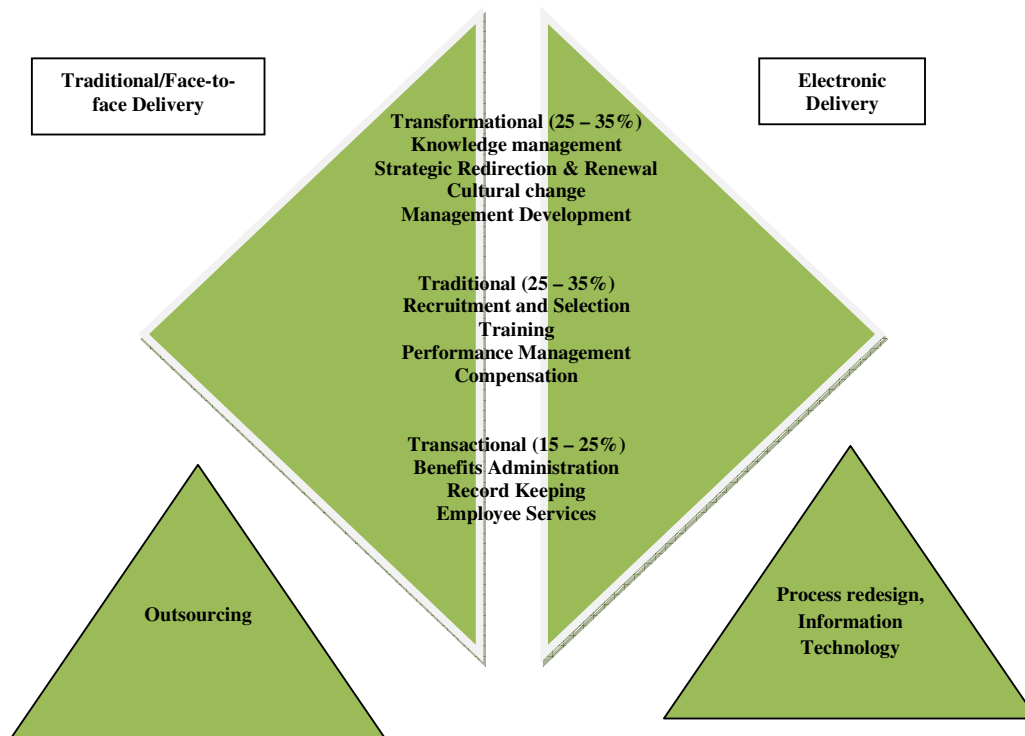


Figure 2: E-enabled delivery of HR service (Wright & Dyer 2000).

We will now turn to a few typical examples illustrating the changes of HR service delivery under the impact of E-HRM.

2.3.1 E-HR and Recruitment

As discussed above, E-HRM plays the key role in changing the way traditional HR operates. One of the most typical applications of E-HRM is that of recruitment or E-recruitment. The traditional recruiting process consists of the following iterative phases: identification of hiring needs; submission of job requisition and approval; job posting, submission of job applications; screening of résumé/application; interviewing; pre-

employment screening; and job offer and employment contract. It is a step-by-step sequential process which is labor – intensive and time – consuming (Lee 2005). Traditional recruitment and selection processes require extensive face-to-face communication with recruitment agencies and potential candidates (Cohen 2001: 53). Even in the assistance of computers, improvement in efficiency has not been considerable because computer applications automate internal processes rather than the rationalization of the process.

The internet marks a new stage in recruitment processes, moving it to a higher level: E-recruitment or online recruitment. Lee (2005) defines it as “practices and activities carried on by the organization that utilizes a variety of electronic means to fill open positions effectively and efficiently”. The tempting idea of easily accessing to job information and applicant databases “anytime – anyplace” satisfies both job seekers and recruiters. While traditional recruitment practices are seen a sequential batch process, the new method is considered as a continuous and online process where some activities can be performed concurrently. The E-recruiting process consists of the following iterative steps: identification of hiring needs; submission of job requisition; approval of the job requisition via a job database; job posting on the Internet; online search of the job database by job seekers, online prescreening/online self-assessment; submission of applications by applicants directly into an applicant database; online search of the applicant database for candidate selection; online evaluation of résumé/application; interviewing by recruiters/hiring managers; online pre-employment screening; and job offer and employment contract (Lee 2005).

With E-HRM organizations can turn into a global recruitment hub for both external and internal applicants who now find it easier to attain information about available positions. Cohen (2001: 59) also argues that E-HRM creates the “mechanism for enterprise-wide yet customer-specific and user-friendly recruitment and staffing”. Many benefits from online recruitment have been appreciated by many MNCs including time and cost saving and increased quality of candidate pool (Panayotopoulou et al. 2007). E-recruitment also provides organizations many other advantages such as quick and flexible responses, wide range of applicants, worldwide accessibility (Galanaki 2002),

efficiency, and convenience for both recruiters and job seekers (Tomlinson 2002). For example, IBM employees now fill out forms on the Web to identify contract help they need, and that information is immediately sent to 14 temp agencies. Within an hour agencies respond with resumes for review, allowing IBM to cut hiring time from 10 days to 3 and save \$3 million per year (Wright & Dyer 2000). In Nike, E-recruitment enables the average time filling a job vacancy to reduce from 62 to 42 days with a decrease in the cost by 54% (Pollitt 2005). Online systems also helped Cisco to attract over 500,000 applicants within one month and to hire 1,200 people in three months (Stone et al. 2009: 24). The recruitment now becomes a very proactive process which allows applicants to have an overall understanding of the organization and its culture before actually joining it (Vinutha 2005). Furthermore, recently, more and more large companies such as Walt Disney or Cisco are using E-recruiting as a weapon to establish and promoting the so-called “brand identities” (Ulrich 2001). Unique information about the firm’s “brand identity” and core values is available on the company’s website which allows applicants to review and determine if their personal goals and values fit with the culture of the organization. Finally, these systems help organizations to “evaluate the effectiveness of the recruitment process and validate assessment techniques” (Stone et al. 2009: 24).

Recruitment process also includes the assessment and selection steps which now can be technically automated. Computerized systems now become of a great assistance in scheduling tests, assessing scores, analyzing performance, etc...from which the results will decide whether the candidates are qualified for the job or not (Cohen 2001: 53). However, technology only affects a few sections like resume scanning, online testing and assessment; it is HR professionals who make the final decision. Furthermore, it is critical to take privacy and security concerns into account when employing the online assessments.

2.3.2 E-HR and Training/Learning

Besides, the most beneficial use of E-HRM lies in the training and development of employees. E-Learning has been described by Sambrook (2003) as activities that are focused on learning and are supported by information and communication technologies.

Training can be done through a company's intranet or through Internet, using a variety of multimedia such as audio, video conferencing and links to resources which offers a solution to remote learning. The advantages of this process are quite noticeable. First, its flexibility – one of characteristics appreciated by most employees allows learners to choose the time and place of study no matter when or where they are as long as they have internet connection. The flexibility in methods and content of courses also improve the quality and effectiveness of learning. Second, cost reductions (administrative costs, travel expenses, opportunity costs, instructional costs and the like) can be achieved in many ways, which promotes this training method among worldwide organizations. Finally, this is a strategy of talent attraction and retention because companies understand that one of employees' needs is to enhance knowledge and improve their competencies through self-study to get promoted in their career ladder (Comacchio & Scapolan 2005). Figure 3 illustrates benefits the firm can gain from E-learning.

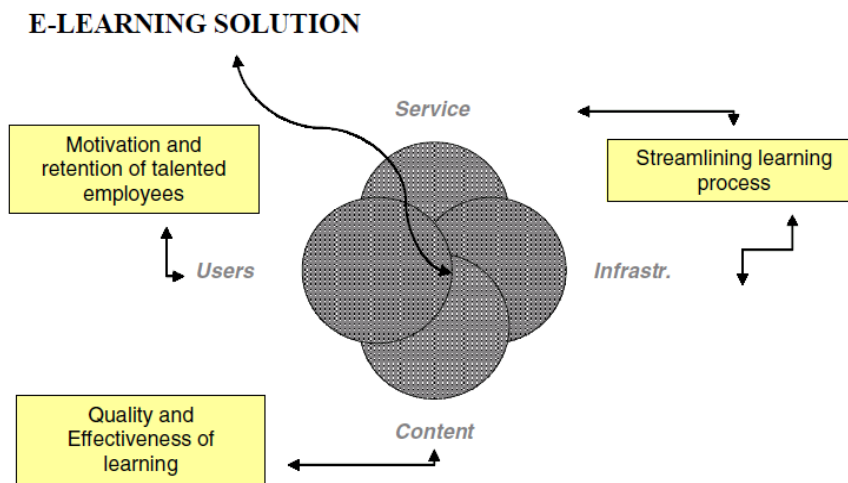


Figure 3: Benefits of E-learning (Comacchio & Scapolan 2005).

Take IBM as a typical example. The company is famous for its E-learning programs which have been carefully designed to fit the demands and expectations of employees as well as the company. If IBM employees are interested in building communication or negotiation skills, they can easily access to the internal website to enroll in related E-courses. The evaluation and assessment of the attendees are available online as well. E-learning sessions simply provide what they need most. Interestingly, it is a push, rather

than pull approach to training. The firm will not wait for you to realize your deficiency of skills or outdated knowledge. Instead, it takes initiatives to push the training to you, which, in turn, force you to update your own learning profile (Wright & Dyer 2000). Therefore, by automating training and development processes and material, the efficiency and effectiveness of training are increased. More importantly, however, effectiveness of such programs will also depend on the national and cultural context in which E-learning is adopted. In addition, Abrahamson and Rosenkopf (1993) blamed the failures of E-training on “opaqueness or lack of clarity surrounding an organizational assessment of an innovation”. They commented that E-learning is an ambiguous decision process in which the technical efficiency or the returns of an innovation is hard to be evaluated properly. Even if the company succeeds in identifying the best E-learning model, there is no assurance that economic performance can be accomplished. Last but not least, individual learning processes should be viewed as “soft” issues which imply that their results are intangible by nature. Though skills and competencies can be partially measured, it is always difficult to isolate its influence on individual performance from other causes (Comacchio & Scapolan 2005). Such considerations should be taken when designing training programs for employees.

2.3.3 E-HR and Performance Management

Employee performance management is one of major causes to managers’ headaches; the bigger the scope of the firm is, the more serious the headaches become. Complications related to goal setting, performance planning, performance tracking, employee appraisal, evaluation and feedback make the performance management process “easier to visualize and talk about than to actually implement” (Evans 2001: 65). However, the appearance of technology in this field shows them a weak light at the end of the tunnel. How exactly does technology help to streamline this heavily administrative process?

Electronic or web-based performance management simply refers to performance management activities under a conscious and directed support of technological tools. It is different from computer-based systems which serve the same purpose. Though such systems attempt to automate paper form procedures, it, in fact, has not revolutionized the whole process or eliminated the challenges of traditional forms (Ensher, Nielson &

Grant-Vallone 2001). Not until Web-technology-based channels become the key facilitators improving the measurement and development of employees' performance within organizations to benefit HR professionals, line managers and employees. E-performance management increases the efficiency and consistency of the whole process. Specific tracking software can help to monitor and track employees' routine jobs. Such information will be available in the internal network system and accessible to both employees and managers. Even performance appraisal and feedback are in computerized forms to save time and simplify the process (Cardy & Miller 2005). HR staff finds themselves free from manual paper-based procedures to focus on more strategic issues. Employees are now able to easily track their performance progress from a real-time performance data and receive fast and adequate evaluations from managers via useful tools such as 360-degree Feedback. Line managers use E-performance management tools to compose better quality appraisals as frequently as required to communicate their employees' performances. They can also adjust employees' goals and performance to fit company strategies and objectives. More importantly, as a whole, the organization will benefit from higher performance and improved goal adjustments.

Bondarouk and Looise (2009) proposed three types of E-performance management: the operational, relational and transformational one. In the operational form, technology only supports the administrative process, for example, offering managers online forms to fill out after the performance planning and appraisal. The relational type deals with daily communicative processes between managers and employees. A typical illustration is the use of 360 – degree feedback tool to communicate performance data across the organization. Finally, the transformational type aims at a more strategic approach in a wider context. In other words, E-performance system is a key facilitator for HR practitioner to develop “an organization's unique human component” by exploring and analyzing individual as well as group work and competencies. Personnel planning and organizational change programs will follow if required (Bondarouk & Looise 2009).

However, regardless of successful stories, many companies face failures and challenges when implementing E-performance management systems. Robb (2004) noted one of the main causes involving the cultural acceptance of employees and managers to the

system. The full cooperation of managers of all levels is another factor affecting the success of the process. Line managers also need to continuously provide evaluations, feedback and coaching to their employees, proactively engaging in the whole appraisal process and the implementation of E-performance management plan (MacMillan 2004). Helmick (2004) added that however perfect the E-performance management system is, it can never replace a human communication; in other words, after all, it is the manager who “addresses individual trends, reinforces positive behaviors and coaches employees to change behaviors that are inhibiting goal achievement”.

2.3.4 E-HR and Rewarding/Compensation

Compensation policies nowadays become one of the strongest weapons to attract and retain competent employees especially in the fierce war for talent. A good compensation system, hence, helps the organization to achieve its strategic objective by having a positive impact on employees' loyalty, commitment and performance. However, Wright and Dyer (2000) argued that most traditional compensation systems in organizations are “rigid, time consuming and ineffective processes” and partly reflect the bureaucracy within HR. Traditional methods of rewarding and compensation are usually based on “Paying for the job” which mainly focuses on the job rather than on the performer. Consequently, it fails to recognize talents and motivate them to gain higher performance standards (Manjunath & Rajesh 2008). For example, managers ignoring the different performance levels among employees give them similar pay increase to avoid potential conflicts concerning the internal fairness. However, this, in turn, has a counter-effect when employees feel demotivated because their efforts of working hard are not granted.

Compensation and rewards can be managed more effectively and with considerably less effort when using e-HRM; we call it E-compensation. E-compensation tools refer to web-based software tools which enable an organization to do a full package of rewarding tasks ranging from gathering, storing, manipulating to analyzing, utilizing and distributing compensation data and information (Dulebohn & Marler 2005).

To survive in a dynamic and competitive market, companies find themselves in an urgent need to enhance the practice of designing and administering compensation

programs. Leveraging technology may help them to achieve such goals with less effort. First, compensation data and information are now available online and easy to access anytime from anywhere – their office, home, on vacation, on the other side of the globe without support of IT staffs or sophisticated technology infrastructures. Such “round-the-clock availability” of essential compensation information has been appreciated by line managers and employees as well as HR managers who now believe that the part of burden to answer all kinds of compensation related calls is relieved from their shoulders. Second, E-compensation tools can rationalize troublesome bureaucratic tasks by introducing workflow functionality and real-time information processing (Dulebohn & Marler 2005).

Ensher et al. (2002) argued that E-HRM can be used not only to inform and implement salary policies, but, more importantly, to tailor rewards and compensation to individual employees’ needs. Employees can make their own decisions regarding choices of benefits or rewards to suit their individual needs. Similarly, with compensation, employees can select their own compensation packages. For instance, for those who value more time off, a four – day working week with a lower salary may be a good option. Another may choose to have a hospital plan instead of full medical aid coverage (Wright & Dyer 2000). E-HRM has enabled employees to electronically select preferred benefits and rewards, hence reduced the amount of HR administrative workload to implement these choices. Wright and Dyer (2002) concluded that in an attempt to win the global war for talent, firms rely on technology to create tailored compensation systems that generate a bigger bang with individual employees.

2.4 Drivers and inhibitors of HR changes

It can be easily recognized that nowadays information technology is changing things in HR department, especially in the way HR services are delivered. Gone are the days HR staff has suffered from paper forms and handling employees’ queries through endless stressful face-to-face discussions. Nowadays, even medium-sized firms have been equipped with the internet via which HR services are provided. E-HRM seems to appear

in every daily HR related activity from HR planning, administration to communication. One might question “What are the drivers and inhibitors of such changes?”, “Why are such changes inevitable for HR?” or “Why are we not expecting those changes?”.

2.4.1 Drivers of HR changes

As a part of the organization, HR department has been influenced by a variety of environmental factors such as increasing competition, globalization, economic recessions, technology breakthrough, etc. However, it is internal needs that play a more important role in forcing HR to restructuring its operations so that the organization can attain a competitive advantage on a playing field and meet business challenges. Yeung Brockbank and Ulrich (1994) suggested four main drivers leading to profound changes in an effort to reengineer HR: the need of cost reduction, customer satisfaction, strategic business needs and technology development.

- **Cost reduction:** While HR attempts to operate in a more cost effective ways without affecting the quality of service delivery, most companies realized that simply reducing headcounts is not a smart solution in the long term. The point is to eliminate non-value added work by utilizing advanced technology to handle the delivery of routine but essential HR processes, which encourage an increase in knowledge-based and problem-solving activities to satisfy customers (Yeung et al. 1994).
- **Customer satisfaction:** With view to facilitating line managers and employees in fulfilling the corporate goals, HR needs to transform their service delivery in a more responsive, efficient and value-added ways. It is widely agreed that satisfying such varying needs across HR customer segments is essential to business success.
- **Strategic business needs:** HR leaders are now being asked to reengineer their functions to focus more time and energy on business strategic needs instead of routine operational activities (Yeung et al. 1994). Organizations that strive for radical innovation and high levels of customer captivity are usually not satisfied with transactional goals such as cost reductions or productivity improvement but aim at transformational goals like building a strategic HR department (Martin & Reddington 2010).

- **Technology development:** Zampetti and Adamson (2001) confirm the “use of interactive technology by employees and managers to obtain information, conduct transactions and essentially short-cut processes that previously required multiple steps, paperwork, the involvement of HR staffers, and all the delays such processes are heir to”. Through the implementation of HR self-service applications, E-HRM has improved the accuracy and data quality of employee information, job posting, modifications in policy and procedure, training and personnel changes (Panayotopoulou et al. 2007). Hewlett-Packard, for instance, has invested millions of dollars in a program called People-Base which helps the company to integrate main HR processes like staffing, training and developing the workforce, compensation, etc. across multiple countries (Yeung et al. 1994).

According to a survey conducted by Mercer (2005), top five reasons that organizations seek to transform HR include making HR strategic (68%), improving service quality (66%), responding to changes in business (60%), benefit from new technology (49%) and better managing the cost of internal processes (47%). Interestingly, only a small number of respondents (8%) attributed the HR transformation to the executive board’s mandate, which implies that the force driving HR to undertake the transformation originates in the HR organization and that HR itself has to realize the urge to change. From resource based view (RBV), the strongest competitive advantage lies within the company in terms of human resources and knowledge they possess; hence, the company should manage the resources strategically and effectively to gain the added value (Grant 1991). A good way to apply the RBV in the area of HR is to outsource non-core activities and concentrate resources on developing core competencies in order to sustain competitive advantages. However, these internal resources, in turn, can become hurdles to the transformation process. The next part will continue the discussion on the barriers to the changes.

2.4.2 Inhibitors of HR changes

Mercer’s survey (2005) reports that the most commonly cited impediment to HR transformation is the shortfall of staff expertise which does not only concern the ability to design and implement change programs but also relate to the absorptive capacity of

new technology and knowledge. This finding suggests the necessity of better training to those involved in the transformation process. The second largest barrier is the availability of technology which can be considered as the backbone of any transformation. The lack of a reliable and affordable support from an appropriate technological system before embarking HR transformation will cause problems to companies in the long term. Other main obstacles listed in the report include the lack of support from the top management level, internal bureaucracy, deficiency of funding for technology, the lack of employee and business line buy-in, etc.

In addition, one more considerable hurdle facing organizations when executing the transformation is the difficulty in dealing with organizational and national cultures. According to the institution based view organizations are embedded in the society where people have their own norms upon which they behave and are expected to behave. Institutions are multidimensional and can be divided into regulative, normative and cognitive pillars (Scott 1995). In that sense, HRM practices can be seen as a reflection of how people view themselves and the society in which they interact. It indicates that the model of HRM employed in the parent company does not always fit with the subsidiaries in developing countries. Socio-cultural factors should be taken into consideration since HRM system from the developed countries tends to homogenize cultural distinctions (Hansen & Brooks 1994). Furthermore, those factors also impact the employees' attitudes to the transformation. Olivas-Lujan, Raminez and Zapata-Cantu (2007) study the adaptation of E-HRM practices in four Mexican firms and suggest that it is crucial to include the effect of local idiosyncrasies to the E-HRM strategy. For instance, they question the effectiveness of "E-recruiting" or "E-training" in a culture that values so highly interpersonal contact and recommendations from other members of the "in-group". Consequently, understanding the link between culture and HRM practices may allow organizations to target their attitude change programs when redesigning their HRM systems on a large scale.

2.5 The Roles of HR

2.5.1 The model of HR roles

One of the challenges faced by HR professionals is to become a critical business partner in driving business success through strategic human resource management. Changes in the role of human resources are inevitable in light of these technological developments. Many academic evidences support the fact that the roles HR play change with time. Table 2 summarizes several main studies concentrating on the roles of HR from 90s until recently.

Table 2: HR role typologies.

Source	HR roles
Schuler (1990)	Business person, sharper of change, consultant to organization/partner to line, strategy formulator and implementer, talent manager, asset manager and cost controller.
Walker (1990)	Support, service, consulting, leadership
Wiley (1992)	Strategic roles: consultant, assessor, diagnostician, innovator/change agent, catalyst, business partner and cost manager. Legal roles: auditor/controller, consultant, provider, conciliator. Operational roles: firefighter, innovator/change agent, employee advocate, facilitator, policy formulator and consultant.
Tyson and Fell (1992)	Clerk of works, contracts manager, and architect.
Storey (1992)	Advisers, handmaidens, regulators, and change-makers.
Ulrich (1997)	Strategic partner, administrative expert, people

	champion and change agent.
Kahnweiler & Kahnweiler (2005)	Process observer, feedback provider, helper, expert advisor, trainer, guide, director, model, collaborator.

Tyson and Fell (1992) introduced three models of personnel management ranging from 1960s “clerk of works” (routine administrative) to 1970s “contracts manager” (interpretative industrial relations) and finally 1980s “architect” (business manager planning). It is loosely arranged on a continuum from the least to the most strategic role, focusing on the long term integration between business and HR strategy (Tyson 1995). Storey (1992) shared the same thought with Tyson and Fell (1992) about HR roles while he offered a new one – the change-makers. In the research (Tyson & Fell 1992) of 15 major UK companies and organizations, he identified four roles HR played based on four dimensions – strategic/tactical and interventionary/non-interventionary. They were advisers, handmaidens, regulators and change-makers. Storey (1992) also discovered that the role as change-makers was highly appreciated by at least half of the personnel managers and directors.

Corner and Ulrich (1996) stated that the criteria labeled “HR roles” has varied from a focus on activities (what HR does) to time (where HR spends time), to metaphors (what identity HR has) to value creation (what value HR creates). For example, Walker (1990) highlighted four key roles that a HR professional is responsible for, namely supporting, service, consulting and leadership. While all such roles are essential and studies have shown that HR staff need to fulfill both operational and strategic roles to become an effective business partner, organizations tend to emphasize the importance of consulting and leadership roles rather than the other two. It is easily to recognize that nowadays many supporting activities such as recruitment, payroll, training, legal compliance, etc. have been automated and even outsourced by external vendors. Increasingly, HR is expected to add values through its consulting role which involves identifying clients’ needs, helping them to evaluate alternative actions, making choices and implementing them effectively. Consequently, HR professionals act as a member of the management team, provide leadership on people-related issues (Walker 1994). In the meantime,

Schuler (1990) categorized six main roles from another perspective - time (where HR people spend time): business person, shaper of change, consultant to organization/partner to line, strategy formulator and implementer, talent manager, and asset manager and cost controller. Wiley (1992) looked at HR roles from another perspective classifying them under three groups: the strategic, the legal and the operational aspects. The strategic roles include consultant, assessor, diagnostician, innovator/change agent, catalyst, business partner, and cost manager. In regards to the legal aspects, it consists of auditor/controller, consultant, provider, and conciliator. Lastly, the roles from the operational views are considered as firefighter, innovator/change agent, employee advocate, facilitator, policy formulator, and consultant.

The concept of how HR adds values to organizations has been debated over decades. The cooperation between HR managers and line managers to solve people-related business issues proved HR is no long a cost center but a value creator (Schuler 1990). The Towers Perrin study (1992) agreed with this point of view and noted that the competitive advantages will be gained from the business partnership between HR and line management “to integrate HR capabilities with business needs”. Recently appraised as the “practitioner paradigm” towards which the HR professionals should desire (Caldwell 2003: 988), Ulrich’s model (1997) prescribed that HR departments engage in a set of roles such as a change agent, strategic partner, employee champion and administrative expert defined along two axes: strategy versus operations, and process versus people (see Figure 4). Table 3 describes, in details, respective roles and corresponding responsibilities.

The “administrative expert” implies traditional HR role concerning with designing and delivering HR processes such as: recruiting, hiring, compensating, rewarding and disciplining, training, record-keeping and terminating. A successful HR professional who takes this role should be able to deliver high quality services at lowest costs as efficiently as possible.

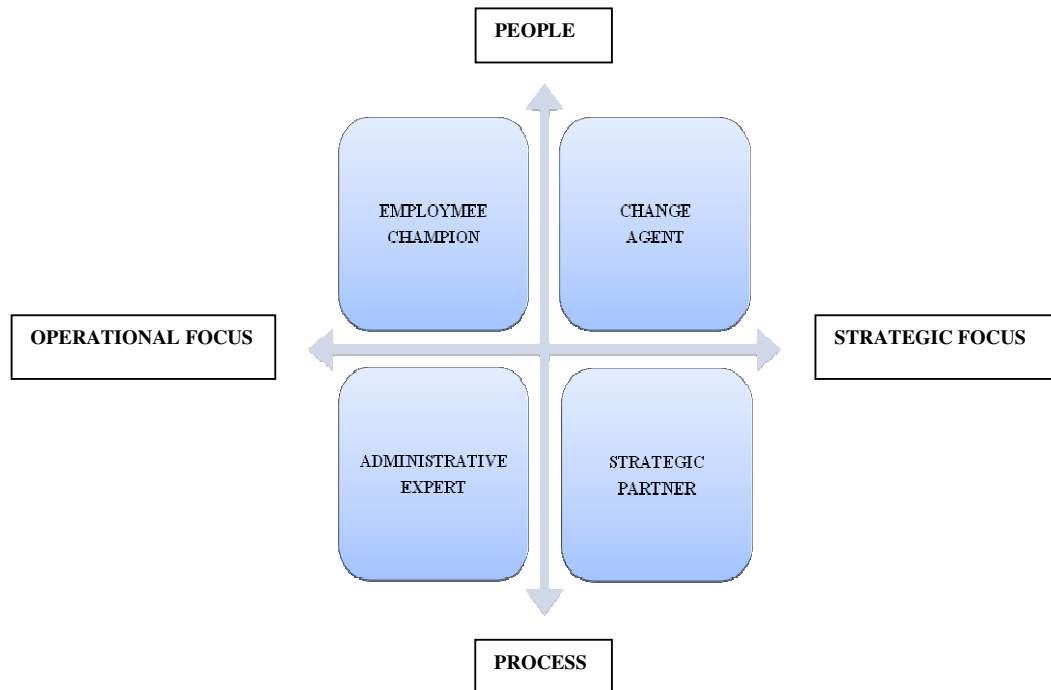


Figure 4: HR role framework (Ulrich 1994).

The “employee champion” role focuses on people rather than process, operates on operational rather than strategic levels. As an employee champion, the HR professional needs to handle daily issues, concerns and individual requirements. To ensure that employees get a fair hearing, the “employee champion” should spend more time communicating with employees by all possible means from surveys, questionnaires to face-to-face meetings (Corner & Ulrich 1996). He suggests companies “in which intellectual capital becomes a critical source of firm’s value”, HR professionals should be active and aggressive in developing this capital and engage “not only the body but the mind and soul of every employee” (Ulrich 1997: 125). Caldwell (2003: 997) argued that the employee champion acted as a partner with line management to deliver value by ensuring the employee contribution to business goals. Ulrich and Brockbank (2005) have recently made some modifications to the original framework when they divided the “employee champion” into two different roles: the “employee advocate” and “HR developer”.

“Change agent” is responsible for facilitating changes in other departments in order to sustain a company’s competitiveness as well as resolving issues arising from such changes. Ulrich (1997) suggested that change agents “help make change happen, they understand critical processes for change, build commitment to those processes and ensure that change occurs as intended”. It is both strategic and people oriented. While the employee champions focus on people as individuals, the change agents deal with people as a collective. In another word, it is concerned with the “health and needs of the organization as a whole” (Kirkbride 2003). He also argued that unlike the strategic partner role, the change agent role is “dangerous and precarious” because it challenges and tests “the generally accepted, but often hidden, assumptions of the organization”.

The “strategic partner” role focuses on adjusting HR strategies and practices to fit business strategies. It also translate such strategies into action in the minimum amount of time by taking the intended strategic direction of the business and show how HR can achieve the implementation of the strategies through its particular set of skills and competencies (Kirkbride 2003). This is considered as, according to Ulrich and Brockbank (2005), the most attractive role which any HR professional aspires and sometimes used to refer to the term “business partner”.

Table 3: HR Roles (Conner & Ulrich 1996).

HR role	Description
Strategic Partner	HR develops processes and programs to link HR strategies to accomplish business strategy HR is seen as a business partner HR’s credibility comes from helping to make strategy happen HR is an active participant in business planning HR helps the organization accomplish business goals
Change Agent	HR’s credibility comes from making change happen HR is seen as a change agent HR is an active participant in organization renewal, change, or transformation activities HR makes sure that HR processes and programs increase the organization’s ability to change HR works to reshape behavior or helps anticipate future people needs

Employee Champion	HR develops processes and programs to take care of employee personal needs HR works to offer assistance to help employees meet family and personal needs HR is an active participant in listening and responding to employees HR spends time on listening and responding to employees HR's credibility comes from maintaining employee morale
Administrative Expert	HR works to monitor administrative processes HR is seen as an administrative expert HR spends time on operational issues HR makes sure that HR processes are efficiently administered HR develops processes and programs to efficiently process documents and transactions

The debate on the importance of respective role in value contribution to a successful company has attracted the attention of many researchers over years. It is a more complex topic than one's initial impression. One might argue that in today's changing environment, the priority of roles has shifted partly due to the development of e-HRM. There is a sound belief that the role of strategic partner would be the most important today by freeing staff from the burdens of administration towards undertaking critical people management activities (Lepak & Snell 1998). However, Ulrich (1997) confirmed that administrative expert and employee champion are still important and such roles need to be handled effectively with credibility. "Being an effective HR professional does not mean simply moving from operational to strategic work. It means learning to master both operational and strategic processes and people" (Ulrich 1997). Wright and Dyer (2000) discovered in their research that line executives have greater demands for HR to play a role as a change agent given the speed and uncertainty challenges. Interestingly, there is very little distinction between the two roles. In the survey conducted by Conner and Ulrich (1996), they found out that the data did not discriminate between the strategic partner and change agent role and that both the strategic partner role and change agent role had the greatest variability in the data. In essence, one cannot function as a change agent without having the strategic business outlook, and vice versa.

2.5.2 The impact of E-HR on the role of HR

The strongest impact of HR technology on HR roles is that it enables a shift in focus of HR work from a transaction to a strategic orientation by taking away the burden of administrative tasks. There is a growing body of research supporting this claim (Bell et al. 2006, Brown 1999, Ulrich 1997, Walker 2001). In other words, HR executives see technology as a means to hold a more strategic role within organizations. This idea is supported by Kossek, Young, Gash and Nichol (1994: 137) who noted that technology can “practically and symbolically represent the transformation of HR into a strategic business partner”. The shift from traditional HRM to e-HRM could also indicate that fewer HR professionals are needed, because e-HRM eliminates the “HR middle-man” (Lengnick-Hall & Moritz 2003). Since the implementation of e-HRM, another major change has been considered as inevitable. According to Gueutal and Falbe (2005: 191), reductions of 33-50% in HR staff in 2002 in US organizations occur after the implementation of self-service technology, with forecasts of spending on e-HR set to increase. This transformation can be seen as an opportunity, as those HR professionals that are retained can hold specialist roles and act in a more strategic role.

However, there is little empirical evidence supporting the same idea. Theoretically, taking the administrative work out of HR which means cutting the HR headcounts sounds right but whether the remaining HR professionals have the ability to be more strategic or not is questionable. Marler (2009) questioned whether HR can be more strategic by “going to the net” or not. He offered a wide range of figures and data from practices to reason his doubt. For example, he cited a finding from a survey of web self-service deployment (Towers Perrin 2002, cited in Marler 2009) which emphasized that “companies have tended to use the web as a tactical tool to deliver HR services, rather than as a way to rethink fundamental operations and strategy, and achieve the more intangible benefits that arise only after large and sustained investment”. His criticism regarding to the overly optimism of current academic researchers about the possibility of E-HRM making HR strategic which is, in reality, a hard target to reach is a warning bell to most practitioners who are still confused of the potential and outcomes of E-HRM. More outcomes of E-HRM have been recently reported by Parry and Tyson

(2010) who examined if the transformational goal of E-HRM was actually achieved by organizations. They argued that no anecdotal evidence for a move to a more strategic role of HR was found though the introduction of E-HRM did facilitate a shift in HR focus in terms of time spent on administrative versus strategic tasks in case companies. The study pointed out that a few organizations viewed developing a strategic HR orientation as a goal for E-HRM implementation while others claimed that a transformational impact of E-HRM was an unintended outcome of its introduction (Parry & Tyson 2010). This inference is consistent with many previous studies in regard to the impact of E-HRM on the role of HR (Strohmeier 2007, Bondarouk & Ruel 2009).

Sparrow et al. (2004: 82) argues that e-enabling HR processes does not mean removing all transactional work but implies the simplification of transactions. In practice, many transactions, on the international basis, still require specialists' consulting such as advice on corporate taxation or employment law. In addition, the transformation's success or failure considerably depends on the attitude and capabilities of line managers to manage the change. Hence, it can be argued that no strategic contribution from HR is likely to be considered of value until those problems have been fixed.

To sum up, whether HR professionals become strategic partners with the intervention of E-HRM is controversial among academicians and practitioners and the exciting debate is still going on. Some researchers believed in the power of E-HRM in changing HR role to a higher level while the others argued that E-HRM has not been recognized as a strategic weapon in transforming HR organization. Again, although there was consensus between HR researchers and practitioners that the introduction of E-HRM will reduce administrative activities and enable HR practitioners more time to focus on other issues, whether their new orientation results in an actually strategic objective or not is another story. Thus, it is critical to say that relying on E-HRM alone to foster the transformational impact is more mythical than realistic. However, there is always a better chance to create a miracle in organizations where HR role has been highly appreciated.

2.6 The involvement of line managers in HR

As discussed in previous parts, the gradual transformation of HRM has been strongly encouraged by main forces such as globalization, fierce competition and non-stop changes in markets as well as technology (Beer 1997). As a consequence, more and more corporations find themselves in the middle of restructuring departments, especially HR activities in a manner of lower cost, higher value. When HR executives adopt new roles as strategic business partners walking hand in hand with other management level to develop the organization, they are basically not able to manage both traditional roles as well as new roles. Thus, a part of HR responsibilities for people management and employee advocacy such as recruitment, selection, training, performance management, compensation etc. has been either outsourced by external suppliers or delegated to line management levels. However, one of major problems delaying this change lies in the attitudes of line managers which range from slight discomfort to strong resistance. Some may think that it is not part of their job or if they do HR jobs what is HR department for. Despite some negative reactions from line managers to this move, results of the transition have showed that line managers who have a great understanding of their subordinates' needs because of their close interaction play a vital part in the revolution of people management (Yeung & Brockbank 1994). Realizing this, HR professionals have reengineered their primary function towards assisting managers to solve HR related issues and improve the quality of people management. However, the depth and scale of line manager involvement as illustrated in Figure 5 varies depending on the different HR roles (Hunter & Saunders 2005). It can be observed that line managers offer the greatest contribution in the area of Employee Champion as a result of a close relationship with their employees which enables them to directly listen to employees' concerns and satisfy their requests. Next comes their essential part in managing changes in terms of HR issues. Line managers are positioned as the "delivery arm and owner of the overall outcome" of change programs designed and facilitated by HR executives (Yeung & Brockbank 1994). However, line managers will take a very limited role in the administrative area which has always been considered as a basic function of HR departments. They also support

HR professionals to align HR strategies with business objectives and develop a partnership with HR leaders.

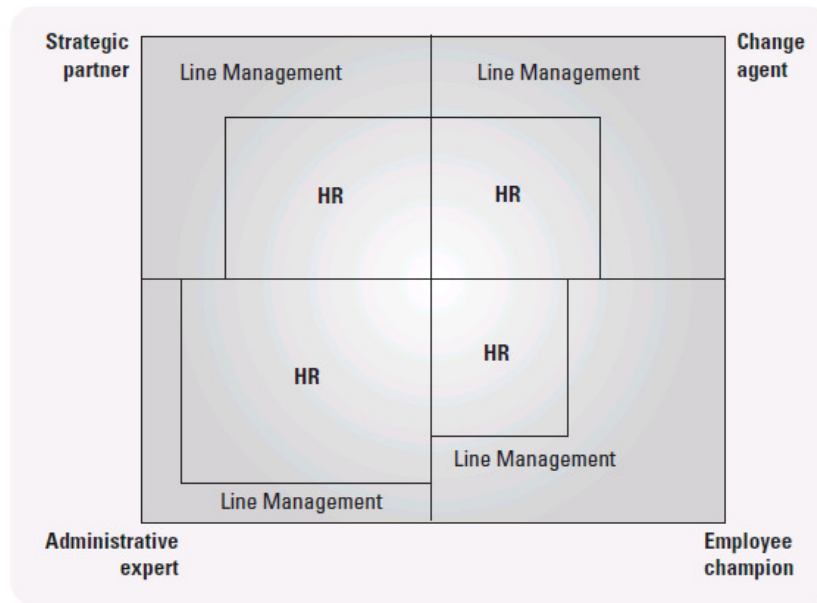


Figure 5: The scale of contribution of the line manager (Hunter & Saunders 2005).

The whole transition does not simply encounter the resistance from line managers but more serious hindrances. First of all, once line managers officially engage in handling employee related issues, they will need a number of required competencies and skills to meet increasingly greater expectations from their staff. Thus, line managers who are probably better at technical aspects of their field of operations than people management may find it difficult and time-consuming to start building and enhancing needed skills to take on a brand new role. In the meantime, HR is not the only department who is seeking the assistance from line managers. IT departments expect line managers and employees to update applications, self-install software, accordingly moving part of their responsibilities to individuals. Finance departments add to the burden by asking line managers to track and approve some of operational expenditures spent by their own employees. As a consequence, if the line managers fail to recognize any benefit in getting more work, there is a high likelihood that they refuse to engage. Fortunately, the widespread application of e-enabled tools in most business areas has partly reduced the pressures that line managers bear. Moreover, regular communications between HR

executives and line managers are compulsory to clarify the line managers' roles and responsibilities and ensure them to receive adequate support regarding to HR activities. Without these, line managers may feel disempowered and fail to meet the challenges. In worse cases where line managers lose its focus, they may run the risk of losing the credibility from their employees (Hunter & Saunders 2005). Last but not least, many line managers fear that their relationship with subordinates will suffer if they take on responsibilities like appraisal, rewards or compensation. Hence, such biases cause a reluctance in line managers' attitudes to confront necessary changes.

Obviously, redefining the role of HR will need a great deal of assistance from line managers in various processes. To complete the new role, line managers need to answer the following important questions which help to orient their next moves:

- How much do line managers understand the significance and essence of E-HRM?
- How supportive are they to HR activities?
- Do they have required competencies for new roles?
- Are they willing to update new skills and competencies?

2.7 Required HR competencies

Previously, competency used to be simply defined as the fundamental abilities and capabilities that an employee should possess to do the job (Furnham 1990). Later, a more precise definition has been proposed which describe competencies as “work-related personal attributes, knowledge, skills and values” that employees need for handling daily work (Roberts 1997: 6). In the area of contemporary HR, competencies cover a set of characteristics contributing to effective HR performance enabling an organization to achieve its business strategies in a competitive market (Selmer & Chiu 2004). Ulrich (1997) reviewed “old myths” and “new realities” of HR and put a stress on the redefinitions of new roles and accompanied competencies (see Table 4). In the past, organizations used to be confused of the boundary between a HR staff and an administrative clerk. There is no clear requirement regarding to competencies that an

employee needs to complete HR tasks which are no different compared to the job of a clerk. However, reality proves that preconception has been obsolete and in fact, one needs to master necessary competencies to function effectively as HR professionals. Consequently, the changing business environment has raised a new question to HR practitioners when HR has stood on the same level with other functions within the organization as described by Ulrich (1997) – “HR work is as important...as are finance, strategy, and other business domains”. Hence, it is time for us to consider the next question - what are the new required competencies that HR professionals need to acquire in order to respond to the new role of HR?

Table 4: Redefinition of HR roles and competencies (Ulrich 1997: 18).

Old myths	New realities
People go into HR because they like people	HR departments are not designed to provide corporate therapy or social or health-and-happiness retreats. HR professionals must create the practices that make employees more competitive, not more comfortable.
Anyone can do HR.	HR activities are based on theory and research. HR professionals must master both theory and practice.
HR deals with the soft side of a business and is therefore not accountable.	The impact of HR practices on business results can and must be measured. HR professionals must learn how to translate their work into financial performance.
HR focuses on costs, which must be controlled.	HR practices must create value by increasing the intellectual capital within the firm. HR professionals must add value, not reduce costs.
HR's job is to be the policy police and the health-and-happiness patrol.	The HR function does not own compliance - managers do. HR practices do not exist to make employees happy but to help them become committed. HR professionals must help managers commit employees and administer policies.
HR is full of fads.	HR practices have evolved over time. HR professionals must see their current work as part of an evolutionary

	chain and explain their work with less jargon and more authority.
HR is staffed by nice people.	At times, HR practices should force vigorous debates. HR professionals should be confrontational and challenging as well as supportive.
HR is HR's job.	HR work is as important to line managers as are finance, strategy, and other business domains. HR professionals should join with managers in championing HR issues.

Changing roles undoubtedly result in essential demands of new competencies. It has posed a challenge for HR professionals to constantly update their knowledge, skills and competencies in order to play a strategic value-adding role to the business. Panayotopoulou and Papalexandris (2004) used the competing values framework to link the specific roles to a relevant set of competencies. The administrative expert was said to need such competencies as process improvement, customer relation and service needs assessment. The employee champion should be capable of morale assessment, management development and system improvement. Change agent role is related to competencies such as system analysis, organization change skills, consultation and facilitation. Lastly, the strategic partner would need general business skills, strategic analysis and strategic leadership.

In addition, a major study conducted by three leading authors - Ulrich, Brockbank and Yeung (1989) revealed that three sets of important competencies which HR professionals need to own included knowledge of the business, delivery of human resources and management of change. Interestingly, the ability to manage changes was highly rated among the three (42.7%), which raised the position of HR professionals as change agents to a new level. Another study on the same topic (McLagan 1989) categorized 35 areas of knowledge as well as skills into four main groups: technical, business, interpersonal and intellectual. Ten years later, the boom of internet and widespread web-based applications forced researchers to review their literature of competencies. Ulrich, Yeung and Brockbank (1993) added one more item to his original model and concluded that four domains of competencies critical to HR professionals

comprised of business mastery, HR mastery, change mastery and personal credibility. Yeung, Woolcock and Sullivan (1996) developed a model based on in-depth interviews with HR leaders and previous studies. The unique point of this model is that it is both generic (i.e., able to cover key competencies required by companies in different industries) and specific (i.e., domains of competencies differ depending on HR roles, be it corporate HR leader, senior business unit generalists, HR specialists in shared service centers or HR experts in centers of expertise) (Lawson 1990, Ulrich, Brockbank, Yeung & Lake 1995).

Brockbank and Ulrich (2005) later claimed the mastery of HR technology as one of the five competency domains for HR, along with strategic contribution, personal credibility, HR delivery and business knowledge. Mukherjee (2001) argued that the pace of technological innovation would continue to accelerate. HR can take advantage of these changes by automating HR processes to become more effective in communicating with its internal as well as external customers. More importantly, by absorbing the latest technology can help HR earn the respect of skeptical colleagues. Hempel (2004) claimed that the following complex competencies are highly required from HR professionals to meet the challenges and needs. They are the mastery of the behavioral and psychological foundations of human resource management, a strategic orientation with broad knowledge of the legal environment and organizational structure and finally, an understanding and mastery of the new technologies that are influencing the design of organizations, work, and HR systems. Bell et al. (2006) stresses the importance of HR professionals' ability to use technology and Web-based channels to deliver services to employees, the ability to teach others how to use HR technology; understanding of the technological aspects for identifying technology needs and managing technology vendors; and capabilities for using technology to collect data and transform it into strategically valuable information.

Adapted from the competency model of leading authors such as Ulrich, Brockbank and Yeung, an integrative model of HR competencies which comprises five main competencies, namely, knowledge of the business, delivery of HR practices, personal

credibility, change management and technology expertise will be used throughout this study (see Figure 6).

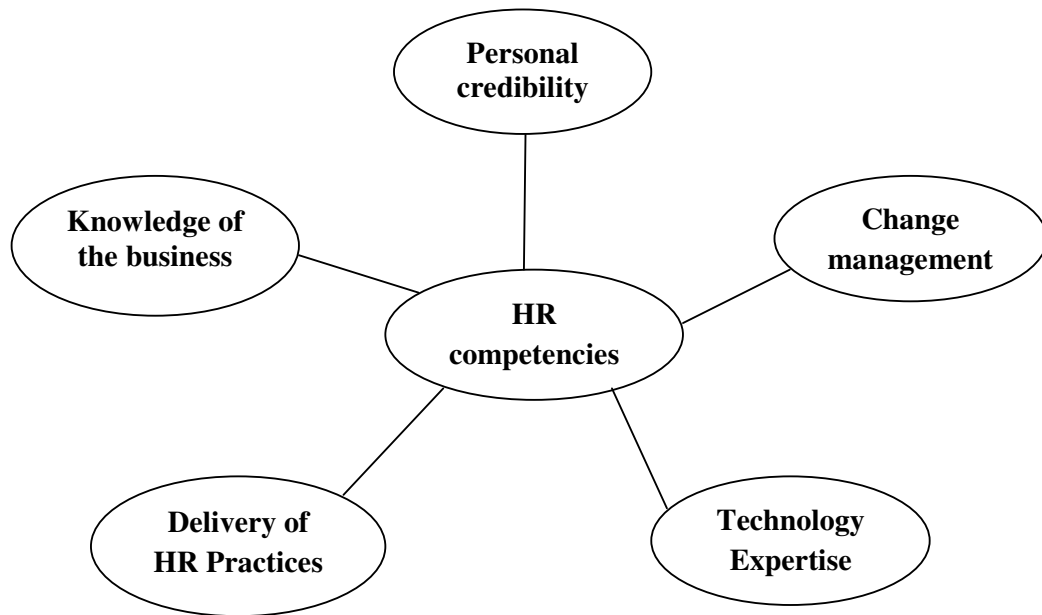


Figure 6: Model of HR competencies.

- Business knowledge:** To become an effective strategic business partner, it is essential that HR professionals have general knowledge regarding to finance, external client needs, information technology, competitors and the like. There is no need for HR professionals to become an expert on those fields but it is critical for them to be able to conversant with line management in meetings. Those types of knowledge will provide them a base to successfully align HR strategies with business vision and consult with line management about strategic issues. Equipped with such knowledge, HR professionals can be confident to contribute to business related decisions and be active members of management team.
- Delivery of HR practices:** HR mastery helps HR professionals to design and deliver HR practices appropriately and effectively. It includes knowledge of “best-in-class” HR practices through benchmarking and environmental scanning, the ability to design and deliver HR services effectively through process

management and improvement and the ability to measure the effectiveness of HR practices. HR specialists who work in shared services centers will appreciate this set of competencies rather than other skills because their final goal is to establish an efficient infrastructure to deliver HR services consistently and cost-effectively.

- **Personal credibility:** This competency was found to be important for HR professionals to support the role as an employee champion. As HR professionals embody the values of their organization, they must be credible and act with a proper attitude when dealing with HR related issues (Ulrich & Eichinger 1998). This competence is essential for HR professionals who want to understand the need of employees and create values through the relationship (Ehrlich 1997).
- **Change management:** Nowadays companies operate in a fast changing business environment which means that the ability to anticipate and manage changes becomes more and more important not only for HR people but also other line executives. This competency serves the role of HR as a change agent who is capable of designing a change process for both HR and business initiatives (Ulrich & Eichinger 1998), helping the organization overcome and manage the individual resistance to changes when the change process is employed, for i.e., the implementation of E-HR systems (Bell et al. 2006).
- **Technology expertise:** As technology has been embedded in many areas of HR, understanding the use of technology will allow HR professionals will not only increase the productivity and improvement of HR performance but also help to transform data into strategically valuable information (Bell et al. 2006). It can be said that technology contributes to redesigning the set of HR skills in a way that enables the HR transformation to proceed with speed and effectiveness.

Identifying required competences is only the first step, more importantly, many companies now concerns about how to acquire these competences to accomplish new roles. This sensitive topic has been neglected in competence discussions due to two main reasons. First, the study conducted by Yeung and his colleagues (1996) revealed that only 10 – 35% of HR professionals have required new competencies. Second, most HR leaders agreed that it is easier to identify competencies than to develop them. The

approach to bridge the competency gap differs depending on companies. For instances, a few companies such as Oracle, Transamerica and Quantum Corporation prefer to use competency audits on a regular basis to assess employees' competencies and plan programs to improve them while others such as Hewlett-Packard and Bay Networks invest in training courses and collaboration with universities to update their staff with new skills. A quicker way to solve the problem is to recruit HR professionals who possess desired competencies. Furthermore, on-the-job training, cross-functional rotation, stretch job assignment, etc. are among popular methods to develop competencies in organizations. All in all, to fulfill HR new agenda, HR professionals have little choice but make a transition themselves to obtain new requisite competencies and skills. As said by Yeung et al. (1996) "the psychological and physical costs of managing transition may be hard. But the costs of not changing are likely to be even harder".

2.8 Summary

To sum up, much of literature review regarding to E-HRM issues has been discussed in this section. E-HRM has been observed from different perspectives (for i.e., E-HRM practices – E-recruitment, E-training, E-Performance appraisal, E-compensation) and especially the impact of HR technology on HR professionals' competencies and roles has been focused on to partly answer the research question, in theory. Four main drivers leading to HR transformation, namely, the need of cost reduction, customer satisfaction, strategic business needs and technology development have been discussed specifically in the previous part which is followed by a presentation of inhibitors to the same change. HR facing many considerable barriers such as the shortfall of staff expertise, the availability of technology, the lack of support from the top management level and the difficulty in dealing with organizational and national cultures when attempting to reengineer its function (for i.e., adopting E-HRM strategy).

Much discussion in the academic literature refers to the potential of E-HRM transforming HR role and improving HR competencies, but few practical evidences

support the idea. Academic literature concurs that further research will be needed to explore the actual impact of E-HRM. However, the introduction of E-HRM will undoubtedly lead to a devolvement of responsibilities from HR to line management. To respond to the changing role, HR professionals should be equipped with a new package of competencies including knowledge of the business, delivery of HR practices, personal credibility, change management and technology expertise.

The framework of the study as shown in Figure 7 illustrates the link between HR technology and HR roles and competencies.

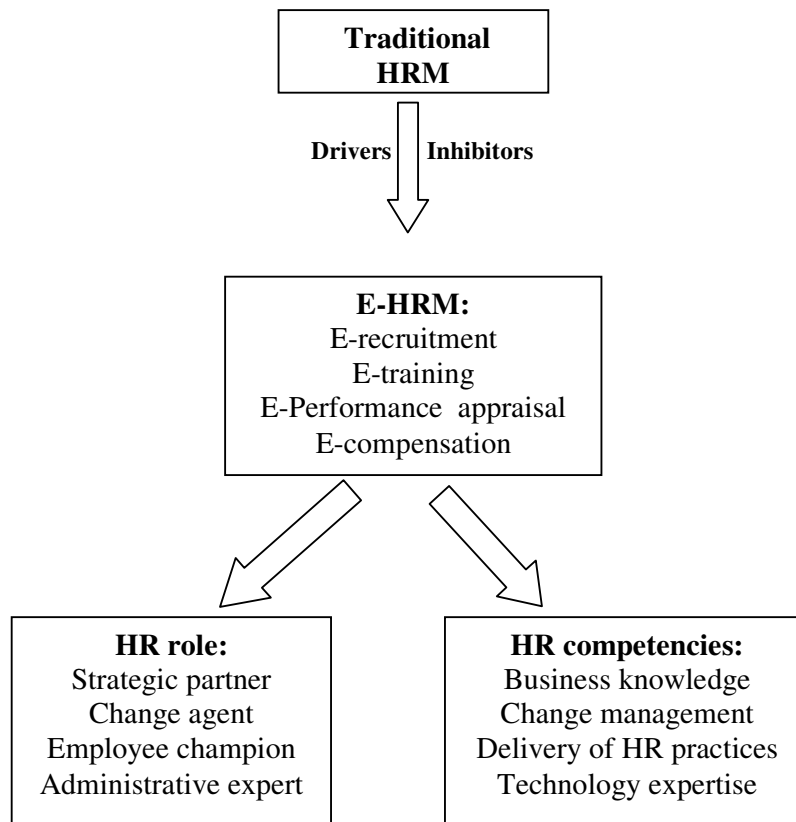


Figure 7: Framework of the study.

3. METHODOLOGIES

3.1 Research approach

There are two basic research methods: qualitative and quantitative both of which act as a means to analyze the selected data. Yin (2003: 5) states that it is the research questions and objectives of the study that decide which approach the researcher will take. If the study aims to measure, describe and explain the phenomena of the reality, a quantitative approach would be a wise choice. Tull and Hwakins (1990) also stress that with quantitative data obtained from samples, relationships and patterns will be explicitly expressed. In contrast, a qualitative research is better for investigating, interpreting and understanding the phenomena. It usually relates to case studies which attempt to gain an insight of the research problem (Yin 2003: 12). Considering the research questions and objectives of this study, a qualitative approach will be employed. The advantage of qualitative research strategy lies in the unstructured or loosely structured nature of a qualitative enquiry.

The study adopted a combination of two approaches: inductive and deductive. It tends to gain an insight of a phenomenon: a change in role and competencies of HR professional in the light of E-HRM within a particular company in Vietnam. Accordingly, it compares and contrasts the empirical data with the theory.

In addition, a single case study will be used in this research since the phenomenon of the interest is of a broad and complex nature (Yin 2003: 3). Case study method is the most appropriate for this study because it emphasizes on organizational and managerial processes, especially when the national context plays a key role in interpreting the data. Yin (2003: 13) describes it as an “empirical inquiry” which uses various sources of evidences to investigate an existing phenomenon in a real-life context. Yin (2003: 3) drew attention to three groups of a case study which can be categorized as exploratory, descriptive and explanatory research. Exploratory studies are to explore any phenomenon in the data which serves as a point of interest to the researcher. Descriptive

case studies aim to describe the natural phenomena which occur within the data in question. Explanatory case studies examine the data closely both at a surface and deep level to explain the phenomenon in the data. It focuses on finding the causal relationships and is used to answer “when” or “why” question of research problem. Hence, this study will adopt the descriptive and exploratory approach to conduct the single case study. To sum up, this empirical research is a qualitative single case study based on semi-structured interview conducted via phone calls.

3.2 Data collection

Even though Yin (2003: 85) recommends the use of different sources of evidence, the study mainly relied on two sources of evidence (archival records which include information collection from websites and interviews). Other sources mentioned by Yin (2003: 85) such as documentation, direct observations, participant-observation and physical artifacts were found inappropriate for this research. Focused semi-structured interviews were employed for this qualitative study because of its flexibility in gathering and processing data. Each interview was conducted in a short period of time and the order of questions can be changed to fit the theme of discussions. Clarifications and explanations were provided to interviewees in order to avoid the occurrence of misunderstanding.

The case company – Company X. – was chosen for this particular study because it is a successful MNC in the industry of milk and dairies and has a reputation for the excellence in terms of HRM in Vietnam. Data were collected in three months from November 2009 to January 2011. 10 middle management executives including 4 HR managers and 6 other functional managers were willing to join the interviews. Profiles of interviewees have been shortly described in Table 5.

Table 5: Profiles of interviewees.

No.	Position	Gender	Age	Time working in the company
1.	Recruitment manager	Female	30	7 years
2.	Training manager	Male	35	8 years
3.	Manager of payroll and compensation	Female	38	5 years
4.	HR assistant manager	Female	37	10 years
5.	Finance manager	Male	40	11 years
6.	Sales manager	Male	32	2 years
7.	Marketing manager	Female	29	4 years
8.	Purchasing manager 1	Male	34	5 years
9.	Purchasing manager 2	Male	42	7 years
10.	Project Manager	Male	30	3 years

The average duration of an interview was about 45 minutes. The first two interviews were undertaken as pilot interviews which helped the interviewer to adjust the time, wordings and attitudes for better responses in following interviews. All interviews were conducted via internet phone calls and audio-recorded by software (Free Sound Recorder). Notes regarding to important comments and emotional reactions of respondents were taken during the interviews and added to the transcripts. A preliminary draft of the interview questionnaire was discussed with the supervisor and the final version can be found in Appendix 1. It is a fact to note that the language chosen for the interviews was Vietnamese for the following reasons. First, it is the native language of both the interviewer and interviewees, therefore, it has a linguistic advantage over any second language such as English despite the fact that English is the language of this study. Interviewees find it simpler and more comfortable to communicate in Vietnamese, hence, they tend to share more of their thoughts during the discussion. Though they work in an international environment, the habit of using the mother language in daily communications in workplace still remains. Second and more importantly, misunderstandings between the interviewer and respondents or the translation errors can be avoided. Accordingly, the quality of collected data will be assured.

Each interview often began with questions relating to background data of the respondents and company and continued with the actual interview questions which were modified depending on the position of the interviewees (whether they work in HR or not). So to say, functional line managers and HR executives would receive different sets of questions. The content of interviews covers a wide area of HRM ranging from recruitment and selection, training to performance appraisal. Table 6 summarizes a number of themes discussed during interviews.

Table 6: Different interview themes.

Themes	Required information
Perception of E-HRM	<ul style="list-style-type: none"> • The understanding of the term E-HRM • The use of E-HR tools
The impact of E-HRM on the roles of HR	<ul style="list-style-type: none"> • The role of HR after implementing E-HRM • The level of the influence that HR technology causes to the role of HR
Line managers' accountability under the impact of E-HR	<ul style="list-style-type: none"> • Line managers' responsibilities after implementing E-HRM
Required HR competencies	<ul style="list-style-type: none"> • The competencies required after implementing E-HRM

3.3 Data analysis

While quantitative researchers try to analyze written material in a way that will produce reliable evidence about a large sample, qualitative researchers are more concerned with the processes through which small numbers of texts and documents depict reality rather than with whether those contain true or false statements (Silverman & Marvasti 2008:

40). Miles and Huberman (1994) also point out that qualitative data comes in the form of words rather than numbers. They divide the process of analyzing data into three steps: data reduction, data display and finally conclusion drawing/verification. Data reduction helps the researcher focus on significant data through a process of selection, simplification, abstraction and transformation of raw data. Data display involves categorizing and assembling information in a way which clarifies the main direction of the analysis and support the conclusion drawing in the next step. Last but not least, researchers have to decide the meanings of different findings, noticing irregularities, patterns, explanations, possible configurations, causal flows, and propositions. Verification will be made to test provisional conclusions.

Analysis techniques based on instructions of Miles and Huberman (1994) were applied to process data. As a result of the data reduction, nearly a hundred pages of raw data in Vietnamese were shrunk into approximately 30 pages. Phone calls to interviewees were made to verify and confirm the main points of collected answers (Emails were ineffective and time-consuming because respondents viewed them as unimportant emails which can wait). Non-informative data were eliminated once again and translated into English after the shortened version had been carefully re-read. The data display began with abstracting major information from each interview and organized them into different themes (E-HRM concepts, HR roles, HR competencies and line managers' responsibilities) which answer the research questions. Notes taken during interviews were included to emphasize the preliminary themes. Answers of two groups (HR and non-HR practitioners) were cross-referenced with each other with an attempt to look at the research problem from variable perspectives. Conclusions were presented in the last section of the study, however, there will be no verification made.

3.4 Validity and Reliability

This part deals with the quality consideration of this qualitative study which is determined by two factors: reliability and validity.

Reliability refers to the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions (Hammersley 1992: 87). Consistency can be among several dimensions: between different observers, between the results of different data collection methods, across different cases, over time, etc. In another word, if a different researcher follows the same procedure to conduct the same study as the earlier researcher, he/she should come up with the same findings and conclusions (Yin 2003: 37).

One of the biggest challenges to the reliability of a study stems from the respondents' bias and misinformation. Respondents may fear that what they reveal will cause bad effects on the company or his/her career. Otherwise, they want to appear more important or knowledgeable than they really are. To avoid these cases, interview questions were sent to interviewees in advance for their verification. The interviewees were also assured that no confidential information would be asked during interviews and their identities would be anonymous. The choice of interviewees as managers served a purpose to limit the data inaccuracy due to the lack of knowledge. The wording of questions was direct and simple to avoid any possible ambiguity which might lead to misunderstanding or misinterpretation of the meaning of the questions. To reduce the bias of HR managers when referring to the field they are working at, line manager's ideas were among the most important source of data as they would approach the same issue from a different aspect.

In terms of validity, there is a consensus in the research literature that validity refers to the truth or how accurately the research can be conducted. Validity includes two main dimensions: internal, external validity (Yin 2003: 34). Internal validity refers to the matter of causal relationships and is therefore applicable to only explanatory studies. External validity (generalizability) refers to the extent to which a study's findings can be generalized beyond its specific context, i.e. the transferability of the data. Since this research is primarily exploratory, internal validity will not be discussed here.

A number of measures were taken to ensure the validity of the study. First of all, data were obtained from multiple sources and informants. Other sources such as company

reports, newspapers, websites, etc. were used in conjunction with interview contents. Second, the supervisor was consulted about questionnaire and the interview guide to ensure a proper process to be exercised. Finally, the findings were regularly crosschecked with the literature review for themes emerging from the interview. However, it is a fact to note that in this particular qualitative research, the degree of generalization to a larger extent is not a major intention. The aim of this study is more theoretical than statistically focused.

3.5 Background of the case

3.5.1 HRM in Vietnam

HRM practices in Vietnam can be divided into two main stages. The first stage from 1975-1990 is considered a "command" personnel administration with the dominance of the state-owned companies in the economy while the second period from 1990 up to the present is characterized as "learning and building a HRM system" which indicates a striking development of the private and foreign-invested sector (Kamoche 2001). In the state-owned sector, little improvement has been made to HRM system due to the incompetence of management levels and high resistance to changes from employees. According to a study conducted by Quang and Vuong (2002), the management styles in this sector were found to be "bureaucratic, familial, conservative and authoritarian", which highlighted clear reporting relationships, formal communication and strict control. On the contrary, many small and medium enterprises in the private sector are run by dynamic entrepreneurs who are willing to learn but lack capital and especially experience in the field of HR. King-Kauanui, Ngoc and Ashley-Cotleur (2006) studied private firms in Vietnam and found that 76% of these companies did not have a formal HR department though an increase in the use of HRM techniques was observed. After 1990, it is noted that the growth of the private sector and the foreign-invested sector has an important impact on the HR practices in general in Vietnam. When the flow of foreign investment increased to a certain point, the knowledge transfer has come along to support the local partners. In joint-ventures, expatriates from developed countries

have room to exercise their style of personnel management. As foreign direct investment (FDI) increases to a certain point, companies, especially wholly-owned foreign companies, import their native HRM practices into the host country with proper modifications (Thang & Quang 2005). Despite the fact that foreign expatriates had much to offer, Kamoche (2001) warned international joint ventures not to adopt such practices without counting the national and organizational culture, work values and the role of political and administrative structures.

The term E-HRM has not appeared in Vietnam until a few years ago with the emergence of ICTs and the increasing importance of the HR role. It is a new topic not only to researchers but also to those who work in the HR area. Bartram, Stanton and Thomas (2009) found out that despite the positive attitudes towards IT applications, most firms in Vietnam were just taking the first step in establishing a HRM system with the support of advanced technologies. The application of web-based technologies in each function of HR varied from companies to companies depending on the demand and the priority of the firm. However, it is estimated that the HR functions that frequently used IT tools to handle daily tasks include recruitment and training. The usage has been reported to be at the operational level rather than managerial level. It is also predicted that in the next decade, more effort will be concentrated on other areas such as performance management and HR planning.

- **Recruitment and selection:** A number of studies relating to HRM in Vietnam confirmed the preference of social networks in recruitment of new staff (Kamoche 2001, Thang & Quang 2005). A possible explanation of this phenomenon is the influence of cultural factor. In a collectivism society like Vietnam which relies on and values so highly social relationships the recruitment through social network's referral, for i.e. the recommendations of employee, family, friends are believed to be more efficient. Accordingly, recruitment procedures begin when an applicant is introduced by word-of-mouth and his/her family background will be an advantage in the selection process which Kamoche (2001) called a "social control mechanism" because it is based on social criteria rather than business related criteria. However, this does not stop applicants from using internet to seek jobs. In effect, more and more

companies capitalize on the internet as a means of recruitment where they can post hiring information and get the quick feedback. Most MNCs in Vietnam possess a recruitment system which enables job-seekers to send their application online. Computerized tests have become more and more popular replacing inconvenient paper-and-pencil manual tests. Other channels of recruitment such as job advertisements in the media, offering internship opportunities, outsourcing agencies, etc. are still seen as alternates to attract talents in Vietnam.

- **Training and development:** According to Quang and Thang (2005), training and development are perceived distinctively by sectors. State owned enterprises try to minimize the budget for training since they see it as an expense and fear that well-trained employees will leave the company for better jobs. On the other hand, managers at the other two sectors realize the importance of building the competitive edge by investing in human resources and tend to view it as a motivational tool, for i.e. abroad training opportunities. Training types are diversified ranging from seminars, workshops, (video) conferences to (online) training (E-learning), in big companies more advanced and standardized techniques such as job rotation, simulation, orientation, etc. are applied in training and development. In addition, specialized IT tools facilitates HR practitioners to investigate the training demands, evaluate the success of training programs, store the results for the future use in performance management and career orientation. It can be considered as one of the most potential areas for bringing ICT tools into practice.
- **Performance appraisal:** In his study, Kamoche (2001) discovered that only one in four organizations reviewed their staff performance against predetermined criteria and targets. In foreign invested companies, the performance evaluation was adopted from parent companies and carried out regularly based on predetermined criteria, especially on the achievement of targets. State owned enterprises preferred to evaluate their employees' performance based on central guidelines called Emulation Standards. Two common forms of evaluation included self-evaluation and face-to-face dialogue between subordinates and managers (Quang & Dung 1998). Moreover, peer evaluation was not effective because of the cultural concept of "face-saving".

This explains why 360-degree-feedback is not in frequent use and the electronic performance monitoring is still rare in organizations in Vietnam. Private enterprises pursue a more informal and simpler procedure in performance appraisal to save time and effort and partly because of the lack of expertise in this field (Vo & Dinh 1997).

- **Compensation:** As the war for talent becomes more fierce, companies in three sectors offer a wide range of award programs involving salaries and non-monetary benefits such as health care, insurance, transportation fees and other allowances though there is a difference in applications between regions and industries. There is a small likelihood of using advanced technologies in this area except for simple software to process data mainly because of the high cost and troubles following the setup of computerized systems such as training, IT support and so on.

In conclusion, the literature reviewing HRM in Vietnam revealed that the implementation of ICT tools in HR and the transformation of HRM practices thanks to those are yet intriguing. Specific national institutions and cultural influences create challenges and invisible barriers to HR specialists who design and exercise HRM policies and practices in Vietnam since among the management domains “HRM is the most sensitive to the local context” (Brewster 2005). It is important to consider the extent to which these factors may affect E-HRM implementation as well as the level of adaptation to the e-environment of users.

3.5.2 Company case

Company X. is a multinational dairy corporate which has 15,300 member dairy farms in the Netherlands, Germany and Belgium. Even though it is a young company but its roots go back to the rich history of the dairy industry in the Netherlands and Germany. Its products are for sale in more than 100 countries. Key regions are Europe, Asia and Africa. Ingredients are sold all over the world. In 2009, sales amounted to 8.2 billion euros. The company employs 20,000 people in 24 countries. The activities of the various subsidiaries are divided over four business groups, each of which ensures the

development, production and sale of dairy products in a number of markets and/or geographical areas.

The company has been very successful in Vietnam during the last 15 years with its famous brands. Since the year 2002, due to the increase in the number of employees, HR has divided its function into HR for factories' employees and HR for offices' employees. In general, there are 15 HR professionals working in four main areas, namely, recruitment, training, compensation and performance management, health and safety. Since 2004, the company has initiated a plan to transform some key processes in order to increase the efficiency of HR and remove the internal bureaucracy. The introduction of technology in some key areas has been a success to improve HR delivery service and helped HR to receive the recognition from other departments. Three considerable IT-based applications in HR comprise of an E-recruitment system, an introduction of E-learning program (of which online courses are provided by a third party) and the intranet which allows a better internal communication among employees. For the purpose of this study, the web-based recruitment system will be the main E-HR tool which cause more significant impacts to HR rather than the other two tools.

The E-recruitment system was designed by the IT team of the company and used to manage the recruitment process from A to Z. It also provides online selection tools but this function has not been utilized by the HR team yet. This system has not been integrated with the main HRIS of the company since it is still in development. In order to ensure the accessibility to all potential candidates, other application methods such as paper-based CVs or emailed CVs are still accepted. However, the company encourages applicants to apply online to reduce the workload for their recruitment and selection department.

The introduction of such systems responds to the global strategy of the MNC which creates the greater standardization of HR processes. In addition, the rationale behind adopting these E-HR applications includes:

- Cost reductions (for i.e., by cutting headcounts in HR or administration costs)
- HR process simplification which will improve the quality and speed of HR issue resolution

- Lessen the administrative burden from HR professionals

The study reports the thoughts of HR personnel and line management about the drift of HR roles and competencies which have been influenced by the above mentioned HR technology.

4. EMPIRICAL FINDINGS

4.1 Roles of HR

4.1.1 Perception of E-HRM

It would perhaps make a sense to explicit the impression of respondents towards sharing their knowledge about E-HRM. Apparently, most respondents were not familiar with the term “E-HRM” but the discussion became more exciting after a clear explanation from the interviewer. They knew more or less about technology applied in HR such as software, HR portal, online recruitment, E-learning, etc. but most never heard about the term. According to them, the term was hardly mentioned in local newspaper as well as other media and it seemed that only specialists in the field might be aware of it.

“I am not very sure about the so-called E-HRM but if you talk about the application of ICTs in HR, I have so much to share...” (HR assistant manager)

“I can not tell you what E-HRM is because I myself have never heard about it. But from what I guess, “E” means electronic, right? Is it like E-learning?” (Training manager)

“Oh, quite weird...I never know that a large number of complex processes in relation with HR can be shortly termed just by a word.” (Marketing manager)

It is a common thing that the popularity of E-HRM seems low in Vietnam as there is a rarity of literature (both academic and non-academic) referring to the term. Explicably, only those who are specialized in the field will be aware of it. Obviously, this study is among the first official academic research in regard to this fresh topic.

In regard to the usage of E-HR tools in the company, it was revealed that there was still little attention from the senior management to the investment of HR technology, which explained the low application level of E-HRM across the company. One of HR manager said:

“I have not received any news from the parent company about changing processes many of which are still performed manually and time-consuming. For example, to calculate the salary of each employee, we need reports of their

absenteeism, paid leaves and overtime working hours from their line manager. These data will be stored and processed by specialized software. I know there is some great software which allows manager to update such information directly in the system without bothering HR. I hope we will install it in the near future.” (Manager of payroll and compensation)

It was said that the company was not willing to increase the investment in IT to support HR function. Respondents emphasized many challenges E-HRM will face such as financial problems, lack of expertise, workflow changes, resistance from the management level and users etc. From perspectives of senior managers, cost considerations and the uncertain return on investment were the toughest barriers when making decisions relating to further funding.

“As I said before, the cost will be high, not only upfront costs to cover initial implementations but on-going costs for software maintenance, training and other stuff which will become a burden to the current financial situation of the company...Establishing a complete E-HR system means a standardization of HR processes all over subsidiaries of the corporation in the world. Imagine how costly it would be...” (Finance manager)

“Does the result worth our efforts? I doubt that HR would become more contributive if it were armed with the so-called E-HRM...Anyway, we need to make many pros and cons before making any further decisions regarding to the installation...” (Purchasing manager 1)

According to other line managers, one of the biggest challenges to the adoption of E-HRM strategy came from the people’s mindsets. Non-HR workers naturally resist to using some of E-HR tools because they are used to having things done by HR staff. HR people even have a better reason: changes mean troubles. It would not exaggerate to claim that any further step to transform HR will need to get started from changing people’s mindset.

“More changes, more trouble and yet the effectiveness is uncertain...” (Purchasing manager 2)

“Let’s be realistic here. The idea of popularizing E-learning courses across employees is impossible. First of all, people prefer the traditional method of face-to-face interaction. Second, we do not have adequate resources such as computers for all employees especially workers in factories to materialize online teaching/learning.” (Project Manager)

HR managers had different thoughts on this issue. They blamed the under-investment in web-based HRM on the weak voice of HR compared to other departments within the

company. Most admitted that the opportunity existed but it was unclear how to overcome threats to catch it.

“The challenge task is to convince line executives that HR can provide a value-added contribution to the firm. All we need is an investment in technology to improve HR processes. But they won’t seem to listen...We lack status and respect, everything will have to wait until we have a better voice within the organization.” (HR assistant manager)

Some of them attributed the indifference of the management level to the shortage of necessary competencies in the HR workforce which implies an unreadiness of HR to welcome any changes. They also pointed out that it required a wider knowledge and more competencies from HR professionals.

“The point is that our HR professionals are not well-prepared for changes, they do not have needed competencies...” (Recruitment manager)

In short, it can be said that the case company are practicing conventional HRM rather than wholly E-HRM or like one of HR manager said “We are moving on from the traditional HRM to a more advanced stage of HRM or you can say that we are halfway through E-HRM process”. The company is taking the very first step on the way to upgrade their HR department with a great number of concerns and worries from the senior executives.

4.1.2 The impact of E-HRM on the roles of HR

The first research problem is what the change of HR role before and after implementing E-HR tools is. Interviewed questions were designed to find out the ideas of different groups (HR and non-HR staff) regarding to the advantages and disadvantages of E-HRM to the role of HR. Most interviewees agreed the transaction processing would be simplified and HR service delivery would be improved with the practice of E-HRM. This, in theory, will shift HR professionals’ attention to a strategic orientation as a result of being free from administrative tasks. However, it does not seem so in effect.

Changes in HR during five-year time have been questioned during interviews and each respondent was asked to evaluate the role of HR in the past and now. The answers imply that HR tends to move away from an administrative expert to an employee

advocate. Since the workload of paperwork has been lessened, HR gradually undertakes more managerial roles.

Most respondents agreed that recruitment and training were the two departments which made full use of web-based tools. In Vietnam, many state owned enterprises and private companies do not prefer such tools because of the cost and the existence of a mechanism which appreciate interpersonal relationships. Only leading local companies and MNCs will employ these hi-tech applications. As far as recruitment and selection are concerned, interviewees were positive towards the use of internet as a source of information. The company encouraged candidates to apply for jobs online via its website where job descriptions are offered and application forms are received online. The selection will be based on the compatibility of applicant's competencies and the job requirements.

“We have applied e-recruitment for years and saved a lot of time and efforts. A hiring needs list will be regularly updated on our company website from which candidates can send their applications online. Nonetheless, the selection processes can not be automated as we are afraid that computerized assessment will miss potential talents.” (Recruitment manager)

“Job interviews can be conducted via telephones especially for senior positions which require the assessment of the headquarters' managers or in case candidates are not able to present as long as they deserve our efforts. All thanks to the power of ICT...” (HR assistant manager)

The Recruitment manager explained that cost savings through E-recruitment has been achieved in two ways, firstly by cutting headcounts in recruitment and selection department and secondly by reducing administration costs which used to be relatively high with the previous paper-based recruitment. She was unable to supply a figure for either of these savings, though.

In-house training is the combination of a traditional method and E-training/learning. Respondents confirmed that e-learning content mainly surrounded operational activities while other areas such as soft skills or organizational culture were not included. At the time of interviews, the company has delivered about 20% of its course portfolio via computer aided training. This number illustrates a fact that e-learning benefits and effectiveness have not been fully exploited mainly due to high IT investments, the lack

of required capabilities and the effect of Vietnamese learning culture which appreciates a face-to-face traditional classroom modality.

“The cost of e-learning courses is quite high, we can only manage to deliver a limited number of e-courses to top and line managers. These managers then have to convey the knowledge to their subordinates if required.” (Training manager)

He later added that:

“Three years ago, 90% of courses were conducted directly. We were always short of teachers and classrooms. I myself had to take care of a few classes even though my responsibility was to plan and manage the training. It is getting better now with the support partially from outsourcing companies which were hired to provide the training to our employees and also from the e-learning system. Managers’ attitudes to this system, at the beginning, were quite negative and reluctant because of the costs and other nuisances. We are trying to show them how resources can be saved this way...” (Training manager)

On the other hand, other HR areas such as compensation and performance appraisal saw a limited use of online facilities.

“The salary calculation has been more speedy and accurate thanks to the use of calculating software and pay-slips are given out to employees every month by emails instead of in printed forms. Inquires about salary administration, bonus or incentives, etc. will be handled by our compensation department directly in face-to-face talks or indirectly by phone calls or emails.” (Manager of payroll and compensation)

“An E-HRM system is a great idea but we do not intend to implement one, at least in the near future. The executives would rather spend money on marketing than HR plans...” (Finance manager)

A line manager shared his thoughts about the practice of performance appraisal in the company. Apparently, E-HR methods are not preferred compared to conventional methods of evaluation.

“Why do we have to use software for evaluating employees’ performances while we can do it ourselves? We always discuss performances with our subordinates face to face and this gives us a chance to understand their concerns and dissatisfaction in work. We try to improve our relationships through such discussion...I believe that employees would like to hear their manager’s comments directly rather than through any other means of communication because it proves that they care about what their subordinates have achieved or failed to achieve.” (Marketing manager)

“I know sometimes personal evaluation of one’s performance may be subjective, tedious and time-consuming but it is like...tradition. It works well till now and we have no reason to change it...” (Purchasing manager 2)

Based on responses, it can be anticipated that time spent on operational tasks remain relatively high due to an insignificant involvement of web-based tools which are supposed to reduce the amount of work for HR. At the end of the day, HR professionals still find themselves stuck in the pile of trivial nameless tasks. Hence, completing administrative duties was considered as a critical task and key responsibility among HR staff.

However, it is unfair to state that technology does not bring any positive change to HR function, especially in the recruitment and selection area where an E-recruitment system is running effectively. The recruitment manager was happy to share that:

“For those who are working in HR, employees are our clients. I feel that we are now close to our clients compared to five years ago. We spend more time on building relationships with them, investigating and meeting their needs.”
(Recruitment manager)

The Training manager concurred with that thought:

“We understand what they (employees) want to learn, what skills they lack, what they want to receive as compensation. We position ourselves as an employee-oriented department.” (Training manager)

Even a new focus has been identified for HR areas where web-based tools have not been installed yet. An overall impression of HR role shows its piecemeal movement towards an advocate of employees.

“We appreciate any feedback and comment from staff. Monthly meetings are a good opportunity for us to listen to employees’ concerns and clarify HR policies.” (Manager of payroll and compensation)

Evidences indicate that HR is still far from being strategic despite their effort to improve HR efficiency. In effect, the discussion of the strategic ability of HR comes quite early in a sense that HR does not embrace essential and sufficient conditions for the transformation. First of all, as mentioned above, the inconsiderable application of HR technology does not free HR professionals from administrative areas. Second, HR is not recognized as a central function to the organization, which means that existing preconceptions to the role of HR will prevent it from reaching a strategic level. Worse, there is a lack of understanding HR needs to follow the general trend of looking beyond routine tasks and concentrating on a long-term development strategy in a complex and

constantly changing environment. Line managers from other divisions shared the same thought with most HR managers that the department has not been powerful enough to accept this role yet.

“In comparison with other departments such as sales, marketing, purchasing or finance our position in the organization is quite...you know...underestimated. We all know that human resources are the most critical factor to build a company but cynically people working in HR areas are considered not as important as they deserve just because they are not making any sales or not saving any money (which can be calculated and recorded in statistics) for the company. Our value should not be measured with numbers...” (HR assistant manager)

“In big MNCs, there are more opportunities for HR to join the management team but here in this company it is just a supporting unit. HR department is still mostly involved in routine transactions focusing largely on daily personnel issues with little strategic concerns. The advanced technology has improved the productivity, not changed their basic role as administrative expert.” (Marketing manager)

“Even though they want to be strategic, they just can’t be. Or do they have to be because they seem all right with the way they are now, at least to me...” (Sales manager)

Responses give a strong impression that HR has not been realized as a truly strategic partner in Company X. but there was a consensus that HR is playing a more positive role and contributing values to the organization through building employees’ capabilities and developing a cooperative relationship with other departments. This means so much to HR particularly when it is struggling to reengineer its function from operational to relational level. It is just rational and natural that HR has chosen the path of incremental transformation, for i.e., it is aiming at the role of an employee champion instead of jumping ambitiously to the strategic partner role.

In a nutshell, the discussion of HR roles, be it in theory or practice, often surrounds one important issue: is the role of HR becoming more strategic now with the support of technology in managing HR? Apparently, the reality does not look like what optimistic academicians describe. An in-depth analysis will be provided in the discussion to propose a conclusion to that problem.

4.2 The involvement of line managers in HR

It seems that devolving HR responsibilities to the line has become a common trend in HR today. However, the challenges lie in the ability and willingness of line managers to carry out HR activities. According to respondents, one of the key responsibilities of front line managers in Company X. is people management which covers a wide area from training, coaching employees to performance controlling and rewarding. They also undertake a part of recruitment and selection together with HR. They criticized that they were overloaded with their own work irrespective of HR activities. Despite complaints, most managers said that they were willing to support HR as they were in a better position to deliver such HR practices. As a matter of fact, line managers in Company X. are encouraged to perform some HR functional activities. For the integration of all organizational functions, the collaboration between HR and managers of all departments is crucial. HR managers showed their opinion in this issue:

“In effect, line managers also benefit from the devolution of HR responsibilities. Many managers told me that their management skills have been improved...”
(HR assistant manager)

“I am afraid that while line managers are taking on more and more HR related responsibilities they are not well-prepared with knowledge and skills to resolve them. We have not planned any specific training or coaching to them yet, though...” (Training manager)

The interviews with line managers focused on one more important issue: how does E-HRM affect their responsibilities? Most respondents confirmed that the real E-HRM has not been practiced in their company and therefore little effects have been recorded.

“Many operational processes are taking us much time and effort. For example, we always need to participate in interviews to select employees for our department, then provide training and guidance to newcomers and supervising their performances for promotion and rewarding. In general, there is hardly any involvement of technology in those processes...” (Sales manager)

“We seem to take care of more and more HR issues. I expect the real E-HRM to be implemented in a near future to lift a part of burden out of our shoulders...”
(Purchasing manager 1)

During interviews, line managers often emphasized the importance of technology and how it may change the way they work. They saw people management as a part of their job and even welcomed it as an opportunity to develop their team. However, the weak support resulting from the shortage of required tools discouraged many of them. Most of them expected a large diffusion of HR technology in the near future so that line managers could be able to do their own HR tasks without consulting HR staff.

“It would be great if I do not have to contact HR just to have information of an employee. There should be a portal where some basic employee data will be posted for reference.” (Project Manager)

Managers also mentioned the potential of online tools which may help them to be less dependent on the support of HR. One of the impacts is that it allowed them to do managerial work more effectively. Then, it is anticipated that changes brought about by E-HRM will lead to sequential changes in the perception of a line manager's role and their relationship with HR. The findings highlight the crucial role of line managers in making HR practices come to life. However, the inconsiderable support from poor E-HR tools makes line managers encounter a number of difficulties in handling HR issues. This fact highlights another value that E-HRM can add to in terms of managerial accountability.

4.3 Required HR competencies

All participants in the interviews agreed that the requirements for HR professionals have considerably increased in recent years. In the past, it seemed that anyone could do HR tasks which mainly involved recruiting new employees and calculating payroll. Nowadays HR professionals had to acquire more skills as their existing skills would be insufficient to handle the daily issues. One manager mentioned that a few years ago those who were good at computerized technology would be appreciated but at present technology expertise is considered as a critical requirement not only to HR profession but also to other kinds of office jobs.

“They do not have to be an expert in IT but have to be comfortable with using common office software such as Word, Excel, Power Point and the like. We work with those everyday and the ability to process computerized data is the key to complete any task. Therefore we assume that candidates own this particular skill before joining the company.” (Recruitment manager)

However, the findings revealed that the IT skill was not in the list of “need-to-upgrade” competencies since it is assumed that this skill has been largely introduced in universities or training institutions, it is not necessary to spend more time and effort developing it.

Being asked to list competencies and capabilities which they think as the most important for HR professionals to serve the role they are playing, respondents gave a wide range of skills. An interesting contradiction was found in two groups of HR practitioners and line managers. HR staff and HR managers tended to put more emphasis on people related skills such as consultancy and negotiation. Besides, skills in specific HR functions are indispensable for HR practitioners.

“As you can see, each function in HR requires a particular competency. For example, negotiating capabilities emerge as key skills to those who are working in compensation, performance management team while those who are responsible for recruiting or training often appreciate communication skills. It totally depends on the area in which you are specialized in...” (Manager of payroll and compensation)

Skills such as advanced communication and teamwork would positively build personal credibility which will be useful for employee advocates. Some claimed that those who want to be successful in HR career should have a deep understanding of human behavior to put the right person in the right place.

“Our job is to solve people related problems, give them advices so it is important to have good verbal and written communication skills.” (Recruitment manager)

“Communication skills are necessary but more importantly, HR should learn how to combine those skills with HR expertise.” (Training manager)

“Teamwork is more essential than ever before. We not only need to get along well with people in HR department but with line managers and non-HR staff also. We support them and want to receive their support as well.” (HR assistant manager)

Likewise, line managers stressed the importance of critical thinking and leadership. They viewed things in a different perspective.

“I think HR is only focused on developing skills which serve their daily work. Of course you should possess a set of particular skills before entering HR department. Therefore, it is more vital to acquire other skills such as critical thinking.” (Purchasing manager 2)

“Leadership is not just required for high management levels. It should be viewed and practiced by every employee as a key skill. One is, first and foremost, a manager of their own.” (Finance manager)

However, both groups have a similar thought that what HR practitioners lack most is the general knowledge of business. Several line managers complained that most HR consultants they talked with failed to catch up with them in a business conversation. Worse, HR staff showed an indifferent attitude to non-HR issues.

“It took me hours to explain to the guy in HR about the project we are working on and how it affects the company operation. I did not expect much but at least he should have understood some key business indicators...” (Project Manager)

“HR needs to put themselves in our shoes if they want to support us. Their strategy should fit with the company’s business strategy.” (Sales manager)

“HR should be ready to give us the best advice in terms of human issues. Therefore, they should learn more about the business rather than what they are doing now...” (Finance manager)

Line managers expected their HR department to be competent professionals who possess both HR expertise and business knowledge to add values to the firm. HR managers admitted that it was the most challenging to acquire or develop. Some HR professionals explained the reasons for that phenomenon:

“My subordinates (in the recruitment and selection department) are busy enough with their day-to-day operational tasks, it would be difficult for them to update any news or information regarding to business even though they know that it is important...” (Recruitment manager)

“It is not compulsory for every HR executive to understand what supplier the company is negotiating with or what other competitors are doing. It causes a bad habit of ignoring what is significant to the company.” (HR assistant manager)

HR managers also confirmed the need to improve HR staff’s business knowledge and encourage them to actively participate in business in an indirect but helpful way.

“I have recently asked some specialists in other departments such as sales and marketing, purchasing, financing...to talk in a seminar in which all HR executives were required to join. This was a good opportunity for them to enhance their knowledge and get acquainted with key employees who they may work with some day.” (Training manager)

“Training is certainly in urgent need to fulfill the knowledge gap. But in my opinion, it is even more important to change people’s mindsets. I mean the kind of attitude “It is not a part of my job, why should I care...” (HR assistant manager)

It can be asserted that most HR executives had a traditional perspective of the HR competencies which suggests that HR department in Company X. is functioning as personnel management oriented part of the organization. The strategic face has not been exploited due to the lack of required skills and competencies. It was observed that personal credibility was not included in the list whereas the literature views it as the most critical competence for the role of employee champion.

4.4 Summary of the findings

In summary, contrasting the initial goals of the company when introducing web-based HR tools (for i.e., E-recruitment system and a part of E-learning program) with the actual changes, it can be concluded that most of them have been fulfilled after more than 5 years of implementation. It is evident that the administrative burden has been lessened where the E-HRM has been practiced (for i.e., the recruitment and selection department). Additionally, an improvement in the perceived quality of services and client satisfaction has been observed. However, no evidence was found of an actual reduction of costs.

The case company is in the first phase of strategically transforming HR department at different levels and has just adopted ICTs in recent years. There is a trend to continue the automation of HR service in the next few years. Despite some few E-HRM improvements in their processes, the firm still stands with the disadvantages associated with traditional HR tasks in a competitive marketplace. In addition, the findings suggest that the delivery of HR services with a small range of web-based tools used hardly

enables the expected changes in HR's role toward a strategic partner though it supports the shift of HR focus to the role as employee champion. The initiation of E-HRM practices is pushing HR to move from a traditional bureaucratic department to a client-friendly approach which potentially targets at the role of an employee champion. Rather than an out-of-reach strategic role, the HR department in company X. has selected a more reasonable alternative. Another tangible effect caused by E-HRM is the devolvement of HR responsibilities to line management though the support from HR technology to their daily work is unobvious. However, improvements in competencies of HR professional after the implementation of E-HRM were found to be inconsiderable. A preference of developing people related skills to other types of competencies existed among HR professionals, though they were suggested to focus on upgrading the business knowledge, critical thinking and leadership.

Table 7 presents a summary of findings in four main themes which will be a useful reference for a further discussion in the next part.

Table 7: A summary of findings.

Themes	Main findings
The perception of E-HRM	<ul style="list-style-type: none"> • The unawareness of the term • Challenges to the investment in E-HRM • Practicing conventional HRM rather than E-HRM
The impact of E-HRM on the roles of HR	<ul style="list-style-type: none"> • Low application of HR technology • Recruitment and training as two main areas employing E-HR tools • A shift from administrative expert to employee champion
Line managers' accountability for HR	<ul style="list-style-type: none"> • High involvement in HR related activities • Willingness to take on HR responsibilities • Technology shows little support to line managers' HR task completion • Line managers' expectation of E-HRM implementation

Required HR competencies	<ul style="list-style-type: none">• Technology expertise as a requirement for HR professionals• HR appreciated people related skills such as communication, consulting, negotiating and teamwork• Line managers stressed the importance of critical thinking and leadership• HR needs to gain more business knowledge
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5. DISCUSSION AND CONCLUSION

5.1 Discussion

Lepak and Snell (1998) proposed three development stages of E-HRM: operational, relational and transformational phase. The findings suggest that company X. is in the transition from the first to the second stage of practicing E-HRM. Through the introduction of a few E-HR tools, the operational goals such as the increased efficiency or simplified processes were recognized. These are also common outcomes that each organization expects before the implementation of any E-HRM system. Although respondents recognize the importance and effectiveness of E-HRM implementation in increasing the organization's competitiveness, the automation of HR service delivery (mainly in two functions: recruitment and part of training) is far from enough in order to promote insignificant changes in HR. At this point, one may question why there is little use of E-HRM regardless of its visible benefits?

First and foremost, as very few users saw a link between E-HRM to organizational competitive advantage and a potential shift from transactional to a more strategic focus, the use of E-HRM in practice is very limited, often to administrative activities. E-HRM does not work as an enabler of the transformation but rather as an administrative tool. It is reported that HR functions in the case company are not able or ready with the change as long as HR professionals are still uncomfortable with the involvement of advanced technology in their daily work. There is an indication that the HR department does not succeed in functioning as proactively and strategically as it should have done albeit its attempt to add value to the business performance.

From a national context, Mohr (Mohr, Puck & Holtbrügge 2009) found that national culture has a certain impact on the acceptance of users to technology applied in organizations. He confirmed that among four dimensions of culture proposed by Hofstede, individualism/collectivism has the strongest influence. For example, collectivist cultures have a strong need to know and trust the applicant before recruiting

him/her which seems impossible through E-recruitment. He further explained that due to the anonymity of the internet which contradicts their basic values of solidarity, group responsibility and personal relationships, companies from collectivist countries are reluctant to implement web-based management techniques. In that sense, the implementation of E-HRM within MNCs in Vietnam is getting more complicated and difficult due to a number of cultural distances. Changing the local professionals' practices and mindsets is not a simple matter. It requires the organizational commitment to invest considerable resources in HR function if the MNC wants to globalize E-HRM. The emphasis of this study does not lie on the relationship between web-based E-HRM and national cultures, however, it suggests a strong connection between those variables and indicates that MNCs which are increasingly promoting the use of E-HRM should be cognizant profound influences of the contextuality.

From the organizational respect, Marler (2009) blamed the low investment in a new innovation to the skepticism or inertia of firms. Firms tend to be skeptical and abandon an innovation too early before it fruits. Similarly firms with managerial inertia are often easily satisfied with a result and discontinue the exploration of a better result. In this case, skeptical attitudes among a few line managers and even HR managers possibly limit its optimal use of E-HRM and the exploitation of its value. It is evident that if the company fails to use HR technology in value-added activities, E-HRM investment will be considered merely as a cost of doing business which does not bring any transformational effects.

From a more individual aspect, the findings also indicated a high resistance to E-HRM implementation. Maurer (2002) stated that there are three main reasons why people resist a change. "They don't get it, they don't like it or they don't like you". While HR employees may object to E-HRM implementation because of the worry about headcount cuts or the trouble of getting used to technology-based processes, other employees have their own reasons. Line managers raised some issues during interviews such as a preference of personal interaction to automated responses or negative attitudes towards "do-it-yourself" tasks which have been transferred to them from HR people. From top management's viewpoint, the worry that the technology initiatives will not pay off

makes them indecisive to invest in HR technology. These psychological barriers obviously delay the organization's progress to reengineer HR through IT.

To overcome these barriers, it is suggested that HR should first create its credibility by successfully execute operational and relational HRM and then manage to engage in more value added activities. There are practical evidences proving the effectiveness of the above mentioned HR transformational strategy. Successful companies which have completed or are currently on the way of restructuring their HR function include Eastman Kodak, IBM, Johnson and Johnson, Merck and Co., Walmart Stores Inc., Xerox, etc.(Kesler 1995). The transformation starting from automating basic HR transactions seem the right way to liberate HR function and exploit the full potential of E-HRM.

In response to the first question of the thesis, it was revealed through the interview texts that though HR may perform many different roles, the currently dominant role which HR specialists spend the most time is the administrative expert. Nonetheless, concurrently, a shift in HR roles is getting more and more obvious, pushing HR professionals from the seat of an administrative expert towards an employee champion. It is evident that HR is spending more time on building relationships with employees and effectively cooperating with line managers towards gaining a better business performance to which its contribution is unclear, though. Interestingly, the worry that technology will gradually omit the "human" contact due to certain advantages of remote communication does not occur in this case where HR, on the contrary, is attempting to reinforce the "human" factor in a different way. It is consistent with the study of Foster (2009) who argued that E-HRM stimulates a fresh way of working, becoming an enabler and implementer of the process change.

Whereas an extensive literature reckoned that E-HRM will transform HR into a strategic partner (Kossek et al. 1994: 137), this study proposes that a relatively inconsiderable use of information technology in the area of HR can only enable limited changes in HR roles, for i.e., from the lowest point (administrative expert) to the very next point (employee champion). The result of this thesis is consistent with a growing body of

empirical research in E-HRM outcomes (Parry & Tyson 2010). The speed of transformation will depend on many factors such as the scope of E-HRM system deployed, the attitude of HR professionals and the support from line management, etc. In addition, the impact of E-HRM could vary according to the process area in which it is implemented. It is shown by the interviewees that E-HRM is more commonly used in recruitment and training than in other HR areas though the immature use of such web-based tools has not brought about the theoretically expected transformation yet.

Another clear theme to emerge from the collected data is the devolution of HR tasks to line managers who welcomed the transfer with a positive attitude. They admitted people management responsibilities as a part of their work which concern performance appraisal, recruitment and selection, training and development, absence management, payroll submission and so on. This is in line with the result of the Chartered Institute of Personnel and Development's survey (CIPD 2004) which reveals that line managers are more and more actively involved in personnel functions. Despite a great attachment to line manager's performance with regard to HR tasks, E-HRM was reported not to be properly practiced in company X. However, it does increase the engagement of line management to more HR responsibilities as an emerging tendency. The only concern was raised by HR managers who remarked a lack of required skills and competencies among line managers for their new accountability.

The shift in the role has led to new requirements in the skills and competencies of HR staff. Nowadays HR is widely recognized as a profession with full requirements of expertise and competencies. Interviewees demonstrated that HR professionals needed to develop communication and consultancy skills to effectively deliver HR services to clients. They also needed to acquire analytical and critical thinking which will help in decision-making process. Especially, the acquisition of business knowledge was considered as a "must" in order to prepare for a strategic move in the future. Expectedly, the findings suggest that HR in company X. appreciated competencies related to HR role as administrative expert and employee champion. Technology related skills are indispensable and have to be excelled by employees before joining the HR workforce in order to work with IT tools effectively.

In conclusion, E-HRM is a powerful vehicle to drive change. The near future will see a considerable number of changes in HR function though the speed of change might be slower due to objective causes from the company and subjective causes from the business context. Technology will not in itself create a strategic HR unless it is backed up by the behavioral changes from HR professionals and line management.

5.2 Managerial implications

Perhaps the strongest implication for the management team of this study is to emphasize the needs to gain a deeper knowledge of the nature and potential of E-HRM. It asks for managers' commitment of time, resources and efforts to get the final outcomes such as an improved HRM system and the strategic capability. Many top executives are standing still in the argument of organizational cost reduction without looking further at the potential of technology to transform the role of HR to a higher level. They keep repeating about a strategic HR but do not understand how to start building one. Their efforts will be wasteful unless HR executives take the initiative to learn about the new role, adapt to the uncertainty and ambiguity associated with all changes. In another word, the implementation of E-HRM does not assure the success of making HR more strategic and unless the value and contribution of technology are well perceived by senior management levels, E-HRM will be merely an administrative tool. HR will need to break out this vicious circle to transform itself into a source of sustainable competitive advantage in the organization. To this extent, the problem of E-HRM does not lie in technology but the organizational capability to exploit its potential and value. Whether E-HRM is actually an enabler of the future or not and whether it can help the organization to go outside the traditional boundary or not depend on the understanding of true benefits of E-HRM and how HR professionals shape its development.

The second implication relates to the influence of HR technology on competencies. In order to welcome the upcoming change in HR with the increased involvement of technology, there is a need for HR professionals to upgrade skills. As reported, the shortage of skills among staff is the biggest barrier to HR transformation, which should

be a great concern to the top executives of companies. As mentioned in the previous theoretical part, there is a rich literature focusing on the identification of critical competencies and skills of HR professionals, very few studies discuss solutions to acquire or develop such. Basically, if a company needs HR specialists with a set of particular competencies, recruiting new ones who are satisfied with those conditions and helping existing HR staff to develop new competencies are among two popular strategies. In practice, most companies will prefer the latter because it is more difficult and time-consuming to find a HR professional who fits all criteria than to train the existing one. Yeung et al. (1996) offer five strategies to bridge the gap of competencies. The first strategy refers to the ongoing competency audit and assessment to identify gaps, then planning the appropriate training. Communicating with employees regarding to demands and expectations of roles and competencies and role modeling through internal HR magazine are the second strategy. Some companies may prefer link new competencies to performance review and development plan. Another approach to develop necessary competencies is to train people through internal courses or external programs. Last but not least, companies may develop new kinds of job assignment, use mentoring and support from senior HR professionals. No matter how many challenges HR professionals are facing nowadays, they have little choice but retrain themselves as soon as possible.

It is recommended that HR personnel should get involved in operations meetings to enable them to get access to business knowledge and use their expertise to consult with the line management. The organization's senior management may provide support by ensuring sufficient funds to be allocated for training activities to improve required skills. The most difficult task is to update HR professionals with business knowledge and encourage them to improve the quality of HR staff. Apparently, what a company needs is a team of HR people who know the business, understand HR processes, have capabilities to manage and lead changes. More importantly, senior executives and line managers should change their behaviors and expectations towards the HR staff. They should put more faith in HR's contribution to business success through culture change and intellectual capabilities.

Last but not least, line managers play a key role in establishing a strategic HRM, collaborating with HR to gain the main business objectives. The devolution of HR responsibilities to line management through E-HRM will create a change in the business culture. To ensure that line managers feel comfortable and confident in handling HR related issues, there is a need to acquire specialist knowledge and skills such as legal requirements or common HR procedures.

5.3 Limitations

This study demonstrates a preliminary examination of how E-HR is reshaping professional competencies and redefining HR roles in a specific context, for i.e., a MNC in Vietnam. Several limitations of the study will be outlined below. In terms of the literature review, there is a limited source of information, both internationally and locally, regarding to E-HRM research in Vietnam. Most of studies dealt with HR practices without particularly focusing on E-HR related issues. In addition, many studies were dated back more than ten years, in which concepts and definitions were inconsistent with today's practices. In that sense, this study provides a unique contribution to the better understanding of E-HRM in a specific context where the rarity of related research has been largely reported.

In regard with the empirical research, the study was conducted in only one company within a small, selective sample and therefore, generalizing the results outside this context must be exercised with great caution. However, the primary aim of this study is not statistically focused but an analytical qualitative research in an organizational setting. Furthermore, when positioned as a longitudinal and representative case, this study has contributed to our understanding about how E-HRM affects the roles and competencies of HR practitioners in a specific context.

5.4 Suggestions for future research

E-HRM research is still in its infancy and further research is encouraged to contribute to advancing the research in this area. This study provides a platform for future research in this area which should concentrate on a number of issues.

First of all, a more detailed research should be done to explore the role of E-HRM in organizations in Vietnam with more considerable sample size. Furthermore, it would be interesting to replicate this topic in a longitudinal study to track the changes of HR roles and competencies before and after the diffusion of E-HRM. Future research into this issue will provide a deeper insight into exactly how E-HR is reshaping professional competencies and redefining HR roles. Previous research has emphasized that technology has the potential to transform HR professionals into a strategic partner but whether it results in the same effect in a different context, for i.e., a developing country or not is still in question. Another exciting approach is to find out the effectiveness of E-HRM in the public sector in Vietnam. As repeated in previous part the research on E-HRM in Vietnam is sorely lacking, therefore, there are a large numbers of opportunities for other researchers to expand this topic by redefining the research questions. Third, further research is needed with respect to providing in-depth analysis of drivers and inhibitors of the changes E-HRM causes to HR. Specifically, such factors as cultural, contextual and social contracts; institutions and the country infrastructure might determine how E-HRM strategies will be deployed and adapted. A clear model is critical to lay the groundwork for both theoretical and empirical study in the future. Finally, more work needs to be done concerning how the E-HRM implementation is linked to the business strategic goals in developing countries like Vietnam.

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APPENDIX 1. The interview question in English

I. Introduction

1. Name
2. Gender
3. Age
4. Position
5. Please introduce about the company
6. How long have you been working in the company?

II. Main content

A. For HR managers:

1. Please describe your daily work. What is your role at HR department?
2. Have you ever heard about E-HRM? If yes, please explain what the term means in your opinion.
3. What kinds of technology have been used to support your work? How long have it been installed?
4. How does the technology affect your work in HR?
5. What are the difficulties when using HR technology?
6. List required competencies for HR staff before and after implementing HR technology to accomplish HR tasks.

B. For line managers:

1. What kinds of HR related issues do you handle in your daily work?
2. What kinds of technology have been used to support you to handle HR tasks?
3. What do you think about the change in the role of HR before and after implementing HR technology?
4. How does the technology affect your responsibilities to handle HR work?
5. What are the difficulties when using HR technology?
6. List required competencies for HR staff before and after implementing HR technology to accomplish HR tasks.

APPENDIX 2. The interview question in Vietnamese

I. Giới thiệu

1. Họ tên
2. Giới tính
3. Tuổi
4. Vị trí công tác
5. Giới thiệu về công ty
6. Bạn làm việc ở cty được bao lâu?

II. Nội dung chính

A. Dành cho Giám Đốc Nhân Sự

1. Mô tả công việc hàng ngày của bạn. Vai trò của bạn trong bộ phận HR là gì?
2. Bạn từng nghe về E-HRM? Nếu có, hãy giải thích thuật ngữ đó theo ý bạn.
3. Ứng dụng kỹ thuật nào được sử dụng trong công việc của bạn. Ứng dụng đó được thiết lập từ khi nào?
4. Việc ứng dụng kỹ thuật ảnh hưởng thế nào đến công việc của bạn?
5. Bạn gặp phải những khó khăn gì khi sử dụng những kỹ thuật đó?
6. Liệt kê những kỹ năng cần thiết cho nhân viên Nhân Sự trước và sau khi ứng dụng kỹ thuật đó?

B. Dành cho Giám Đốc bộ phận

1. Loại công việc nhân sự nào bạn cần giải quyết?
2. Ứng dụng kỹ thuật nào được sử dụng trong công việc của bạn.
3. Bạn nghĩ gì về sự thay đổi của vai trò nhân sự trước và sau khi ứng dụng kỹ thuật?
4. Việc ứng dụng kỹ thuật ảnh hưởng thế nào đến việc giải quyết các vấn đề liên quan đến nhân sự?
5. Bạn gặp phải những khó khăn gì khi sử dụng những kỹ thuật đó?
6. Liệt kê những kỹ năng cần thiết cho nhân viên Nhân Sự trước và sau khi ứng dụng kỹ thuật đó?