

The impact of information technology on the HR function transformation

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Preface

This master thesis concludes my life as a student, which is performed under the supervision of Twente University in the Netherlands. The research is the terminal of the program Human Resource Management. Doing this research not only improves my skill on literature searching, information analysis, but helps me to gain more profound knowledge about e-HR.

During the research, I have got great support from several persons, and now, here is the opportunity to thank them.

At first, I give special thanks to Jiajie Li, my boyfriend. He accompanies with me during the whole research period. Besides dealing with my impatient and anxious attitude, he also put great effort on improving my thesis. His optimistic and serious attitude influences me, and makes me continue the research with better and better results every time. His support is very meaningful for my research period.

Secondly, I would like to thank Ms. Tanya Bondarouk, and Prof. Jan Kees Looise for their excellent support, feedback and guidance. Both of them give me fruitful advice on how to improve my work. And they always give me timely feedback on my work, which encourages and makes me belief that I can hand in a satisfactory report under the effort.

At last, I would like to thank my family and friends for supporting me not only during this research period, but also throughout my life, my study and everything I undertake.

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Management Summary

Information technology is expected to improve the performance of Human Resource Management (HRM) by shifting its focus from administration or personnel management to strategic HRM. The strategic role of HRM is supposed to add value to the HR function, and leads the essence of HR function to transform.

This study examines HR function, HR function transformation and Human Resource Information Technology (HRIT), by investigating the role of HRIT playing in HR function transformation process, and the interrelationship between them.

The research consists two parts: a theoretical review and a meta-analysis of empirical data. For both parts, all the research data comes from peer-review academic papers, and 43 of them are used.

In the theoretical chapter, HR function, HR function transformation and HRIT are conceptualized. Firstly, the HR professional is moving from operational level to strategic and managerial levels. Line managers have taken an important part of HR function. Secondly, HR function transformation is a business process that changes the HR tasks and expands the involvement of actors in HR function, and that makes HRM concentrate more on strategic, value-creating activities for the long-term business objective. Thirdly, HRIT is supporting and forcing the traditional HR function to transform, and changes the way of management. However, HR professionals need to pay attention to deal with the drawbacks brought by HRIT, which might leads negative effect on both social interaction and information accuracy.

In the second part, the analysis of empirical evidence provides insight into the practice role of HRIT in HR transformation.

The empirical evidence shows that the devolution and decentralization of HR function is leading to role dissonance between HR professionals and line managers, and the HR professionals do not always focus on strategic issue but still put attention to daily managerial and operational tasks. On the other hand, the HRIT is considered as indispensable parts on supporting HR function transformation. It is because HRIT provides the platform and opportunity for HR function transformation and shifts the traditional HR function to technology-based new function.

In conclusion, this research reveals that HRIT not only is considered to support HR professionals to be strategy partner of business but also boosts a wide level of participation into HR practices. Academic researches consider the usage of HRIT focuses on supporting strategic HRM, but the analysis of practical evidences shows that most companies are still in middle of the transformation process where HRIT is shifting HR function from transaction activities to strategic ones.

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Chapter 1 Introduction

1.1 Research Background

The competition among the companies is actually the competition of human resources, as the market reveals. A company, as a profit-pursuing organization, is always under the pressure of delivering new products to win market share. Without high quality human resources and its effective functioning, a company can hardly endure the profit pressure and pursue its long term business strategy. The past decades has witnessed the transition of employee becoming the most precious capital in the company and the ascent of Human Resource Management (HRM) (Schuler, 1990). The strengthened management of human resources is now the very essence of a successful business story.

Nowadays, business world is undergoing a substantial change: the employee turn-over rate becomes high, and both the organization structure and management pattern change as well. The traditional HRM style fails to catch up with such rapid changes: the traditional style mainly focuses on supportive personnel activities for a company, for example, collecting employee information, monitoring individual performance, and implementing organization policies. It is a passive, submissive execution, without self-motivated participation into strategic issue to foresee the challenges of tomorrow. Therefore, there comes a demand for the new HRM that should understand the business strategy, formulate the corresponding management strategy on human resources to improve delivered service, and act as a strategy partner with top management team (Beer, 1997; Mohrman & Lawer, 1997).

To meet the demand, there is an increasing pressure on HRM to support strategic objectives and to focus on value-adding activities, which consequently leads to the change in the job content and the expectations on Human Resource (HR) professionals. Shrivastava *et al.* (2003) and Stone *et al.* (2006) note that one of such changes is that the wide, contemporary use of Information Technology (IT) in supporting various HR activities. Moreover, the researchers expect that the increasing use of Human Resource Information Technology (HRIT) can improve the performance of HR professionals and makes them involved in the company internal consulting activities (Albers *et al.* 1997). In addition, Ulrich (1997) mentions that the use of HRIT provides value to the organization and raise HR professionals' status in the organization. In a

recent theoretical development, Ulrich and Brockbank (2005) emphasize the need for HR professionals to become business strategic partners.

These phenomena arouse a few questions about the interrelationship between the HR function and the emerging HRIT:

- Does the HRIT have the impact on the changing HR function?
- In which ways does HRIT support the changing role of HR function?
- How does HRIT influence the HR function transformation?

Driven by these questions, I start to explore the interrelationship between the HRIT and the HR function transformation, which is the purpose of this research.

1.2 Statement of the Problem

Many researchers have studied the changing of HR function. The most significant change is that the HR professionals now focus more on business strategic issue from a “human resource” aspect with the top managers rather than only dealing with personnel administration (Jacoby, Nason & Saguchi, 2005; Bjorkman, 2006; Valverde, Ryan & Soler, 2006). Meanwhile, part of the HR tasks, such as routine administration and individual performance management, are decentralized to line managers (Hales, 2005). Such extensive change in the HR function can hardly be described as simple as “change”, but “transformation” instead. It involves reinvention, reposition, and reconstruction of the HR roles, task and responsibility (Appelbaum & Wohl, 2000; Svoboda & Schroder, 2001; Knapp, 2004).

The HR professionals participate in transformative activities to uphold the transformation (Appelbaum & Wohl, 2000), such as redesigning the work processes and HRM system, restructuring service delivery process, and managing cultural change. To be competent for such challenging activities, they should improve management skills to promote the transformation by appropriate strategy (Svoboda & Schroder, 2001), develop leadership to control it, and overcome any barriers to ensure right direction (Knapp, 2004). Only then transformative activities can bring positive effect and improve the performance of the organization.

On the other hand, companies nowadays are thirsty for the IT to reduce cost, improve service, and achieve effectiveness (Yeung, Brockband & Ulrich, 1994). With appropriate information tools, managers, employees and customers can quickly response to market change, and control risk cost. To reveal the adding value of IT application in HRM, it is necessary to clarify how IT can advocate the HR function, for example, in strategic task or administrative task, and how IT can advocate its transformation. Therefore, this thesis originates from following research goal: to investigate how HRIT advocates the HR function transformation.

1.3 Research Questions

Since the transformation of HR function and the influence of HRIT on this transformation are the focuses of this research, the discussion points in this research paper are designed to gain insight into HR function, HRIT and HR function transformation. The main research question is stated as below:

What is the role of HRIT in the transformation of HR function?

Further more, a series of stepwise sub-questions are designed to explore the main question from various aspects:

1. What is HR function?
2. What has been changed in HR function, and why it is considered as a “transformation”?
3. What is expected from a theoretical point of view on the impact of HRIT on the changing HR function?
4. What are the findings in the current literatures?

1.4 Research sketch

In order to depict a clear image of this research, a roadmap is developed to understand the research procedure and how it is organized.

The research involves three stages. First, literature about HR function, HRIT and HR function transformation are searched and studied in detail to give an exploratory description of the HR function. The main task is to find out how scholars defined HR function in the past and which new concepts have appeared in HR department today. Especially, an additional analysis is given

to the HR function described from the Ulrich's Model (1997). The second step is to investigate the transformation process of HR function, and the final step is to find out how the HRIT affects HR function and impacts its transformation.

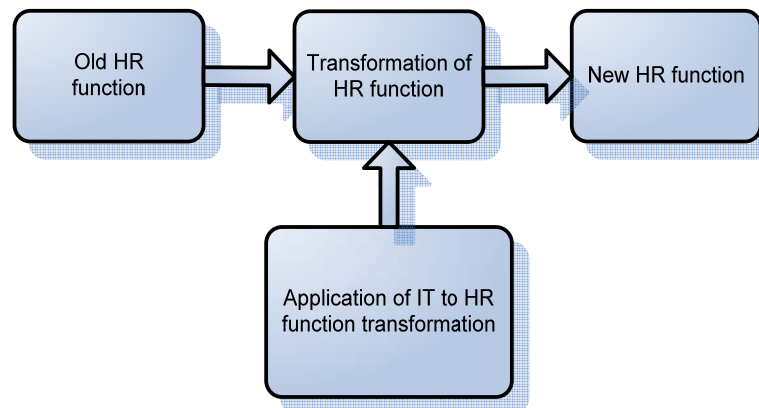


Figure1.1 Research sketch

1.5 Structure of the thesis

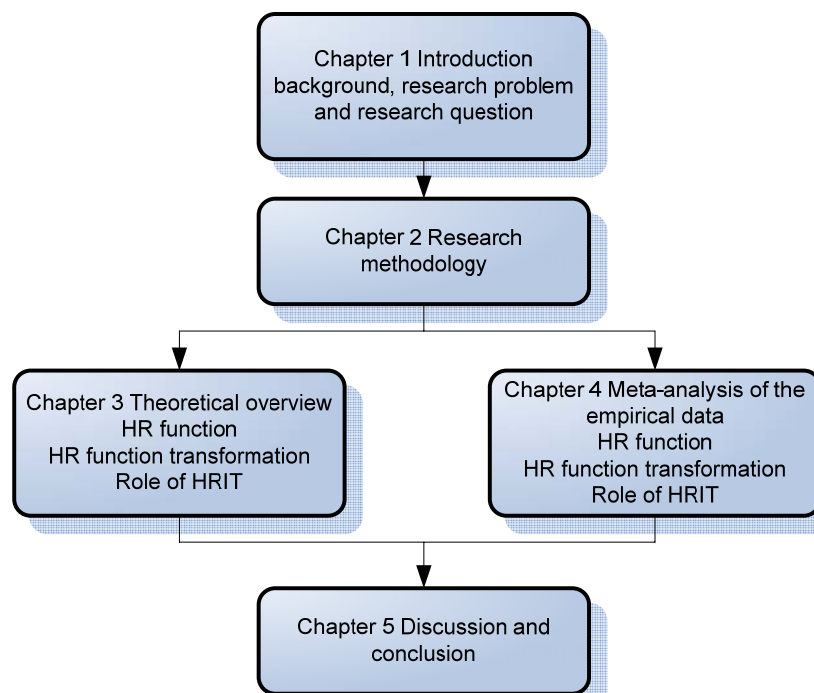


Figure 1.2 Research pathway of this thesis

This thesis is a meta-analysis of the literature which investigates the theoretical and practical aspects of HR function transformation with HRIT application. It composes of five chapters: the first chapter is the introduction of the whole research project, which includes the research's background, purpose, problem statement and questions, and how it is organized. Chapter 2 describes the methodology of the research. Chapter 3 inspects the HR function, its transformation and HRIT from theoretical point of view, while

chapter4 focuses on empirical data. The last chapter, chapter 5, summarizes the research findings and gives suggestion for future study.

Chapter 2 Structured literature search

This chapter focuses on the research methodology of this thesis, on which the research in following chapters is based. The general idea of the research method is explained in 2.1. The literature search procedure is presented in 2.2. Finally, the research methodology is briefly concluded in 2.3.

2.1 Methodology of research

This thesis adapts critical literature review method to develop deep understanding of previous researches which provide the cornerstone for this research. Both the literature devoting to theoretical reasoning or empirical data is considered. The theoretical literature summarizes the related theories discussed from literatures, including books and peer-review papers. The empiric literature collects academic evidences from published papers of case study, and qualitative/quantitative data analysis. These empiric evidences is then examined to justify the theories related to the research questions.

2.2 Selection of Journals and articles

The search for both theoretical and empirical literature is described. The initial step is to determine the literature coverage by defining the searching parameters, including publication language, source media, keywords, and period. With these parameters, a selection pool of journals is determined, and interested papers are fished from this pool.

2.2.1 Parameters for searching journals and literatures

The first search parameter is language. All the literatures which are published in English, either academic journals or books, are concerned. The target fields, the second parameter, are the studies of “Human Resource (HR) function”, “Human Resource (HR) function transformation”, and “Human Resource Information Technology (HRIT)”. The following key words and their synonyms are chosen for searching: “Human Resource (HR)”, “Human Resource Management (HRM)”, “management”, “manpower”, “employment relationship”, “Human Resource (HR) function”, “transformation”, “e-HR” and “Human Resource Information Technology (HRIT)”. The publication period is varied for

each studied filed, which is the trade-off between the availability and the up-to-dateness.

2.2.2 Journal search

The search of the journals is a multi-step process which contains key-words screening, citation search and coverage extension. Due to the accessibility, the searched journals are limited to the e-journal list of the library of University of Twente.

In the first step, the journals which contain key words “Human Resource (HR)” or its synonyms (personnel, manpower, etc.) directly in their titles are selected, which include *Human Resource Management*, *Human Resource Management Journal*, *International Journal of Human Resource Management*, *Personnel Review*, and *International Journal of Manpower*. A number of interested papers are selected from them (detailed in 2.2.3 Article search).

Second, a citation search is performed on these interested papers, and additional journals are obtained: *Human Resource Planning*, *Human Resource Management International Digest*, *Industrial Relations*, *Employment Relations Today*, *Employee Benefit Plan Review*, *European Journal of Innovation Management*, *Journal of Knowledge Management*, *Managing Service Quality*, and *Facilities*.

In the last step, in order to ensure that relevant journals are not missed, the coverage is extended to the journals regarding general management: *Journal of Management Studies*, and *Academy of Management Executive*.

The academic quality of the selected pool of journals is high. Most of the chosen journals belong to Social Sciences Citation Index® (SSCI®), which is the world leading database about social sciences. These journals includes: *Human Resource Management*, *International Journal of Human Resource Management*, *Personnel Review*, *International Journal of Manpower* and *Journal of Management Studies*. The other two journals, *Human Resource Management Journal* and *Academy of Management Executive* are ranked “A” (= “highly regarded journals”) in the Business and Management category of the “Australia Business Deans Council (ABDC) journal rankings” (ABDC, 2008). The high quality ensures that the later screened papers from this pool can accurately reflect the contemporary development of the research.

2.2.3 Article search

The search for articles is a two-step procedure: first, the articles are selected from both rough and refined screening; second, a citation search contributes additional articles.

In the first step, a rough screening is first performed, and articles are searched within the obtained journal pool. The articles in the field of “HR function” are from the publication year 2002 to 2007 in order to track the latest development. The rough search method is to screen articles’ title one-by-one from each journal. The literature related to “HR function transformation” is very limited. Therefore, the publication period is extended to 1990~2007; and it also does not limit to HR function, but includes the transformation in management-related fields as well: knowledge, work, strategy, etc. As the result, there are 29 articles in total that are selected for “HR function” and “HR function transformation” after the first rough screening.

An improvement is made for the later searching for HRIT: besides the key words “e-HR” and “HRIT” used for screening the journals, additional key words are assigned for article search: “HRIS”, “HRM system” and “virtual HR”. Finally, 12 articles are chosen.

In total, 41 articles are found after rough screening. In the refined search, not only the abstracts and key words, but the table of contents, introduction, and conclusion of the article are inspected carefully to filter out the little related articles. Finally, as the result of the first step search, 30 articles are obtained.

In the second step, 13 additional papers are attained by citation search of aforementioned 30 articles. In total, there are 43 articles that are chosen for literature review.

Table 2.1 List of chosen journals and number of articles for HR function, HR function transformation, and HRIT, after both rough and refined screening, and citation search

Journal	No. of Articles (1 st rough run)	No. of Articles (2 nd refined run)
Human Resource Management	16	11
Human Resource Management Journal	3	3
Personnel Review	8	5
Academy Of Management Executive	3	3
International Journal of Manpower	3	3
Journal of Management Studies	2	2
Human Resource Management	4	4

Review		
Employment Relations Today	1	1
Industrial Relations	1	1
Human Resource Planning	1	1
Employee Benefit Plan Review	1	1
Human Resource Management International Digest	1	1
International Journal of Human Resource Management	2	1
European Journal of Innovation Management	1	1
Facilities	1	1
Journal of Knowledge Management	1	1
Managing Service Quality	1	1
Public Personnel Management	1	1
Journal of Vocational Behavior	1	1

2.3 Review Process

Three analytical tables are built up to summarize the research findings from each article. Each table collects essential information, including: authors, source journal, research method, research objective, and results. With such information, the criticism can be reasoned out by summarizing, comparing and contrasting with others, and it helps to discuss the theories in depth and finally to depict a comprehensive picture of the research question. The analytic tables are listed in appendix.

In summary, lists of relevant articles are found for HR function, HR function transformation and HRIT. They are examined carefully to generate analytic tables, which provide rich material and deep understanding of the researched phenomena for the discussion in later chapters.

Chapter 3 Theoretical overview

This chapter is to answer the research questions regarding to “HR function”, “HR function transformation”, and “HRIT”. In the section 3.1, the concept of HR function is defined from both traditional and current interpretation. The section 3.2 presents the theoretical concern of HR function transformation: first, the necessity of “transformation” is presented in 3.3.1; then, the generic definition of transformation is discussed in 3.3.2; last but not least, the definition of HR function transformation is discussed. The theoretical study of HRIT is examined from its form and function in HR activities in the section 3.4.

3.1 Concept of HR function

There are two axes to understand the HR function: one axis is a philosophical axis, which deconstructs the function into its actors and corresponding activities, the other axis is a time axis where the difference between the traditional (past) and current interpretations of the HR function is regarded. Therefore, this section includes two parts: a philosophical description part (3.1.1) and an interpretation comparison part based on Ulrich’s models (3.1.2 and 3.1.3); and it is prepared for the theoretical discussion on the transformation of HR function and HRIT.

3.1.1 The definition of HR function

According to Valverde *et al.* (2006), HR function is “all managerial actions carried out at any level regarding the organization of work and the entry, development and exit of people in the organization so that their competencies are used at their best in order to achieve corporate objectives”. It includes the actors, as well as their relevant responsibilities and tasks.

The actors of HR function

The actors, who participate in HR function, do not limit to HR departments, but involving all the people at any level: HR professionals, line managers, the employees, etc. (Hales, 2005; Andolsek & Stebe, 2005; Francis & Keegan, 2006; Valverde, Ryan & Soler, 2006; McConville, 2006). The following picture depicts the different levels of people as the major actors involved in HR function, which is based on the literature.

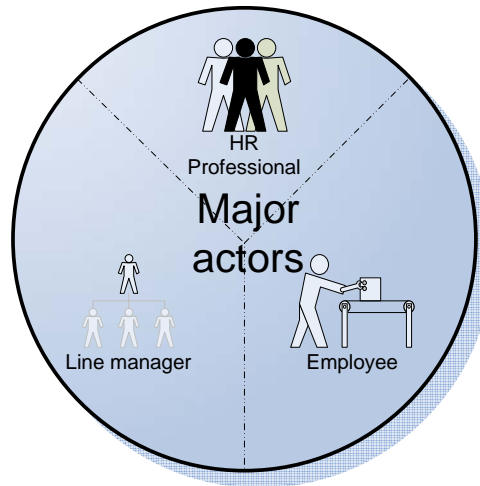


Figure 3.1 Major actors involved in HR function, at different level of a company

The activities of HR function

The concept HR function can also be deconstructed into three components – the factors reflecting who perform the function (role), why they perform (responsibilities), and what activities are taken to carry the responsibilities (process) (Gutierrez, 1995; Svoboda & Schroder, 2001; Caldwell, 2003; McConville, 2006). Each actor (HR professional, for example) can play one or a few roles, and each role participates in certain process to fulfill its responsibilities. Based on above interpretation, the following picture is developed to give an impression of it.

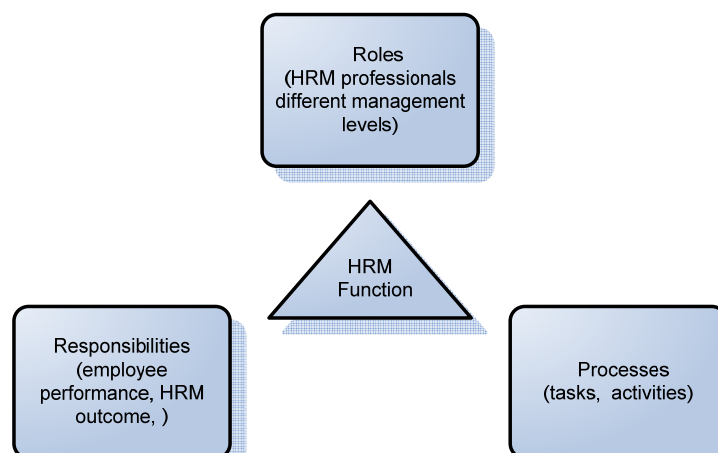


Figure 3.2 Components of HR function

3.1.2 The traditional HR function

In the past, the HR function was recognized as the personnel management that focuses on administration (selection, appraisal, reward, and development),

welfare and industrial relationship. The HR department was treated less important than financial and marketing departments, because it did not create direct value, nor have any decision power on strategic issue (Fombrun, Tichy, & Devanna, 1984; Hall & Goodale, 1986).

The traditional personnel managers paid attention to labor management, but did not participate into a company's planning and strategy decision. They paid great attention to control their employees, including carefully designing the contracts and rules for monitoring the employees (Storey, 1995).

The line managers at this moment played passive roles on the personnel management (Storey, 1995). The line managers were the transactor of the decisions made by the personnel managers, and they were the industrial relationship builders through the negotiation with employees and employers.

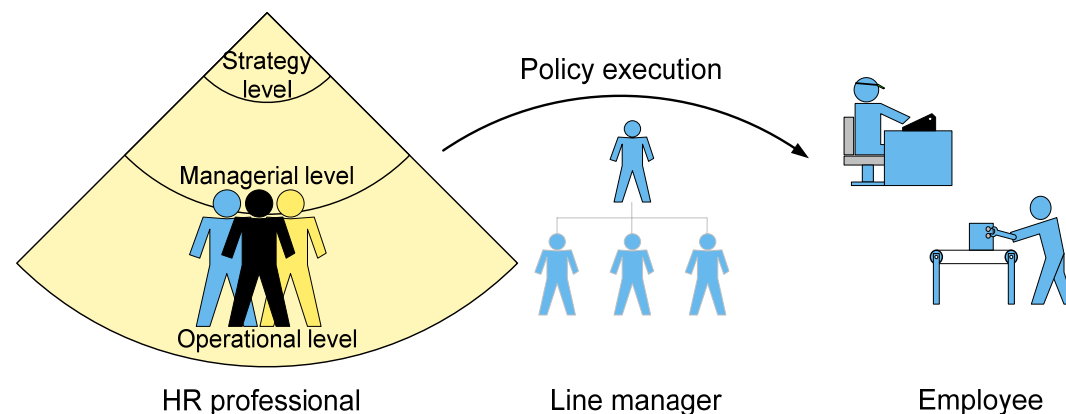


Figure 3.3 Scheme showing the traditional HR function

Since early 1980s, the personnel management started to shift to “human resource management”, due to the fact that HR professionals were considered to involve in strategic business decisions (Fombrun, Tichy, & Devanna, 1984; Hall & Goodale, 1986). The main tasks of HR professionals still focused on the daily administration, but broadened management activities are involved in the HR function, which reflected that the HRM began to pay its attention to the relationship with strategic business issue.

At this time, the HR function was still considered as the exclusive performance done mostly by HR department, and it spread its main activities onto three levels. The lowest level was the operational level, which managed the daily personnel issue of the organization. The second was the managerial level which mainly concerned how to manage the capable workforce by acquisition, retention and development. The highest level was the strategy level. HR

function paid attention to the future development of business. The main responsibility was to get the qualified people, and set the policies and programs for long-term human resources demand.

However, the lacks of the integration with the line management level, and the lack of the power were the two major obstacles affecting the effectiveness of HR function. The elaborate routine tasks and overloaded paper work also made the HR function inefficient. To be more effective on service delivery, HR function needed to be strategic on operational and managerial level, and to become more mission-oriented (Hall & Goodale, 1986).

3.1.3 The new HR function

Human resource management has developed for almost twenty years; and the HR function has changed a lot from the activities to management level. It makes the traditional structure of HR function different that the line managers and employees involve in HR issue. But HR professionals are still considered as the core of workforce management, especially towards the strategy aspect. Thus, Ulrich has defined the “four roles of HR professional model” in 1997, and later develops the model in 2005 to examine the changing of HR professionals. In the following paragraphs, the goal of understanding HR function is separated into these three levels: HR professional, line manager and employee, through Ulrich’s model and theories from literature.

The role of the HR professional

Ulrich’s model 1997

In 1997, Ulrich defines four roles of HR professionals involved in the HR function performance (Figure 3.4).



Figure 3.4 Four roles of HR professional (Ulrich, 1997)

According to Ulrich (1997), “strategic partners” are the HR professionals, who work together with top executives to make competitive business strategies and to figure appropriate HR strategies, policies, practices and tasks to support the business strategies. And they should also make sure the implementation of the strategies. At the same time, they should develop certain evaluation method to estimate business results.

The second role of HR professional is “administrative experts”, who should make HRM works more effective and efficient. This can be achieved through reengineering organizational processes, improving the capacity of organizations to gain competitive advantages, reducing cost, adding value, and determining insourcing and outsourcing strategies for better HR services delivery.

“Employee champions” is the deputation of employees. That means, at this position, the first thing HR professionals should do is to understand and find out the demand of employees, by taking friendly and useful communication with them frequently. At the same time, they should provide necessary resources to employees. The HR professionals should motivate their employees, and provide certain training and learning programs to help employees realize their potential. Employee champion also means that HR professionals represent the voice of employees in the organization, and they are responsible for enhancing employee commitment, developing employees’ competence, and enhancing the capability of employees for the competitiveness of organization.

“Change agents” are the HR professionals that support and manage the organization transformation and the changes. In the changing process, “change agents” need to create new culture to help organization members get enough motivation to participate in the new situation.

Ulrich and Brockbank’s model 2005

The HR function has adapted and changed, since the theoretical framework of HR four roles model is launched by Ulrich in 1997. According to the changing situation, Ulrich and Brockbank (2005) have made some changes on the model of 1997, to make it suitable to the actual HR function in the organizations. In 1997, Ulrich’s model divides HR professionals to four roles: strategy partner, administrative expert, employee champion, and change agent. In 2005, these four roles are expanding to five: strategy partner,

functional expert, employee advocate, human capital developer and HR leader. At the same time, the responsibilities are also specified to each role.

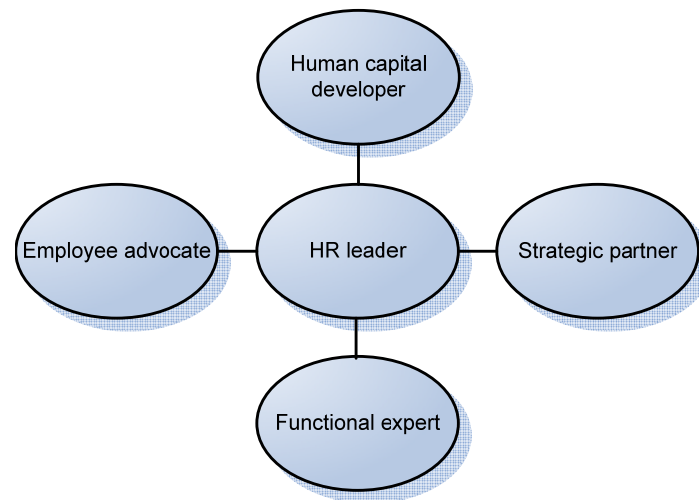


Figure 3.5 Five roles of HR professional (Ulrich, 2005)

The strategy partner has multiple roles according to Ulrich and Brockbank's (2005) new opinion: it includes the business expert, change agent, and knowledge manager. The change agent that exists in the previous model now becomes part of the strategy partner. The strategy partner should help line managers to reach their goals.

Functional expert is responsible for the HR practices delivery. Besides the traditional function of administrative expert, the role of "functional expert" is broadened by using technologies for administrative efficiency.

Employee advocate and human capital developer both concern employees. The difference is that the employee advocate focuses on current employees, to make sure that the relationship between employees and employers is meaningful and friendly. The human capital developer puts attention to the future workforce, including acquiring external suitable workforce and helping today's employees for future development.

HR leader is the people who control the whole situation. The leadership is the sum of above four roles. Being an HR leader, he/she should set the relationships among each HR function, and supervise the whole HR community.

In conclusion, HR professionals have worked as business partners – more competitive players in the core of business issue. They start to align their work with business strategies, and spend time with line managers of marketing,

financial, and manufacturing departments to ensure that HRM helps to create business value (Ulrich & Brockbank, 2005). When they act as value creators for an organization and provide positive outcome for key stakeholders (customers, investors, line managers, and employees) (Stone *et al.*, 2006), they involve as strategic contributors and create competitive advantage in business.

The role of the line manager

Line managers are the final executive of HR policies and activities on operational level, whom HR professionals coach and assist (Ulrich, 2005). They are the direct contact people regarding to HRM, and their HR tasks are to manage the employees' motivation, communication, authorization, training and so on. The core value of them is to lead their employees to achieve the objective of a department, which can be only completed by the leadership, and the plan, coordination and control on their employees (Storey, 1995).

From the investigation of Nehles, *et al.* (2006), line managers are perceived as an important role in HR practices. Most line managers are willing to perform and spend time on HR activities, and they invest a lot of time in guiding, monitoring, coaching and motivating employees. They, however, are not the specialists on HRM, and they thus need training and support from HR professionals. HR professionals should make clear about line managers' responsibility, and help them to fulfill HR roles.

However, sometimes line managers might not take their responsibilities on performing HR tasks (Nehles, *et al.*, 2006). The reason can be that the main duties of them is not HR issues, and they lack of personal incentives to participate in HR practices: when they do not have enough time to implement HR activities, and think business issues are more important, HR activities are postponed. They may also not have sufficient HR-related competencies, or the policies and procedures are unclear for them, which indicates a lack of support from HR professionals. All these may cause role dissonance (McConville, 2006).

The role of the employee

In the past, employees are supposed to be passive receivers from HR activities. Now, HR professionals try to make their people have positive attitudes on the daily work (Ulrich, 2005). For example, making employees involved into decision-making processes can motivate them to think about how

to compete for the goal and which kind of training program is needed. This kind of positive attitude can help employees to endeavor on the career development, and to create greater value for organization rather than passively taking some constrained learning programs. In other words, the change of HR function makes employees independent, and makes them take the initiative to participate into both individual and organization development.

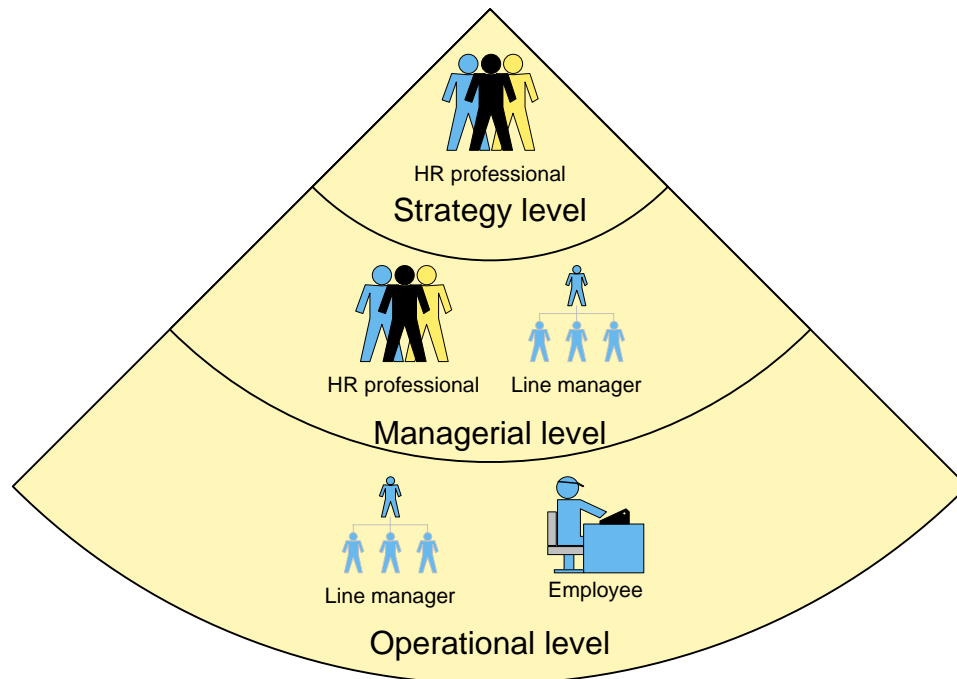


Figure 2.6 New HR function, with participation of line managers and employees along with HR professionals

3.2 HR function transformation

In this section, two parts are organized to make deep exploration of HR function transformation. The first part is about the necessity of transformation, and the second part mainly focuses on the definition of HR function transformations.

3.2.1 The demand for HR function transformation

The business world is becoming more and more demanding: the increasing competition and globalization in the world business, the requiring of developing capability for long-term survival, and the improving productivity to gain market share. Such demands have forced organizations to rethink how they can keep or attain their competitive advantage in the continuous changing market environment through making the best use of their people (Beer, 1997;

Appelbaum & Wohl, 2000; Stockport, 2000; Sagie & Weisberg, 2001; Knapp, 2004).

Furthermore, there are other driving forces pushing organizations to reconsider their HR function to meet the strategic business demands and the future corporate success, such as business environmental change, customer satisfaction, management diversification, and development of knowledge and technology (Yeung, Brockbank & Ulrich, 1994; Beer, 1997; Robertson, 2000; Appelbaum & Wohl, 2000; Aston, 2002). These driving forces press the HR function to evolve under the pressure of environment and to avoid the downside of existing systems.

Business environmental change

The fundamental changes in business world have forced the HR function to shift and put the HR function into an important status (Schuler, 1990). These changes include the uncertainty of personnel management caused by the rapid business change. They also include the increasing competitive pressure on profit forces the organizations to reduce the cost from various aspects including personnel management cost. The last but not the least change is the complex situation on employee management when there are more organizations running global business: such as managing employees of different business function, in different product lines, or with different culture background, etc. All these changes demand flexible and effective management style.

Service improvement

A basic function of HRM is to delivery its services to both internal and external customers, and it should ensure that the services are effectively delivered (Yeung, Brockbank & Ulrich, 1994). However, the traditional HR function only concerns the basic services such as selecting the right people for organizations, managing the database of employees, or assessing the employees. Now, the increasing demands from the customers force the HR function to be more valuable on its tasks. The value-creating activities, such as standardizing the work process and coordinating the tasks, can be done by HR professionals to help to resist the pressure from business environment (Mohrman & Lawler, 1997; Beer, 1997; Robertson, 2000).

Diversify of workforce

People are always the first priority of the business success. With the international business development, the workforce can be divided based on universal variables as gender, socio-economic status, geography, and generation gaps (Sagie & Weisberg, 2001). For example, the increasing number of aging people in the developed countries and changing values of the young generation in the under-developing countries require fundamental change of the tasks of the personnel management (Selmer, 2001). The multi-classifications of employees lead to diverse value and multi-cultural working environment, which asks the HR professionals to create harmonious organization culture and widely acceptable work values.

Development of technology

The last driven force for HR function transformation is the technology advancement. The technology enables organizations to improve their business competence through various aspects.

For example, technology changes the management of information, and releases the burden of publishing information of HR department. The rapid technology changes also ask for HR professionals to get new skills through education, or sourcing HR professionals who have certain IT ability. Yeung *et al.* (1994) report that more than half of the companies which they interview have used the HRIT to integrate their databases, and their information system provide better information access for managers and employees. Moreover, Sagie and Weisberg (2001) perform research about HR function in companies in Israel and find out that the technology levels have divided the HR department into two parts: the high-tech and low-tech sectors. The high-tech sector focuses on the strategic issues while the low-tech sector deals with traditional tasks. The HR function needs to adjust itself to maximize the benefit of using HRIT.

3.2.2 HR function transformation process

Definition of transformation

Transformation is defined as the “the act or an instance of transforming” or “the state of being transformed”, as from the “American Heritage® Dictionary of the

English Language, Fourth Edition”¹. When we look at the word root of “transform”, it can be divided into two word roots – “trans” and “form”. “Trans” means “change” while “form” is “the shape and structure of an object” or “the essence of something”. Thus, “transformation” can be comprehended as “the changing of appearance or form”, and it can also be “the changing of nature, function, or condition” (Hornby, A. S. & Wehmeier, S. 2000).

Appelbaum and Wohl (2000) define transformation based on the meaning of change. They consider that both change and transformation are making something different from previous status. Change offers the development in certain fields when such alternation is required. The objective of changing should already exist and the result of change is to make things dissimilar or even better. On the other hand, transformation focuses on creating new things that do not exist before besides improving (they also define continuous transformation as “reinvention”). Thus transformation emphasizes making new context to make thing work better.

Stockport (2000) thinks that transformation is also a kind of change but more radical, and more likely to happen internally, concerning an organization. Such transformation may occur in the systems, structures, employees or culture. It is a wisdom way for long-time survival.

Stockport (2000) divides transformation into four stages, namely “unconscious incompetence”, “conscious incompetence”, “conscious competence” and “unconscious competence”. In the beginning stage, most people in the organization do not feel necessary to transform, nor do they have the relevant ability to manage it. After this period, they start to consider the possibility of changing although still no action is taken, which is marked as “conscious incompetence”. The third stage is the core of whole transformation process. The factors, such as the participated managers and employees, information technology, and knowledge management, need to be taken into account at this stage, and to develop a “conscious competence” to make the transformation happen. Finally it is the maturation stage – “unconscious competence”. The transformation is finished, and new system replaces the old one in daily business.

¹ Transformation. (n.d.). *The American Heritage® Dictionary of the English Language, Fourth Edition*. Retrieved October 19, 2008, from Answers.com Web site: <http://www.answers.com/topic/transformation>

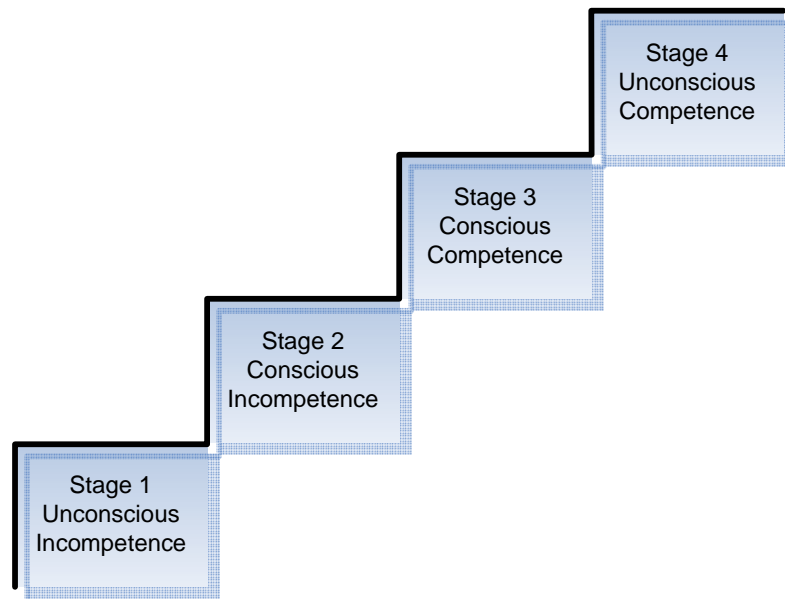


Figure 3.7 Transformation development process (Stockport 2000)

Based on the definitions from dictionary and literatures, in this thesis, transformation is defined as an advanced form of change, which emphasizes radical changes that create new context to make things better rather than its appearance or form becoming different. Most of the authors think that transformation is kind of change, because both of them are making things different (Stockport, 2000; Selmer, 2001; Rowley & Bae, 2002). Furthermore, transformation is more “radical” and “innovative” which focuses on changing from the fundamentals. The competence, creative mind and technology support are needed. It should appear at the fundamental and essential place of an organization. The factors involving in the transformation must assist strongly on the transformation procedure, which includes: (1) Leadership – the strategic leaders should hold the blueprint of the whole transformation process with which they encourage and enforce the transformation happen with clear direction. (2) Information management – people who try to manage the transformation should gain enough knowledge or make sufficient use of exist knowledge that can be the source to develop the solutions to smooth and add value to the transformation process (Klaila, 2000). (3) Employees – no matter where the transformation happens, people got involved should be motivated to challenge and accept the new wisdom of doing things (Stockport, 2000). (4) Future development – each aim of the transformation is for long terms survival and development of an organization. The changing of technology and customers’ need demands today’s transformation to be based on the vision of future.

Transformation of the HR function

A transformation in HR function can be interpreted two aspects, according to the etymology: firstly, the main tasks of HR professionals have changed. A slow and gradual change in HR department, by redesigning its structure, or out-sourcing the whole HR department (Mohrman & Lawler, 1997; Knapp, 2004), happens to meet the demand of the organization (Selmer, 2001; Rowley & Bae, 2002). The center of the HR work is no longer the basic administration, but it moves toward the management consultant and strategy aspects.

Secondly, it is a change of management level. An obvious change is the participation of line manager and employees into the staffing issue along with the HR professionals.

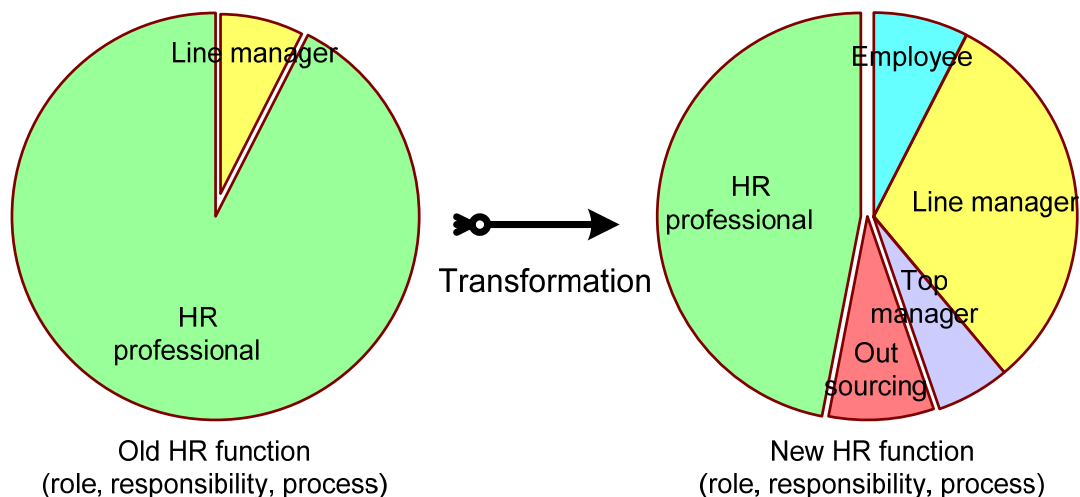


Figure 3.8 Transformation of the HR function (no exact percent of distribution should be drawn from it)

In short, transformation is business processes that changes the tasks and expands the involvement of actors in HR function, and, which makes HRM concentrate more on strategic, value-creating activities for the long-term business objective.

3.3 IT in HR function transformation

3.3.1 Form of HRIT

HR data has various forms, including historical and current policies, job records, employees' personal data, training programs, individual performance details and so on.

The HRIT provides the possibility to store and repeatedly use the information as electronic database, which could be accessible by anyone, anytime and anywhere within the organization. For HR function, the HRIT can be applied into HR tasks and help improving the HR service delivery. The application of IT into HR process can be done via the web-based tasks application. The information publishing, for instance, is a simplest and easiest implementation of the HRIT (Gardner, Lepak & Martol, 2003), which is kind of one-way communication from the higher management level to lower ones. The information can be the policies, news, and publications from the organization. Although this simple function only needs to provide the information through the website, it benefits the organization through the reduction of printing cost, the instant delivery of the information on-line, and re-accessibility to information at any time.

The higher-level application of HRIT is the automation (Gardner, Lepak & Martol, 2003): to use IT to manage the workforce data. At this level, the HRIT uses the intranets together with internets. There are two kinds of data: one is the individual data of all employees, and the other is the business data, such as the structure of the organization, position arrangement, wage scale and so on. These basic data are used for all the HRIT applications for HR function. HRIT automation can reduce the amount of the routine works, such as business records maintenance, which previously must be done manually by HR professionals. Now, employees can update their information by themselves, and HR professionals can be freed from the time-consuming tasks, and focus on interpreting the information (Gardner, Lepak & Bartol, 2003).

The third level is the interaction level, which goes beyond simple information publishing and basic automation, and provides advance benefit and effectiveness for HR function (Tansley, Newell & Williams, 2001; Gardner, Lepak & Bartol, 2003). Individuals not only can obtain information from the

HRIT platform, but can return their feedbacks. By selectively filtering information, employees can take the initiative to self-plan their career, which turns the job planning from department-orientated to employee-orientated. Moreover, the interaction function can link the different departments together to share the service and use the public information to reach harmonious work flow. Through the interaction of work flow and exchange of data, both internal and external HR professionals can carry on the cooperation of the ceaseless HR program.

The highest-level of HRIT application involves envision of the HR function. From the information to automation to interaction and then to envision, HRIT starts to move the HR function beyond the traditional focus, out of the boundaries of HR department, and towards a strategic one. Based on the abundant data, HR professionals can obtain the information through data statistics and analysis, like program achievements assessment, employee training, appraisal record, and so on. Further, they can use statistics results to formulate strategy to meet with the future demand on the human resource of an organization, and plan salary-scale of employees regarding to financial balance trend.

Both the HRIT application and the HR function transformation have impact on each other. The transformation of HR function requires powerful tools to assist and help managers and employees to do things better and do better things. On the other hand, the application of HRIT makes the transformation of HR function become realistic, and to some extent, changing the HR function radically – it requires HR professionals to learn the new and mixed skills for HRIT, and attracts HR professionals to pay attention to HRIT supportive and transformational activities. As a kind of the new HR function pattern, the HRIT is the software platform that moves HR function toward the network and knowledge based activities.

3.3.2 HRIT in HR function transformation

While the application of HRIT in human resource services has been developed since 1990s, the effects of IT on HRM are broadening over years (Florkowski, Olivas-Lujan, 2006). Considering its ability of contributing to the overall performance of organization, HRIT supports the fundamental transformations concerning the HR function.

Interaction model

Hempel (2004) has developed a model of the interactions between the technology and the HRM, including the design of the organization and work, the HR professionals, and employees. According to the model, a new development of technology can cause the changes in reengineering the organization and work design, which changes alter the outcome of HR practices. HR professionals get more powerful technologies to foster changes happened within organization, through managing the innovative and knowledgeable employees. From this opinion of view, the relationship between HRIT and HR function is kind of interaction. Hempel (2004) considers that the HR professionals are on the catch-up position. Due to the fact that the technologies first change the structure of the work, such as virtual global work groups, HR function needs to evolve in order to support these changes. HR professionals already involve into the redesign process, thus they need deep understanding of the business on both operational and strategic sides to handle and support the innovation.

HRIT functions

When considering the impact of HRIT on the HR daily activities, some researchers have examined HRIT from its functions, such as the e-recruiting system, e-selection system e-performance system, and e-compensation system, and pointed out that HRIT can have both positive and negative influences on HR function (Stone, Romero & Lukaszewski, 2006). Through the investigation on these functions, the understanding of HRIT influence on the transformation of HR function can originate from the information flows, social interaction patterns, perceived control of individuals and system acceptance (Ashbaugh & Miranda, 2002; Stone, Romero & Lukaszewski, 2006).

Information flows

The application of HRIT can change the information flows significantly, due to the fact that the system enables users more efficiently to collect, disseminate and access the information (Stone, Romero & Lukaszewski, 2006). For example, in the recruitment, without the face-to-face interview and inquiry HRIT can make the applicants easier to collect information about jobs and to access to the HR professionals. In another case, HRIT can provide more frequent feedback to employees, and improve the supporting capability of an organization. Moreover, the information flowing among the various departments can help the HR professionals hold the complete and consummate information for strategy making. Although HRIT has increasing

an organization's ability on data collection and management, there still some limitation on this aspect. For instance, the e-performance management system may not have the capacity to measure all the behaviors of the employees (Stone, *et al.*, 2006). The system can measure the quantity, but not the quality. Thus, HRIT allows the HR professionals to manage large amount of information with great accuracy. The automation of HRIT is thought to be the best way to improve the effectiveness, and it becomes a valuable contributor of HR function. But in some cases, the system may not be as useful as traditional methods (Haines & Lafleur, 2008).

Social interactions

The HRIT reduces the face-to-face interactions in organizations. Each member can be connected through internet, such as internal email and telecommuting system, so that work can be cooperated without the location constrain (e.g. working at home, international company). From this point of view, the HRIT broadens the interaction among the employees within the organization. However, on the other hand, due to the face-to-face interactions are decreased, HRIT may have negative effects on trust levels among managers and employees (Stone, Romero & Lukaszewski, 2006), which requires the HR professionals to rebuild the trust and relationship among employees.

Perceived control

The traditional personnel management is to control and monitor the employees. With the application of HRIT, whether the controlling of individuals is more effective than before or not is uncertain. From one side, the increasing employee and manager self-service asks for more participation in individuals. In this sense, such decentralization gives more freedom on management of employees (Ashbaugh & Miranda, 2002). The supervisors are reported increasing satisfaction on HRIT systems because the systems provide greater amounts of feedback and control over their employee's performance than traditional ways (Stone, Romero & Lukaszewski, 2006). On the other hand, the same HRIT system also has more tightly control on individual performance, due to reduce the freedom and controls levels of individuals (Stone, Romero & Lukaszewski, 2006). For example, the managers can exactly check the time of each employee spend on their tasks. It may lead to negative react to the e-performance management systems. Moreover, invalid data about the performance of employees, and employees may behave in rigid ways that

make them look good from the systems also damage the organization in the long run (Stone, Romero & Lukaszewski, 2006).

To sum up, HRIT forces the traditional HR function to transform, and changes the way of management. HRIT brings the ability for all members to simplify work, measure activities, provide instant feedback, and reduce wasted time (Ashbaugh & Miranda, 2002). The application of HRIT meets the need of end-users and real situation of organization. Otherwise, the decreased social interactions and negative effect on both quality control and information accuracy can damage the benefit of organization (Stone, Romero & Lukaszewski, 2006). HR professionals need to pay attention to deal with the drawbacks when enjoying the benefits brought by HRIT.

3.4 Research frameworks on HR transformation

The HR function is shifting from a traditional one to a strategic one, especially in the large organizations. In the small and medium companies, the HR function is likely to be the same as before, but the application of HRIT makes some parts of HR function, such as training system, information management, etc., changing towards the effective performance, better services and more profitable to organization. From the powerless and unvalued personnel management to the business partner and strategy developer, the HR function is broadening while the tasks division is clearer. To be specific, the HR function nowadays is adding with the new factors.

The internal performance of the transformation is the embodiment of multi-role of the managers; because new works and responsibilities are emerging, they start to shoulder emerging works, or change their objectives due to facing different tasks.

The devolution and decentralization of HR function indicates that quite some parts of HR tasks are separated out from HR professionals, specially being apart away from the center of HRM. More and more sub-units with their own HR specialists or line managers take the duty from the higher levels of the HR department.

Moreover, the internal changes are making HRM become an important strategic part of the organization, which makes tight relationship between business and HRM, and forces HR function to be more valuable. The strategic and business focus of HR function can more effectively utilize their people in

the right direction. The transformation of HR function is a continuous process. No matter which forms of HR function transformation take place, the final aim of HRM is to serve their internal and external customers better and better.

A radical transformation of the HR function is happening for the sake of adding value to business, improving service quality, or keeping organizational changes. That's why the HR function transformation is a popular topic in organization research for recent years. Most of authors argue about HR function transformation that HR professionals play a more strategic role in the organization. By contrast, other non-strategic roles are less concerned, making the relevant HR tasks and responsibilities transformed simultaneously. HR professionals are the valued member of management teams. They contribute to both the decision making and business strategy. The traditional HR function is to manipulate people under business policy, whereas, HR function now should motivate the performance and development of employees.

On the other hand, HR professionals integrate the performance management of line managers and employees. Line managers are important partners on helping HR professionals and are the direct contactors of employees. They implement the strategy and policy from HR professionals, and help employees to achieve the objectives of organization. Line managers take more responsibilities to handle HR tasks; the increasing burden of line managers also ask for tight relationship with HR professionals to get more assistance. HR professionals need to acquire new knowledge to understand the business and work with line managers, to satisfy customers and to create a committed and motivated workforce. Through playing the new role and gaining the new ability, the HR function becomes more important and strategic than ever before.

It should be noticed that some researches have put it as the way to reduce cost of HR activities (Mohrman & Lawler 1997; Brewster *et al.* 2006), although there is not much research from the searched literature about the outsourcing parts of the HR activities. The outsourcing can be the strategic activities, such as recruitment, training program, and acquisition of expertise from external experts who are not easily involved in the organization.

The HR professionals should also effectively utilize the information technology for work. The HRIT has impressive influence on the various aspects of HR function, such as value-creating, and it provides the opportunity for employee

positively take part in some HR activities. Hereby, the next chapter examines the empirical research about the HR function, its transformation and HRIT.

Table 3.1 Framework of HR function transformation

The direction of HR function transformation	Change in the content
Devolution & decentralization	<p>(1) The responsibility is distributed between HR professionals and line managers, Line managers start to involve and take the responsibilities of HRM function. The traditional personnel management is devolved to line managers. They are responsible for managing individual performance and instructing subordinates.</p> <p>(2) Technology change makes line managers mainly responsible for hand-in-hand personnel management issues, such as recruiting, coaching, paying, and dealing with employee's dissatisfaction. In small companies, line managers also should be decision-makers.</p> <p>(3) The HR function is decentralized from the central team to each business sub-unit. The managers are responsible for the strategic management within the teams at the local level. They focus on team or unit management, and put attention to the performance management.</p>
Focus on business & strategy	<p>(1) HR function starts to realign the HRM strategies with organization objectives. HR function shifts from rationale- and technology-oriented to strategy-oriented. HR professionals play the strategic role, as the guidance of general managers and their teams, which focus on attracting and developing managers, and creating efficient team-work.</p> <p>(2) HR professionals deliver the most direct handling issues to line managers and focus on the special issues of managers and team management. Meanwhile HR professionals spend more time on designing HR programs or system,</p> <p>(3) HR professionals pay more attention to business issue and customer demand while put human resource issue into the business strategies and operation plans. They develop policies to ensure good performance of employees and set standards to enhance HR function.</p>
Integration with other departments	<p>(1) The organization can develop a common approach for selecting, training and developing managers for different organization functions, such as marketing function, financial function.</p> <p>(2) The HR function make an integration process in the organization, such as the integration of departments, or of performance management system, and the personal development plans for different departments within the organization.</p>

Chapter 4 HR function transformation: Meta-analysis of empirical data

The HR function plays a critical role in contributing to the effective management and development of employee performance for an organization. As HR function is undergoing the transformation process, a stronger workforce can help improve the efficiency of the organization as a whole. And a more efficient and productive business can quicker and better respond to the changing circumstance, and gain more profit. The traditional time-consuming works, paper-based processes, frequent daily meetings, or skilled personnel losing can make it difficult for HR professionals to focus on value-creating business.

To improve the efficiency and capability of the organization, the transformation process of HR function has shown the direction to provide higher quality services. The future trend of HR function is to widely utilize information technology.

This chapter focuses on reviewing empirical data from literature, to find out how the HR function is transformed in organizations, and how information technology impacts on HR function transformation.

4.1 Actors involved in HR function nowadays

Based on the definition of Valverde *et al.* (2006), the understanding of HR function should consider all the levels of people in the organization that participate into the HR activities. In the following paragraphs, the HR function is explained according to each role, or each management level, to find out how the HR function distributed among different agencies.

The role of the HR professional

There are many research investigations proving the existence of continuous transformation in HR function nowadays. Some of them show that the HR function tends to be more strategic, especially on internal professional consulting and decision making.

In Caldwell's study (Caldwell 2003), he tries to map the changing role of HR professionals within organizations with comparison to the theoretical ones. He

discusses two models concerning the development of HR function: the Storey's "four roles of personnel managers" and Ulrich's "four roles of HR professionals", which are the starting points to understand the trend of the role of HR professionals. He also surveys 350 UK companies and finds out that the most significant role of HR professionals is *advisor*. They act as internal consultants to serve internal customers through consultancy or advice. They also assist line and general managers in the organization to make management decision. They tend to be potentially strategic and business-oriented to have more influence by holding resources or power. Another important role of HR professionals is *HR director*, who is considered as the similar function of *HR service provider*. Both roles are responsible to make the HR management activities effective, to enhance HR function within organizations and to restructure HR process to achieve higher level of service standard. Whereas, beyond the role of *service provider*, Truss *et al.* (2002) find out that *HR director* should develop policies, be responsible for decision-making under the changing business environment, and set standard to ensure the performance of employees. The last role is the *HR executive*, who works as strategic decision-maker (Beatty, Ewing & Tharp. 2003). He/she sets new strategic objectives and involves in decision process, and influences the final business strategy setting. Being different from previous models, the *HR executive* not only focuses on strategic issue, but also needs to participate in individual management. He/she should assist employees to solve personnel problem, increase communication within organization and help managers to work more flexible.

Andolsek and Stebe (2005) mention another role of HR professionals in their research: *mediator* in the industrial relations between managers and employee in organizations. The *mediators* are relationship builders. (Lengnick-Hall & A. Lengnick-Hall, 2003). They are responsible for developing, nurturing, mentoring and supporting the relationship among the top, senior and line managers. This can be achieved through training, coaching and supporting to ensure that the relationships between every party are in the right direction. HR professionals should foster the organization culture, develop common working process, and ensure the communication and interaction is positive. Although the communication function is on the transaction direction (Lepak, *et al.*, 2005), it is indispensable when certain HR activities are outsourced or involved in IT application.

The factors that affect HR function have been studied as well: the organization size, different sections within organizational and national locations, and the strategic choices of organizations all have influence on HR function. Brewster *et al.* (2006) survey by sending questionnaires in 17 European countries in 1999 and 2000, and find out that the large organization turns to have small HR department and to concentrate on the basic HR function such as administration. Most HR function is outsourced, such as recruitment, training program, and even strategy exploration. The small or medium-sized organizations hold large HR department to be responsible for the internal relationship, staff development and commitment enhancement to keep their employees. Also, Som (2003) reports the research at Lafarge: the HR in Asia mainly acts as business partner and culture builder; in Europe and the US mainly it works as trainer and in Africa plays as change-agency to lead the changing activities. The HR roles are transformed from the parent company in French and have their own significant roles in each region.

Truss *et al.* (2002) have done the research about different roles of HR professionals in different types of organizations (profit vs. non-profit) for eight years, from 1992 to 2000. They study the HR function in two organizations, National Health Service (NHS) and Citibank. In NHS, the HR professionals assist the employees, by creating effective communication channels between different work levels, and by making flexible working arrangement. Meanwhile in Citibank, the senior HR managers work as the internal consultant in stead of assistant for their employees. Another factor, the national difference also contributes to the functional distinction in HRM. Jacoby, Nason and Saguchi (2005) have studied the national difference in HR function. They make mail survey to 229 Japanese firms and 145 U.S. firms. The results show the HR departments in both countries are responsible for executive decision-making. In Japanese, the main tasks of HR executives are responsible for employment administration and labor relations, that is to say, they put attention to individual employees. But in U.S. companies, the functions of HR executives have changed a lot. In the past, it provided services to help the career development of employees, coordinated line management, and supported employees; now, the executives focus more on executive and strategic issues.

Despite of the different situations of organizations, most of the HRM sections do not take the general activities as before, such as operational decisions and daily personnel management, but start to expand into strategy and policy decision, and the management level rises from operational level to strategic

level. Nevertheless, the HR professionals work more as consultants for subordinates with the devolution of HRM tasks to line managers, and employees.

The role of the line managers

The most important change of HR function is the participation of line manager and it even becomes the priority responsibilities of line manager. In recent years, many organizations have started to decentralize the management functions and the role of management has also been redefined. The fundamental and traditional role of HR professionals as administrative expert does not shift to strategic focus, but basically it is delivered to line managers.

Hales (2005) has made face-to-face interview in 135 organizations in London and the southeastern part of England to study the supervision and find out that the supervisory function is the main function of line manager, which was done by HR professionals. This traditional function includes translating the organization policies into action and operations, helping smooth the production process and giving support to their employees. The role of the line managers is defined as routine administrator, or consultant for their employees. He also finds that most of the researches about management after 1980s have pointed out that the traditional type of direct supervisory is under modification to suit the changing situation. The supervisory is still the core function of line managers but they also involve in business and personnel management as the role and management responsibilities are broadening. These management activities mainly concern the administration of individual employee performance, such as motivation, communication and monitoring. The line managers are more like the team leaders and “unit managers”. Francis and Keegan (2006) also find the same phenomenon in their 200 interviews on HR professionals in UK and Ireland. With the technological change, lots of HR professionals’ tasks and hand-in-hand jobs are transferred to line managers by devolution, and the line managers are dealing with employees’ personnel issue, such as coaching, and handling employees’ dissatisfaction.

Further more, McConville (2006) has studied the role of middle line managers in three public organizations: National Health Service (NHS), Armed forces and the Fire and Rescue services. In this study, McConville tries to put forward new understanding about the new phenomenon that appears on the middle line managers. The author points out that the role of middle line managers is confusing and unclear in public organizations, as they undertake additional

management activities and responsibilities in HR function. In the three studied cases, the middle line managers participate in the management activities of their staffs, such as appointing, training, and translating policies. They hold the role as co-coordinators between top managers and employees, at the same time they collect and distribute information for both parties. The middle line managers should take the responsibilities for those activities; however, they lack of power and authority to performance the managerial tasks. Such situation often makes the role of middle line manager ambiguous and powerless. That's why the relevant power and competencies of the line managers, who are involved in the personnel issues, should be enhanced.

In short, the line managers start to take additional responsibilities. Although in different organizations, the role and tasks of line managers are not exactly the same, most of them focus on the daily personnel issue, and have to build the relationship with both HR professionals and employees. To some extent, line managers are the “bridge” between the higher management level and lower working level.

The role of the employee

The HR function is shared by employees as they are taking the responsibilities of self-management and self-service. This is more notable when the HRIT is applied for supporting HRM. The information technology enables employee to access and manage their own records, get welfare information, and arrange the travel or vacation issue. Thus, the employees can provide the information instantly, and the HR professionals are free to focus on other activities (Ashbaugh & Miranda, 2002).

The role of other participants

Apart from HR professional, line manager and employee, Valverde, Ryan and Soler (2006) say the other agents may be involved in the management of people, including top manager and external HR agencies.

Their research results reveal that the top managers involve in almost of all HRM activities – hence HR function is shared and led by top managers. First, the top managers have priority on strategic making and leadership activities. Second, top managers also involve in various HRM activities. The research suggests that top managers are heavily involved in administrative tasks and daily personnel management, such as determining the type of contract, and organizing the training resources.

They also find out the fact that there are external agencies participating in most of HR activities. This does not imply that the degree of outsourcing is very high, but it covers a wide range of HR activities. And the research results show the training, administration and technical activities are the most outsourcing HR activities.

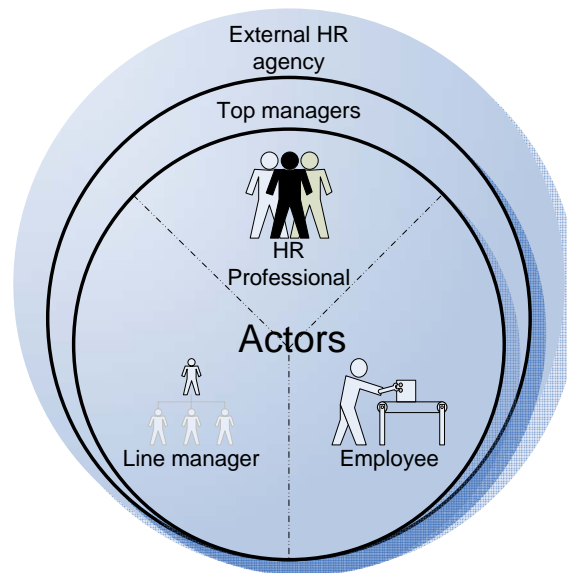


Figure 4.1 Actors involved in HR function nowadays

As conclusion, to broaden managerial levels participated in the HR activities is the trend of future HRM. The HR function nowadays is shared by HR professionals, line managers, and employees. In some organizations, the external HR experts are also invited to take some tasks, being an important actor of HR function.

4.2 HR function transformation

Under the transformation stage, HR function is broadened, devolved or rotated, which confuses the understanding of HR function. Reviewing previous studies on HR function, Caldwell (2003) points out that most managers do not work as the role that they are supposed to be, or see themselves as multiple and conflicting roles. He argues that in most cases, the researchers describe the HR function as the isolated responsibilities of whole HR department, and do not give clear distinguishable roles of the different people within such department. In some other studies, different researchers do their research based on different countries, organizations and business environment, which results in various roles and functions.

Despite different descriptions about the HR function nowadays, however, the trend of HR function transformation is basically similar, which can be summarized as following three key points.

Devolution and decentralization HR function

Both devolution and decentralization refer to delivery the tasks and responsibilities to lower level (Yeung, Brockbank, & Ulrich, 1994; Beer, 1997; Ashok, 2003; Hales, 2005; Andolsek & Stebe, 2005; Björkman & Soderberg, 2006). This distribution of HR responsibilities shows the trends and reveals the transformation direction of HR function.

The devolution is not as easy as the HR professionals hand out the tasks to their line managers; HR professionals should also learn to work with line managers to integrate the management practice of whole organization (Yeung, Brockband & Ulrich 1994; Mohrman & Lawler, 1997). Furthermore, HR professionals still hold their duties to help line managers to attract and retain core staffs for organization. When HR professionals make job devolution, they should bear in minds how to organize a better way for management. Since their time and energy are released from the daily, repeating work, it is the time to gain more competencies on workforce diversity management, talent management, and plan development (Schuler, 1990).

On the other hand, line manager has been the main partaker in HRM today. When the HR tasks and hand-in-hand jobs are devolved to line managers (Hales, 2005), they work both as the daily supervisors and the administrators to deal with employees' personnel issues, such as recruiting, coaching, supporting routine practices, and managing individual performance (Francis & Keegan, 2006). They join the advisor role of HR professionals to give instruction to their subordinates.

Line managers also involve in the tasks such as recruiting management. In 1990, Schuler has found that recruiting management become a job of the line managers in a 10 year survey. Since then, there are more literatures concerning with line managers' involvement in HR function, which shows that line managers had shared more or even integrated the management practice of whole organization with HR professionals (Yeung, Brockbank & Ulrich, 1994; Mohrman, & Lawler, 1997).

More recently, the line managers have shared or taken over the roles of HR professionals, which make the transformation happen, as studied in Nordea's

case (Bjorkman & Soderberg, 2006). Apart from this, Hales (2005) has made the interview in 135 organizations, and reveals that the central task of line managers is daily supervising, and the rest tasks are associated with more diverse roles: coordinator, trainer and foster which have been part of the HR professionals. Most of the time, line managers decide the number of employees, meanwhile, HR professionals maintain the relationships between employees and employers (Andolsek & Stebe, 2005; Francis & Keegan, 2006).

Furthermore, line managers are also responsible for personnel issue, which has been handled by HR professionals (Andolsek & Stebe, 2005; Björkman & Soderberg, 2006). In some organizations, the line managers are even responsible for the strategic management within the teams at the local or unit level; HR professionals should act as consultants to assist their line managers (Truss *et al.*, 2002). But sometimes, line managers need to take more tasks when HR professionals leave to them.

Comparing to devolution, decentralization not only concerns about the tasks being delivered to line managers, but also devolves HR function onto sub-units. It relocates the HR function within different business levels or business units (Bjorkman & Soderberg, 2006). This happens due to the fact that the organization is an international one which requires each subsidiary company has its own HR professionals to meet the local requirement, or other departments with special requirements on HR issues also need own HR professionals. For the multinational or global HRM, HR professionals must learn the local political environment and law to build their own HRM system legally and obey local rules; on culture aspect, to build enterprise culture is deeply influenced by the local society and culture. The differences exist not only between countries, but within different national interior areas as well.

Unlike the centralized HR department, the HR professionals in sub-units are less strategy orientated, and sometimes, use unqualified staffs to play HR roles. They help to train business managers to be international and ensure that the employees have the ability to work in cross-cultural teams (Som, 2003). On employee issue, they can make decision on the number of employee, and staff selection process (Andolsek & Stebe, 2005). Yet some of them have the decision power on strategic issue, but most of the sub-unit HR professionals still work on administrative jobs. However, although most of the HR function can be decentralized at the business level, the tasks such as employee relationship building, resourcing, equal opportunity strategizing and

executing still are held by HR professionals in core position of organization (Yeung, Brockbank & Ulrich 1994).

Strategic and business focus

No matter whether it is devolution or decentralization of HR function, the significant benefits brought to HR professionals is to gain more time to concentrate on the strategic issues.

In 1990s, there are many researchers focusing on the changing of HR professionals. Jumping out from the bounds of supervisor role, HR professionals act as consultants for the line managers instead of program-delivery role, and HR professionals involve in strategic planning from people-management point (Schuler, 1990; Yeung, Brockbank, & Ulrich, 1994). Bjorkman and Soderberg (2006) collect their research data through 60 interviews with HR managers in Nordea, and disclose that the HR department has more influence on strategy making and implementation. HR managers work mostly as the business partner, while other functions are declined or delivered to line managers.

At the same time, start realignment the HRM strategies on business issue, which mean there are additional new tasks, such as plan development, talent management, etc. The traditional personnel management focuses mainly on managing employees, and pays attention to their inherent capabilities. The HR professionals nowadays not only needs to control the employees, but focuses on the development of employees with potential and constantly stimulation of their motivation, while the final aim is to serve the whole organization. They provide training and studying program to help workforce to reach new qualification level, keep competitive knowledge and skills, and maintain the advance of business (Gutierrez, 1995). Moreover, the HR professionals should also make forecast and plan to meet the various demands of present and future human resource of organizations (Ulrich, 1997).

Diversified and dissonant roles

The traditional HR activities have started to become multi-dimensional. Apart from completing the administration work efficiently, HR professionals should have an adequate understanding and knowledge about their business, doing a good job in service work, and supporting the development of organizations. The roles of HR professionals are diversified to meet the multi-dimensional activities, while the roles are dissonant at the same time.

Lepak *et al.* (2005) claim that the traditional HR function has diversified into two directions: a transactional one and a transformational one. The transactional activities include employee services, record keeping, benefits administration, and performance management. The transformational activities focus on the strategic planning, organizational development and knowledge management. The HR function is considered to be more likely to retain service delivery internally when it become more transformational; while it turns to be transactional, it is outsourced for cost reduction. Many researchers have considered the transaction is part of the transformation process, based on the fact that HR professionals can use outsourcing or HRIT to deal with the activities in a more strategic and valuable way (e.g. Truss *et al.* 2002; Brewster *et al.* 2006). When the dividing of tasks into transactional or transformational ones is not clear, HR professionals have to go back to do the routine work, which is supposed to shift to line managers.

At the same time, the roles of the HR professionals are dissonant. In 1997, Ulrich publishes the four-role HR professional model, which broadens the jobs and responsibilities of HR professionals, and all basic issues of personnel management are considered to belong to HR department. But some researches have found the HR professionals are not exactly the four roles that they are supposed to play, and the administrative and strategic roles are not always assigned in the same function (Beer, 1997). At the same time, the line managers start to handle some of the personnel issue.

Caldwell (2003) has found that the HR roles are more multiple and conflicting than before. The study is based on a survey of 350 UK companies, and the results show the HR roles are not exactly the four mentioned in Ulrich's theory (1997). The most notable point is that the service provider and regulator are declined in Caldwell's result. Some HR managers see their main role as advisor or change agent, and the respondents also think that they have at least two other significant roles; by contrast, many people claiming that they do not have a main role.

Moreover, such conflict between theoretical and realistic aspects can be seen in the development of Ulrich's model as well. The roles from the model of Ulrich and Brockbank 2005 change a lot comparing to the 1997 model: the fours HR professional roles increase to five, with some roles disappearing and some roles taking more responsibilities. The administrative expert is not a role belonging to HR professional any more, and change agent becomes part of the strategy partner. These five roles of HR professionals in Ulrich and

Brockbank 2005 model mainly concern the leadership and strategy issue. HR professionals trend to work more closely with their internal and external customers, making their business more competitive and customer-oriented (Caldwell, 2003).

Integration with other departments

The point of “HR professional performs as a business partner” has been discussed in many articles (Svoboda & Schroder, 2001; Francis & Keegan, 2006; Bjorkman & Soderberg, 2006). HR department sets closer relationship with the whole organization than before. One of the evidences is that the line managers share the HR function. Line managers are the executors and proponents of HR policies and strategies, at the same time, the line managers are the policy-makers and executors of own department. Line managers are more familiar about the situation of own department. Thus, HR professionals should assist the line managers to connect the aim of department with whole business objective, and help line managers on HR tasks (Kraut, etc. 2005). Based on above idea, the new relationship – the gradual infusion between HR department and other functional departments is shown as below.

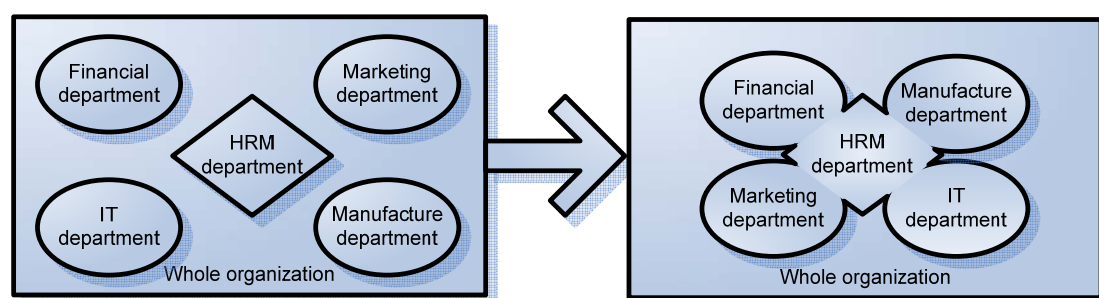


Figure 4.2 Integration of HRM and other departments in an organization

In short, the HR function is moving toward a strategic one optimizing all the human resource to create the most valuable and competitive power for organizations.

4.3 Role of IT in the transformation process

In order to examine the role of HRIT in the HR function transformation process, the overall study of HRIT based on large data evaluation is used. About four-fifth of researches are non-theoretical and to examine the real situation of the application HRIT in organization (Strohmeier, 2006). Some of them are based on certain sub-function of HRIT, such as web-based job analysis, and

e-learning program (Shrivastava & Shaw, 2003; Hempel, 2004; Palmon, etc. 2006); some are based on single case study to examine the influence of HRIT application on management changing (Tansley, Newell & Williams, 2001; Neary, 2002). Following paragraphs discuss about HRIT from the diffusion of HRIT in different countries (Florkowski & Lujan, 2006) to the impact of HRIT on HR professionals, and HRM effectiveness (Gardner, Lepak & Bartol, 2003; Haines & Lafleur, 2008).

Hussain *et al.* (2006) have done the research on “The use and impact of human resource information systems on human resource management professionals”. They investigate the information system usage in different sizes of companies, and the impact of information system on HR professionals. They survey HR professionals in 450 organizations in UK by questionnaires and 11 senior executives by in-depth semi-structured interviews. The results show that, the size of organizations does not have strong influence on information system usage. The application of IT can enhance the strategy partner role of HR professionals, independent of the sizes of organizations. The researchers also noted that the HR professionals can raise the standing of organization through strategic use of information system. In a word, the application of information technology can provide value-add and raise the status of the HR professionals as a whole.

Florkowski and Olivas-Lujan (2006) have studies HRIT from a different point of view. They have evaluated eight information technologies that transform HR service-delivery in North America and Europe, including HR functional applications, integrated HR software suites, interactive voice response systems, HR intranets, self-service applications, HR extranets and HR portals. Through the investigation of the application and usage of these information technologies, they try to find out the impact of HRIT on different HR agencies. This research applied external-, internal- and mixed-influence models to find out the HRIT-adoption decisions of cross-sectional samples of US, Canadian, UK and Irish firms. The senior HR executives of 1,400 companies are invited to attend the research and in total 216 valid responses are obtained. The study finds out that the overall diffusion is considered as internal influences, and the primary end-users are mainly the HR professionals, following by internal customers, if certain HRIT has been implemented and employees are authorized to use the intranet directly. No matter how different the national settings, targeted end-users, or technology types are, these factors do not influence the research results. And the HRIT and HR-transaction automation

require for more formalized HRIT strategies at the organization-level to coordinate business decisions. This supports the idea that the HR professionals are the first and main undertakers of HRIT application. The HRIT holds the HR function as a unit, and offers the automation of discrete tasks and responsibilities that are assigned to the HR function, which provides effective delivery of HR services.

Under the authorization from HR professionals, line managers and employees can use the HRIT to participate into the HR activities, which enables employees with direct access to collect internal databases with web-based applications, and gives them the freedom to access the work-related information (Gardner, Lepak & Bartol, 2003; Florkowski and Olivas-Lujan 2006).

Gardner *et al.*, (2003), in their research work, investigate the influence of extensive use of IT on HR professionals. Furthermore, they also examine how HR professionals handle the HRIT as well as how the expectations are placed on them due to the increasing reliance on HRIT. They mail surveys to 1814 HR executives from SHRM (Society for Human Resource Management), and finally get 455 completed surveys. The results indicate that the more extensive use of HRIT, the greater information autonomy for HR professionals. At the same time, extensive use of HRIT requires HR professionals to spend more time on IT supporting activities, and turns HR professionals to focus on developing IT-based HR applications. In addition, line managers are reported with increasing time spending on both transformational activities and HRIT supporting activities. Moreover, the study also notes that additional factors may influence the relationship between the activities of HR professionals and IT. The finding suggests that IT can reduce routine work and allow better information communication and autonomy, which leads to fundamental change in the nature of HR professionals' work.

Application of HRIT has transformed the traditional way of working, but only successful implementation and usage of HRIT can offer an advantage. Upon that, some researchers have investigated the influence of IT on effectiveness of the HR function.

Stone *et al.* (2006) have studied the factors that affect the acceptance and effectiveness of HRIT. The primary purposes of the research are to consider the impact of e-HR on a set of human resource processes (recruitment, selection, performance management, compensation) and the impact of

individual and organizational factors on the outcomes of e-HR. They focus on four major variables – information flows, social interaction patterns, the perceived control of individuals and system acceptance, and apply the variables on the above human resource processes.

In conclusion, the researchers argue that for both individual and organizations, the e-HR systems have showed a number of functional and dysfunctional consequences. For individuals, if the following conditions can be met, the application of HRIT system can be accepted by individuals and result in functional consequences: First, the information flows should be valid and bi-directional between and among individuals and systems. Second, social interaction among individual should be promoted. Third, the use of systems should be controllable. The authors noted that such systems have the potential to increase organization efficiency. For instance, they give great freedom and increase the ability for individuals on accessing to information. Nevertheless, the usage of systems may decrease social interactions and affect the quality and accuracy of information. In order to enhance the acceptance and effectiveness of e-HR system, the researchers recommend two points. First, the organization may use the systems to collect data about performance and feedback, and the face-to-face interview can not be ignored and should be organized periodically. Second, the use of computerized monitoring systems, which greatly limit the freedom of employees, should be minimized.

Haines and Lafleur (2008) examine the possible influence of IT on the roles and effectiveness of the HR function. They send mail survey to 1556 senior HR executives of leading Canadian corporations, and get 210 questionnaires returned. The results reveal that the more frequent use of IT-supported HR applications, the more effective on strategic issue of the HR function, and this point of view is supported by other studies, Sam Ashbaugh *et al.* (2002) and Hussain *et al.* (2006). They argue that the HRIT allows HR professionals to manage large amount of information with high speed and accuracy, which leads to more efficient information management. Therefore, they conclude that the powerful IT applications are associated with the increasing involvement of HR professionals in the role of change agent and the strategic role of business.

In conclusion, HRIT provides the opportunity for everyone to participate into HRM activities. HRIT supports various information flow among organization members, regardless the limitation of time and space. Thus, HR professionals can command and support their line and sub-unit managers to decentralize HR activities; meantime, such system can also provide the possibility to check the

outcome and feedback of the performance. With HRIT, HR professionals can jump out from the boundary of traditional HRM, focus on more strategic and consultative activities, and realize HR function transformation for value creation and delivery.

4.4 Chapter summary

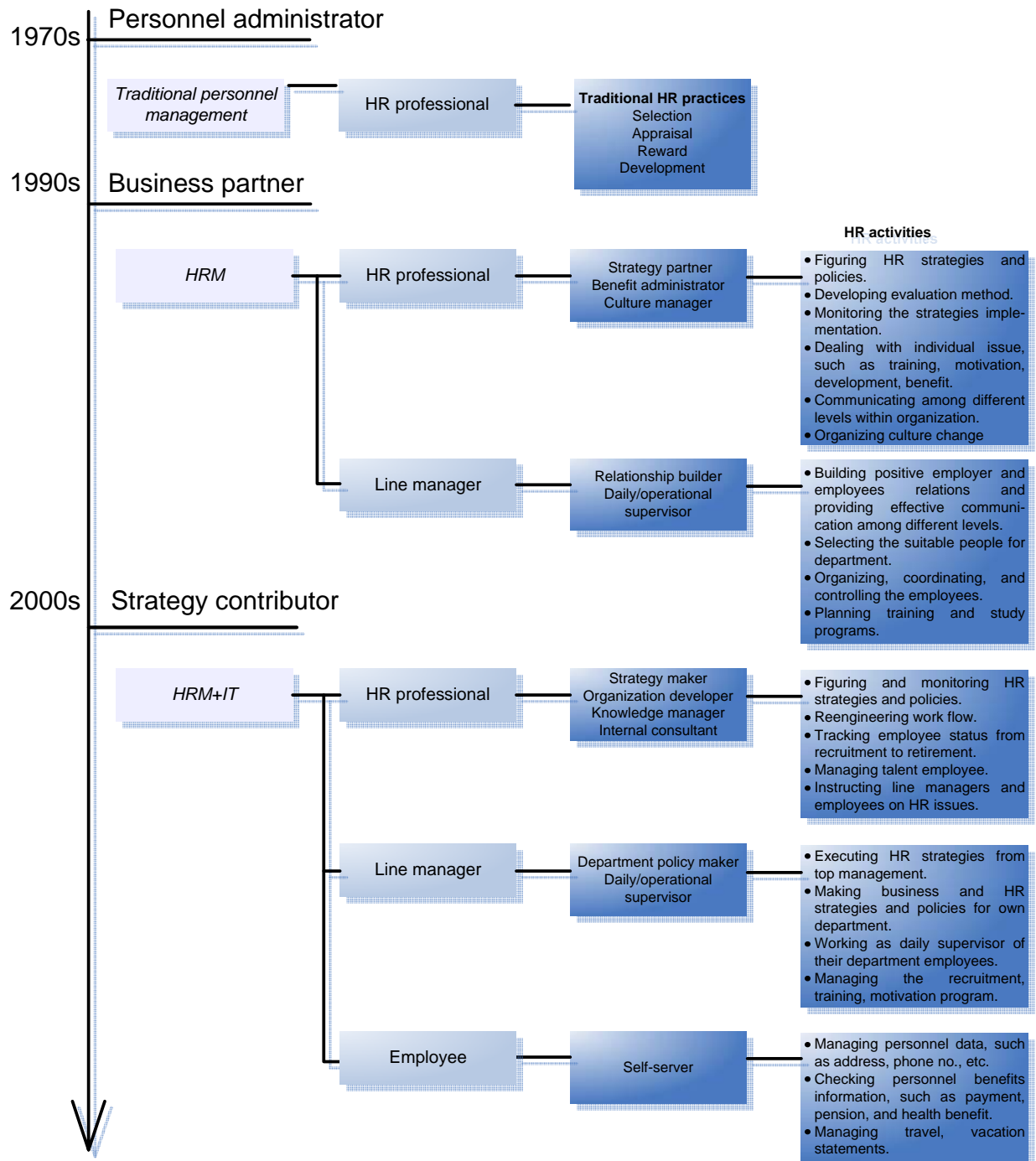


Figure 4.3 the transformation of HR function (1970-2000)

Under the environment with HRIT, the HR function among HR professionals, line managers and employees becomes more specific. On one side, the HRIT impels the decentralization of whole HR function, because the HR function has jumped out of the control of HR professionals and been shared by line managers and employees. For both line managers and employees, the HRIT enables them to participate in HRM process, and empowers them the independence of management. On the other side, the extensive use of HRIT makes the HR function of HR professionals become more centralized. The HRIT impacts the HR professionals' function through providing both IT support as well as the information flow among employees, including establishing the information system for organization and adopting specific application in the HR areas, such as training, payroll and evaluation.

No matter how deep the application HRIT is, or which kind of the HRIT is adopted, the direction of HR function of HR professionals is moving toward the strategy partner. Beyond the automation working process of HRIT, HR professionals enrich their roles through being customer-oriented (serving both internal, external customer, and the whole organization), being professional consultant (intervening in the policy building for top managers, the policy instructing and activities organizing for line managers, and the administration centering for strategy management of employees), and implementing knowledge management (building expert center, fostering creative culture by self-management and HRIT development).

In short, HRIT provides the platform and opportunity for HR function transformation, and shifts the traditional HR function to technology-based new function. HRIT has changed HR professional radically from the traditional personnel manager to strategy partner.

Chapter 5 Discussions and conclusions

5.1 Discussions

As put forward in the introduction chapter, the main research question for this research is as following:

What is the role of HRIT in the transformation of HR function?

According to the statements from previous chapters, to some extent, the HRIT have effective influence on HR function transformation. For the HR function transformation, it needs such information technology to help the management activities to be more efficient and effective. From the HRIT side, it affords the possibility for HR to realize more valuable function for an organization. The influence of HRIT is not only within the HR department, but at any level that participates into the HRM activities. Furthermore, there should be different roles played by HRIT in the transformation process according to different management levels: from employee to line manager to HR professional. In a word, the HRIT is playing an important role to realize the HR function in a more competitive and efficient way to achieve the organization objective.

HRIT in transformation of HR professional

In traditional HRM, the HR professionals put huge energy on time-consuming and tedious daily administration processes, but pay less attention to the consultation work and strategy formulating which should be the main tasks of higher management level in organization. Under the HRIT management environment, the task of advisory service of HR professionals is increasing, which provides for both higher management level and the lower line management, and employment level. Thus, the HRM process is an optimization, which dose not only release the HR professionals from the numerous and diverse work, but completely changes their working style and working focus as well. HR professionals gradually become the strategy partner of the organization, demonstrating the abilities on strategic formulation, work flow management, employee motivation and so on, and realize the HR function transformation.

The function of HRIT includes the human resource planning, recruitment, and in-office management (personnel information management, attendance and absence management, training management, performance management, welfare management, and relationship management), from entering till leaving

the work position. A number of activities, like the HRM system establishment, activity planning, management process monitoring, results compiling and analysis, still need the HR professionals to accomplish with HRIT. Only some activities are authorized for line managers and employees to finish. Therefore, besides being responsible for the HRIT management, HR professionals pay more attention to HR function through the platform of HRIT, but not carry on the massive data maintenance, which function is gradually shared by line managers and employees.

With the utilization of HRIT, HR professionals become the core of the HR service net. The HR professionals can be considered as both the service provider and service buyer according to different objectives of business. From the aspect of line managers and employees, they are the customers of HR professionals. The related business processing can be completed through the on-line interaction: the line managers and employees can obtain the “product” and “service” from HR professionals via internet. The HR professionals can “purchase” various kinds of human resource management service and expertise information from external providers, for instance, consultant company, e-learning service provider and so on. The issue with common service provider is also changing from paper work to on-line management, such as insurance management.

Thus, the HRIT supports the HR function transformation into three types of form: fostering centers of expertise (Neary, 2002), strategic partner with the line managers (Ashbaugh & Miranda, 2002), and HRIT management (Gardner, Lepak & Bartol, 2003).

Centers of expertise or expertise teams refer to the key HR representatives of the organization. Most time, they are the HR functional specialists and proficient in one or several aspects of HRM. Without HRIT, they need to spend huge energy on face-to-face interview of employees to find out and discuss the actual situation, which decreases their creation and strategy value. But now, the virtual working environment through the development of HRIT has solved this problem. All members under certain authorization can communicate with each other on line, and representatives can promptly provide strategy and suggestion to their “customers”, both top managers and line managers.

The strategic partner with the line manager refers to HR professionals as the leaders on managing the HR issues within the organization. Although HR professionals have to move out from routine tasks and leave the basic function

to line managers and employees, the HR professionals are still responsible for the employee management from the higher level. For example, the HR professionals need to make out the overall plan of human resources, and download the tasks to line managers. They need to master and familiar with the information of their workforce, in order to make the best use of their employees. The HRIT puts the information on HR professionals' desks and makes those data easily accessible, which enables the function of HR professionals and keeps the function strategic and controllable under decentralized situation.

HRIT management comes after the application of HRIT. The extensive use of HRIT asks managers and employees to acquire new skills and knowledge, in order to make use of the new systems and technologies. HR professionals partially turn attention from personnel and strategic issue to HRIT related performance, such as the training on using of HRIT, and maintaining the HRIT applications. Thus, these HRIT-related functions are the new responsibility of the HR professionals.

Therefore, the extensive use of HRIT can make HR professionals spend more time and energy on the strategic issue, thus accelerating the transformation of HR function (Gardner, Lepak & Bartol, 2003).

HRIT in transformation of Line manager

Based on the function of HRIT, line managers can obtain the latest HRM policy, work procedure information, market data and so on, which can be used as the reference to instruct and manage their employees. HRIT provides the platform for line managers to participate in the HRM work. HRIT can provide all the information with which the line managers supervise their employees; under authorization, line managers can deal with HR activities such as recruitment, training, absence, vacation, appraisal, leaving, etc.

Because the line managers are the direct connections between their higher and underling management levels, they know more about their employees and understand better the policy of organization. When the daily supervisor function can be accomplished through HRIT by line managers, it not only saves the time and energy, but gives line managers more freedom on using people. They can get the latest information about their employees, and make their staff catch up with the development of organization. When the line managers are responsible for making policy of own department, they can also

make good judgments on both internal and external situations and make the right decisions. They can consult with HR professionals through HRIT, submit the recruitment or training program, and, in return, get direct and effective assistance from HR professionals.

HRIT in transformation of Employee

The increasing consciousness of information and independency of employees have asked for transparent and clear human resource information. They pay attention to personalized human resource development project, realize self-management, and master career development on own initiative, and they are also eager to choose suitable studying program. HRIT provides opportunity to every individual in the organization to participate in HRM works, and decentralizes some responsibilities of HR function to them. The employees can choose the HR information and service on their own. Therefore, they can get the information at any moment and take the action to get result. To some extent, the employees no longer need to wait for any other people coming to solve their problems or to reply their questions, because those can be easily dealt through HRIT, such as on-line communication, or getting answer from knowledge database.

Through the interactive and dynamic HRIT, HR department can carry on the working arrangement, training and motivation according to various individual demands, and let the employees implement the self-control and, master their own future. In addition, based on the HRIT, employees may obtain and maintain their individual information such as attendance, salary, training record and so on. Moreover, the communication between employees and managers is also different with the traditional one. The feedback of employee can directly transmit to related manager or department via the HRIT platform, which ensure that any problem can be handled accurately and expeditiously. Thus, the HRIT enables the employees to realize the self-control and self-service, provides more opportunities to involve low level into management issue, and fosters the whole organization to accept this new kind of management style.

Therefore, the HRIT brings the independency to employees when they face HR issue. In the recruitment process, the applicant can manage their applications through web-site, update personnel information on-time to hold comparative advantage; when they are accepted by the organization, they can also design their own career, and make plan for various training program provided by employer which may be helpful for their future. In short,

employees can choose the way they want to develop and realize the value creation for whole organization.

As conclusion, HRIT plays a major role in strategic HR tasks. It changes the management way of traditional HRM, enables such management activities can carry out at any level without further hindrance – top management, line management, employee self-management and external agency. Besides dealing with the information transaction, the strategy HR activities such as workplace learning, career management, business process reengineering, etc. can be better developed and supported with the HRIT application, which helps HR function on a more valuable position.

5.2. Future research

This research has confirmed that the HRIT does have substantial influence on the transformation of HR function. Starting from this research, future work in this area can focus on following issues.

First, at present, the HRIT researchers and developers may only understand the technological aspect, such as the information system development or information technology, while few of them understand the business aspect, management or HRM. By contrast, the experts who know the key issues of HRM, to a certain extent, lack of the knowledge of information science and technology. Therefore, a cross-disciplinary research theme should be established so that researchers from both technology side and business side can try to learn from each other to eliminate the knowledge gap, and to find out the new possibility of technology application to boost business. At the same time, investigation should be given to the company to see how people in the business world lower the expertise fence to fully functionalize the HRIT platform, and to see what can be done to smooth the transformation process so that it can be turned from technology-driven into business-objective-driven.

Then, as HRIT becomes an increasingly important factor of HR function transformation, researchers should deepen their understanding of the opportunities and threats that HRIT brings. HRIT may be a key enabler allowing HR professionals to fulfill the business and strategy partner roles. But there is also some investigations mentioning that HRIT dose not improve HR performance to be a more cost-efficient center (Haines & Lafleur, 2008). This may be caused by low acceptance of new IT system among target users, inappropriate HRIT choices, or any other factors.

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Vocabulary of key-terms

HR Role – a way how a person takes on specific responsibility and performs corresponding tasks in order to participate in HR activities

HR function – all managerial actions carried out at any level regarding the organization of work and the entry, development and exit of people in the organization so that their competencies are used at their best in order to achieve corporate objectives (Valverde, Ryan & Soler, 2006)

HR function transformation – a business process to change the form of the HR department (by restructuring, outsourcing, etc.) and/or to expand the management levels involved in the HR function (HR professionals, line managers and employees) so that HRM concentrate more on strategic, value-creating activities for the long-term business objective.

HRIT – an application of software and hardware (Florkowski & Olivas-Lujan, 2006) for both supporting and delivering various HR activities among different actors.

Appendix 1

Table 1 Reference list used for the meta-analysis

Author/year	Title of articles
1. Schuler, R. S. /1990	Repositioning the human resource function: transformation or demise?
2. Yeung, A., Brockbank, W., & Ulrich, D. /1994	Lower cost, higher value: human resource function in transformation
3. Gutierrez, L.H.S. /1995	Transformations of the HR function in the Context of Restructuring
4. Mohrman, S. A. & Lawler, E. E. /1997	Transforming the human resource function
5. Beer, M. /1997	The transformation of the human resource function: resolving the tension between a traditional administrative and a new strategic role
6. Robertson, K. /2000	Work transformation: integrating people, space and technology
7. Appelbaum, S. H. & Wohl, L. /2000	Transformation or change: some prescriptions for health care organizations
8. Stockport, G. J. / 2000	Developing skills in strategic transformation
9. Klaila, D. /2000	Knowledge as a transformation agent
10. Sagie, A. & Weisberg, J. /2001	The transformation in human resource management in Israel
11. Svoboda, M. & Schroder, S. /2001	Transforming human resources in the new economy: developing the next generation of global HR managers at Deutsche Bank AG
12. Selmer, J. /2001	Human resource management in Japan – adjustment or transformation?
13. Tansley, C., Newell, S., & Williams, H. / 2001	Effecting HRM-style practices through an integrated human resource information system
14. Rowley, C. & Bae, J. /2002	Globalization and transformation of human resource management in South Korea
15. Ashton, C. /2002	HR transformation at AT&T Consumer Services
16. Truss, C., Gratton, L., Hope-Hailey, V., Stiles, P., & Zaleska, J. / 2002	Paying the piper: choice and constraint in changing HR functional roles
17. Ashbaugh, S. & Miranda, R. /2002	Technology for human resources management: seven questions and answers
18. Neary, D. B. /2002	Creating a company-wide, on-line, performance management system: a case study at TRW INC.
19. Beatty, R. W., Ewing, J. R., & Tharp, C. G. / 2003	HR's role in corporate governance: present and prospective
20. Caldwell, R. /2003	The changing roles of personnel managers: old ambiguities, new uncertainties
21. Lengnick-Hall, M. L. & Lengnick-Hall, C. A. / 2003	HR's role in building relationship networks
22. Som, A. /2003	Redesigning the human resources function at Lafarge
23. Gardner, S. D., Lepak, D. P., & Bartol, K. M. /2003	Virtual HR: the impact of information technology on the human resource professional
24. Shrivastava, S. & Shaw, J. B. /2003	Liberating HR through technology
25. Knapp, D. /2004	If you're in HR, you're likely in HR transformation
26. Hempel, P. S. /2004	Preparing the HR profession for technology and information work
27. Lepak, D. P., Bartol, K. M., & Erhardt, N. L. /2005	A contingency framework for the delivery of HR practices
28. Hales, C. /2005	Rooted in supervision, branching into management: continuity and change in the role of first-line manager
29. Jacoby, S. M., Nason, E. M., & Saguchi, K. / 2005	The role of the senior hr executive in japan and the united states: employment relations
30. Andolsek, D. M. & Stebe, J. /2005	Devolution or (de)centralization of HRM function in European organizations
31. Kraut, A. I., Pedigo, P. R., McKenna, D. D., & Dunnette, M. D. / 2005	The role of the manager: what's really important in different management jobs
32. Farley, C. / 2005	HR's role in talent management and driving business results
33. Brewster, C., Wood, G., Brookes, M., & Van Ommeren,	What determines the size of the HR function? a cross-national analysis

J. /2006	
34. Francis, H. & Keegan, A. / 2006	The changing face of HRM: in search of balance
35. Valverde, M., Ryan, G., & Soler, C. /2006	Distributing HRM responsibilities: a classification of organizations
36. McConville, T. /2006	Devolved HRM responsibilities, middle-managers and role dissonance
37. Bjorkman, I. & Soderberg, A. M. /2006	The HR function in large-scale mergers and acquisitions: the case study of Nordea
38. Strohmeier, S. /2006	Research in e-HRM: Review and implications
39. Reiter-Palmon, R., Brown, M., Sandall, D. L., Buboltz, C., & Nimps, T. /2006	Development of an O*NET web-based job analysis and its implementation in the U.S. Navy: Lessons learned
40. Stone, D. L., Stone-Romero, E. F., & Lukaszewski, K. /2006	Factors affecting the acceptance and effectiveness of electronic human resource systems
41. Florkowski, G. W. & Olivas-Lujan, M. R. /2006	The diffusion of human-resource information-technology innovations in US and non-US firms
42. Hussain, Z., Wallace, J., & Cornelius, N. E. /2007	The use and impact of human resource information systems on human resource management professionals
43. Haines, V. Y. & Lafleur, G. /2008	Information technology usage and human resource roles and effectiveness

Appendix 2

Table 2 Overview of the findings per article on HR function

Author/year	Journal	Research Design	Goals of the article	Findings	Definition of HR function	Type of HRM	Remarks
Andolsek, D. M. & Stebe, J. /2005	Human Resource Management, Vol.16, No.3, P311-329	Data was collected from the Craftfield Network on European HRM. The questionnaires were sent to senior human resource persons. No exactly number of respondents was mentioned.	To analyze and identify the factors involved in HR devolution or decentralization, transferring the individual tasks to line managers.	Levels of (de)centralization of performing the HR function was various according to different countries. The (de)centralization process was common in determining of the number of employees and staff selection. Big organisations, existing of HR professional to solve special HR problems, widely use of technologies in private-sector organizations, and organizations polices and strategies together with influence of global economic environment would all cause the devolution of HR responsibilities.	In the devolution process, HR specialists still act the role as mediator in industrial relations between management and employee, and selection of staff. Line managers mainly responsible for personnel issue: decide the number of employees, training, paying and staffing. In small firms, line managers also should be a decision-maker.	In decentralization HR responsibility, the type of HRM is more towards on commitment orientation. HR tasks have transfer to line management in devolution process. Line managers responsibility of job redesign, productivity bargaining, various training and developing practices etc. they have the broadly defined jobs and different tasks. The HR professional will be only focus on policy making or even this role is outsourcing.	In this article, there is clear description about the responsibility delivery from HR professional to line managers, but after the devolution, what the role and position of the HR professional is confused. From the author, one answer to this question is the small companies do not have highly developed technology will leave room to middle management. The author also mentioned the importance to analysis the change of HR specialist's work and 'how the devolution affects the success of organisations, motivation and employee commitment.'
Beatty, R. W., Ewing, J. R., & Tharp, C. G. / 2003	Human resource management, Vol.42, No.3, p257-269	The researcher sent surveys to 300 senior-level HR professionals across 19 industries. There are 112 valid responses.	To find out the ethical issue and legal standards performed by HR professionals in corporate governance and	HR professional often fell in dilemma about how to balance the interests in different stakeholders. In order to meet both customers and executive's benefits, HR always needed to make police and standards to clarify such principles. To reduce vulnerability and follow	HR function takes the role as strategic decision-maker in firm. It should inflect firm's strategy, culture, and strategic capabilities to ensure the successful. HR executives should foster organisation culture, they should design	Encourage board participation in measurement and reword systems design and selection process refer to commitment HRM systems.	This article mentioned some HR functions that easily to disobey the law and social standards, the methods to avoid the situation is

			the attitudes and the roles of different levels of HR toward the ethical and legal questions.	legal and ethical standards, there were several activities can be helpful. HR should encourage the participants in measurement and reward design process as many as possible. When considering the interest between customer and executive, HR should set the ethical standards. They should focus on the interests of customers and investors. The selection process could also be used in board member's appointment, to make sure of legal. The measurement and reward system should be the ethical issue. In different areas, HR should take the culture factors into their standards building.	reliable financial measurement and reward systems, and get customer and investor trust.		analysis. However, those methods mainly concern internal at management level and community, there should be more consideration on lower level and external factors to ensure them work on the permitting fields.
Bjorkman, I. & Soderberg, A. M. /2006	Personnel Review, Vol.35, No.6, p654-670	This is a single case analysis. The researcher made 60 interviews with several managers in Nordea. Additional materials included company-internal material and consultancy reports.	During the post-merger process, how the roles played by the HR function changed.	In the past, HRM focus on personnel function which activities as labor negotiators and administrators. Now, HR function takes a strategic and business role, the responsibility is distribution between HR professionals and line managers, the traditional people management is devolution to line managers. In Nordea, the HR organisation is separated first, one for development and another for administration, then, the HR function decentralized from the central team to each business unit. Some of them have decision power on strategic issues, but most still work on administrative process.	On the initial of the merging, the HR was a unit responsible for HR administration, competence and management development. After reorganization HR, the author use Ulrich concept to analysis the role of HR function in Nordea. Nordea's HR function mainly work as administrative expert, and put the emphasis on integrating, rationalizing and developing relative HRM administrative policies. As employee champion, HR should proactive and support employees in order to enhance employee commitment, to persuade employees to stay in the organisation during the unstable merger process or when they want to search higher salary. This should also focus in line organization and develop the relationship between HR professionals and employees. As strategic partner, HR function mainly influence the organization strategies and decision making, at the same time influence the implementation of	HRM in Nordea is toward control aspect. HR function is largely centralized and traditional. The HR professional have their own special unit to work with involve in detail development process, such as pay system and appraisal.	The research focus on the whole HR organisations in Nordea. In order to know the exactly role change and responsible shift, focus on a single HR business unit will be better.

					the strategies and the outcome. As change agent the HR function played the role to integration the cultural within the merged corporation.		
Brewster, C., Wood, G., & Brookes, M., & Van Ommeren, J. /2006	Human Resource Management, Vol.45, No.1, P3-21	Data was collected from the Cramet surveyed in 1999/2000 in 17 European countries. Questionnaires were carried out in those countries. And there were 7,000 valid respondents from 40,000 questionnaires sent out.	To explores the factors that influenced the size of HR department and the strategic HRM policy setting.	The HRM department was not only effected by organization size, but also by different sections in organizational and national location. The organizational size, sector, national context all had the relationship with the size of HR department within organization. But the whole phenomenon was that larger organization trended to have smaller ratio of HR staff engaged in the HR function. The HR function was determined by strategic choice, which was likely to be affected by the external factors.	Administrative is the basic functions in HR department, but most time, it involves in compliance and specific development works. Senior HR specialists having a board definition of the role, but the tasks on training and development is increasing.	HR has two roles: administrative and strategic. Strategic role is the control of HR function. In the article the commitment to employee development will be larger in large HR department,	It is hard to prove which one is better: the smaller HR department or larger one. And in each kind of situation, how to determine the responsibility and authority between different level of HR function does not mentioned in the article.
Caldwell, R. /2003	Journal Of management Studies, Vol.40, No. 4, p 983-1004	The survey was based on postal questionnaires in 350 UK companies, and totally 98 respondents. They also used face-to-face interviews, and respondents were 34.	Through comparison with Storey and Ulrich's models to identify the role changed in HRM.	From the research, the roles of personnel professionals had changed in many aspects. The Regulator role had declined. Advisor role acted as internal consultancy and tended to devolve. The Service Provider roles were trying to avoid outsourcing and be responsible for making whole HR structure more effective. The Changing Agent role had significant growth with power increment.	HR professionals have more complex and conflicting roles than before. As advisors, they should be strategic and interventionist. They offer internal consultant through non-directive manner. Service providers trend to service internal customers and markets to make their business more competitive and customer-oriented. The administrative experts should re-structure HR process to achieve higher level of service standard. Regulators involved more in strategies decision.	Commitment organisation takes more flexible structure and focus on cost reduction. HR roles are multiple and flexible.	Storey's model is more empirical analysis, and Ulrich's put attention on the new changes in HR function. But both of them need intensity and extend to meet the competitive and challenges managerial works in the future, because the direct use of their model in practices is not clearly and satisfy anymore in today's organisation.
Farley, C. / 2005	Employment relations today, Vol.32, No.1, p55-61	Single case study: WisdomNet client.	How to develop business through effective talent management.	There were many processes that HR must focus to reach the goal of effective management. They should make the business objective be treated as employee's own needs, and ensure the HR strategies could fit the corporation strategies. HR should let employees understand the goals and objectives of firms, and make sure there was	In the past, HR functions mainly focus on transactional operations. But today, HR function should help to improvement people performance to develop business, it should maintain at the strategic level. HR should help employee to develop their plans and strategies.	Focus on team management and competencies based are denotation commitment type of HRM.	The article emphasized on the strategic level of HR function. HR not only should have the authority of decision making, but also should have the ability and power to put the

				corresponding competencies to achieve the goals. The HRIT played an important role in such super management method, which could make organizational management more effective and efficient.			strategies and policies into action.
Francis, H. & Keegan, A. / 2006	Human Resource Management Journal, Vol.16, No.3 p 231-249	Related documentation review; depth conversation; interviews of 200 HRs in UK and Ireland; In Chartered Institute of Personnel and Development	To find out the initial meaning of the thinking performance and what was the influence of the concept on HR work and the change of expectation of HR participations.	<p>(1) The framing of HR policy and practices Business partner concept had stronger feather on HR practitioners than thinking performance in the beginning of interview. Business partner is mainly concerning the business focused strategic activities. At junior level of HRM concern the thinking performance is the people working at strategic decision-making level.</p> <p>(2) Structural changes and devolution of HR tasks to the line Technological change making line managers works more and more on hand-in-hand jobs.</p> <p>(3) Role change: from 'employee champion' to 'employee well-being'.</p> <p>(4) With the devolution to line manager, the contact between employees with HR specialists is losing; this might make the employees lose trust and confidence in HR function to their supports.</p>	HR professionals should try to balance the interests and values among stakeholder. With the technological change, lots of HR specialists' tasks and hand-in-hand jobs are devolution to line managers, such as coaching, dealing with employee' dissatisfaction, employee personnel issue.	As high commitment HR practices, the employee well-being and organisation objective should be accordant; focus on high performance and business-oriented performance outcomes.	The thinking performance concept could use only on commitment HR types and there should be more discussion about how to release the tension in employment relationship and give new idea on employee champion.
Hales, C. /2005	Journal of Management Studies, Vol. 42 Issue 3, p471-506	Face-to-face interview; 135 organizations in London and the South East.	The survey focused on how the role of FLM (First-Line Manager) was presently defined and how it had been changed.	In the past, FLM did not participate in decision or strategy making, but just translating the policies into action and operations. Now, FLM could make decisions by themselves with assistant and consultant from the senior managers or the HR department. The power and ability of supervisor was strengthened, and started to involve into business management. Besides its responsibility of people management, FLM also focused on team or unit management, and put attention to the performance management.	This article focuses in the role and function of FLM. The function of traditional FLM is supervisory. They should help smooth the production process and translate the business policy to employees. FLM is narrow defined as routine administration. FLMs take the role as consultants, meanwhile, senior managers or HR professionals cover the strategic issues. When FLM takes the leadership, they are responsibility on managing individual performance and instructing subordinates.	Through commitment rather control of HRM, there is more participate in management to ensure 'high performance'; there will be smaller organisational units and focuses on team-working, with wide extend of self-managing teams. There is performance-oriented supervision and control of a work-group but not individual.	In the article, it is claimed the role of FLM supervision is strength, but the extension and additional or alternative elements of the role are not analysis.

Jacoby, S. M., Nason, E. M., & Saguchi, K. / 2005	Industrial Relations, Vol.44, No.2, p.207-241	Mail survey of senior HR executives in large public companies in two countries: U.S. and Japanese. Usable responses came from 229 Japanese firms and 145 U.S. firms.	To compare the HR management structures and practices in Japan with those in the United States.	1, In both countries, the role of sub headquarters was dissonance; they did not have operation authority, but took their action between headquarters and line managers. 2, In Japan, internal HR employee was decreasing and their work was becoming more general, but the operation decisions was still more centralized than in the U.S. 3, In Japan, centralization were providing great power for high level of management, but in US, there was no such strong positive relationship between headquarters operating authority and HR staff from centralization. 4, The Japanese companies were more likely to give chance to internal candidate, but US companies give more opportunities to external candidates. 5, US HR executives involved more in strategic decisions than Japan's, they had strong influence on the decision making. 6, National difference made different corporate structure: in the US, finance function decided the budgets and executive compensation; in Japan, it is determined at the headquarters levels	HR executives in both countries are acting strategic function in executive decision-making. Japanese: The headquarters HR department responsible for administration employment and labor relations. The HR executive acts as strategic decision-maker. U.S.: The senior HR executive works in the managerial hierarchy, and functions to support employee. Personnel administration should select, make attitude surveys and management development on the employee. In the past, HR department provides services to career employees, coordinates line management, and supports employee, now, the HR executives focus on executive and strategic issues. Headquarters HR pay attention on the corporate culture creation; line management monitoring and HR policies development.	As control oriented HR units, the headquarters HR in Japanese firms is centralized structure. HR in U.S. firms works as commitment type and their corporate is more diversification and decentralization than Japan's. The reward system is more performance-based.	This article draws comparisons and the change of senior HR executive in Japan and the United States. But sometimes, the function will be affected by different level of power scrambling and societies. There should be more analysis on this point.
Kraut, A. I., Pedigo, P. R., McKenna, D. D., & Dunnette, M. D. / 2005	Academy of Management Executives, Vol.19, No.4, p122-129	Data was collected through questionnaire. Interviewing 1,412 managers and they are asked 57 managerial tasks of their jobs. Statistic method was used to analyze the data.	To find out whether there was the difference among different management jobs.	The management jobs were equal in each function---marketing, manufacturing and administration, although some significant differences exist. Administration managers thought it more important to instruct subordinates than marketing managers did, but managing individual performance was considered more important in marketing. The manufacturing managers think that managing group performance was the most importance activities. So, the organization could develop a	The management tasks are involved in three functions: marketing, manufacturing and administration. The management role are divided into three level: first-level managers, main tasks are managing individual performance and instructing subordinates; the middle managers, they should plan and allocate resources among different groups, coordinating interdependent groups and managing group performance;	As control oriented HRM, there is a clearly authority of each management level (first line manager, middle manager and executives), and the tasks divided quite clear and fixed.	This article identified different role of managers in different organisation functions, and give out practical implications on team foster through selecting, training and developing from every level of management.

				common approach for selecting, training and developing managers in different organization functions.	the executives are focus on external environment. All managers in different levels are representation of their people.		
Lengnick-Hall, M. L. & Lengnick-Hall, C. A. / 2003	Academy of Management Executive, Vol.17, NO.4,p53-62	Multiply cases study. E.g. Leon Festinger, Southwest Airlines, GE etc.	To find out the reasons of restructuring HR role in organizations and how this could be done.	<p>The firms could be benefited from active role of HR to create wide range of relationships. In individual-to-individual relationship, HR could be more involved in managerial activities and HR professionals could help building the relationship between employees. In individual-to-group relationship, HR could support the communities' practices, or help shaping individual-to-group interaction in the organisation, or provide inside information to external groups to make alliance. In individual-to-organisation relationship, HR expertise should foster the organisation culture, socialization and organisational citizenship. HR could also create a psychological contract with customer and employees. In group-to-group relationship, HR could develop common working process, or design cellular organisation department. In group-to-organisation relationship, HR could create cooperative effect between two parties and common interest, opportunities for creating productive relationships.</p> <p>Organisation-to-organisation relationship could be built through key relationship and improving difference value-creation process to achieve inter-organisational cooperation.</p>	<p>As relationship builder, HR should be responsible for developing and nurturing the relationship directly, they should mentor and support relationship between senior and line managers. It can also be achieve through training, coaching and supporting to ensure the relationship between each parties are in the right direction.</p>	<p>Some feather of commitment HRM is mentioned in the article: high-involvement work parties, relationship-based system; focus on team work; HR do not supervise employee directly but through line managers.</p>	<p>The article put the relationship responsibility mainly on HR professionals; and their role changing. But all the levels of management should be responsible for building relationship, so, what's the role of senior and line managers: How should they deal with the relationship issue or just follow HR specialists in and organisation? There're remaining questions.</p>
McConville, T. /2006	Personnel Review, Vol.35, No.6, p637-653	There were three organisations involved in this research: National Health Service, Armed forces and fire and rescue services. The debate of this paper was	This paper described the role of middle line manager in public sector organisations and the tension appeared for	<p>This paper put out the role of middle line manager is still confusion in public organisations. They do not have clear role definition and position, the role enhance by increasing workload, the framework presented how should the tensions arise and public</p>	<p>The role definition is always unclearly of middle line managers. In this paper, those managers are the people who involve in management work within the organisation, and also in the end of the chain to delivery service for other part.</p>	<p>As commitment type of HRM, there is no clear job scope and task assignment, the managers can play several roles in the organisation, they do not have the fix task but more</p>	<p>To a large extent, the role dissonance caused by devolution of HR function, how to avoid this during the devolution process might be analysis to</p>

		based on the previous research about the phenomenon of middle line manager and it put out new understanding of such phenomenon. During the research, the questionnaires, individual and group interviews were used. No exactly number of participation was mentioned.	middle line managers.	still do not pay attention on it. They report that they middle line managers should have the power to make decision on the activities they need to implement, and this point need the strategy integrated. The workload of middle line managers are overloading, they do not have the power in policies decision but need to translate the policies can be accepted by the staffs, at the same time making sure the staff put out satisfy outcome under the policies, which making them to bear the pressure of the resulting tension.	They are under the top superior and organisational executive but responsible for at least two levels of hierarchy. The middle line managers have three levels of work: administrative work, technical work and the managerial work. They play the role as high-level administrator, coordinating, however, the procedurally autonomy is limited. Middle line managers often lack the control power such as policies making, they lacked clear role definition, they pressured from both role ambiguity and powerlessness and the personal and professional levels confliction are increasing.	flexible according to the situation of organisation.	avoid the role conflict and tension release of managers.
Som, A. /2003	Human Resource Management Vol.42, No.3, p271-288	A longitudinal case study of a French firm---Lafarge. Data were collected through interviews of 25 managers in Lafarge.	To find how Lafarge redesigned its HR functions.	(1) To decentralize recruitment function. To trained business managers to be international and ensure employees have the ability to work in cross-cultural teams. (2) Before the redesign process, Lafarge had different training policies for different levels of manager., after redesign, Lafarge used 'learning organisation methodology' which focuses learning on the job. (3) Redesign of the HR function made an integration process in the organisation, such as new integration of department, the integration of performance management system and personal development plan. (4) New bonus plan for managers, new professional qualifications for employees, etc. were all the outcome from the redesign process.	The regions HR directors are responsible for regional employee recruitment. All HR directors should be responsible for decision making with consider the changing HR policies. The corporate and divisional HR departments offer coaching and training program to deal with unsatisfied feedback. HR departments should provide promoting, training and coaching for career and personnel development.	As commitment HRM, Lafarge has flex structure of HR department, the level of HR involvement is various in every division. The redesign of HR provides on-job-learning, and creation compensation-performance relationships. Besides the main tasks, the well organized peripheral jobs such as cleaning and maintenance also help to achieve optimization.	HR strategies should comply and support corporation business strategies. What's a Lafarge business strategy? How the redesigns of HR function can be suit the organisation strategies? It is unclear in this research.
Truss, C., Gratton, L., Hope-Hailey, V., Stiles, P., & Zaleska, J. /	Human resource management journal, Vol.12, No2,	Case study analysis. Data was collected 3 times in 9 years, from 1992 to 2000. The research was doing by	To find out the position of HR function's in a complex and dynamic	There were various levels of strategic roles of HR department. The HR director should develop policies to ensure good performance of employees and set	In this article, the HR department is considered as more strategic role then before. In NHS, the mainly HR function is to set up the relationship	The HR departments in NHS works as control orientation HRM which can be see from the following aspects: The HR	Most time, HR often is defined as strategic role, but it is not clear what the exactly mean by this

2002	pages 39-63	questionnaires and interviews in two companies: NHS trust and Citibank. The valid respondents are as following, during 1994-95, 1996-97, 1999-2000, the interviews in NHS Trust and Citibank are 35, 23, 23 and 36, 13, 17 respectively. Valid respondents in questionnaires are 126, 152, 98 and 177, 159, 110 respectively.	environment.	standards to enhance HR function. In NHS, a Beacon Award, from NHS Executive, was responsible for setting new strategic objectives of the trust and the employee administration. HR team in NHS developed 'the Pledge' to assist employee, increasing communication with staffs and making managers work more flexible in work arrangement. In Citibank, the senior HR officer developed long-term plan, involving activities such as motivating and retaining targeted individuals, and they should also set their personnel goal to meet the HR targets. Many line managers treated the HR managers as consultant at individual.	among different levels of people, and to integrate the Trust strategy into their business. But in Citibank, HR professional works as non-strategy, transactional and reactive role. The line managers are responsible for the strategically management within the teams at the local level. Most HR professionals act as consultant.	director making the quality standards and setting objective for HR function, and transmit relative information to their staffs. The improvement of individuals is performance related pay and job appraisals. Citibank HR is commitment based. The policy decisions try to involved all the senior HR officers, and encourage them to develop their own HR strategies and policies.	and the necessarily of HR department act a strategic role is uncertain.
Valverde, M., Ryan, G., & Soler, C. /2006	Personnel Review, Vol.35, No.6, p618-636	There were 231 respondents. The research took place in Spanish organisations with HR department. The research methodology was including qualitative research methods, contingency approach and questionnaires.	To find out the distribution of HRM activities and responsibilities among top and line managers and external HRM service providers.	There are seven groups of organisations are mentioned: (1) HR as a shared function among internal agents (2) HR as a shared function lead by top management(3) HR function, an agent for each job, a job for each agent(4) Partial outsourcing of a wide range of HR activities(5) Outsourcing specialized activities and sharing generalist responsibilities(6) HR function as the exclusive domain of the HR department(7) HR functions as the domain of the HR department supported by the line. Each organisation has its own HR function. The HRM activities and responsibilities are different for agencies in different organisations. But similar contextual characteristic (e.g. organisational size, environmental, culture etc.) do not means the types of HR functions will be the same.	From this paper, the HRM departments are divided into three levels: top management, line management, and external HR agencies. All the levels have the responsibilities on recruitment, at the same time, they should help organisations to manage and develop the competencies of their people to achieve organisation objectives. (1) HR as a shared function among internal agents: Top management involved in every kind of HR activities, but lesser in administrative and technical activities. Line managers not only involved in daily management, but also have more specialist HR activities. (2) HR as a shared function lead by top management: Top management involved in strategic and leadership activities and high involvement in administrative tasks. Top management is differentiation in generalist activities and HRM specialist's tasks.	Cleary distribution and control of HRM practices, e.g. top management responsible for decision making, line management responsible for operational management means the control type of HRM.	The respondents give the answers which do not belong to their responsibilities will reduce the reliable of the research. What's more, the low response rate also asking for further research.

					<p>(3) HR function, an agent for each job, a job for each agent; different agents responsible for different task.</p> <p>(4) Partial outsourcing of a wide range of HR activities</p> <p>(5) Outsourcing specialized activities and sharing generalist responsibilities: some specific HR activities are outsourcing; those activities are intervened by internal agents from generalist management tasks.</p> <p>(6) HR function as the exclusive domain of the HR department: however, strategic decision making, and operational decisions and daily people management, the two most generalist activities should be the responsibility of top and line managers.</p> <p>(7) HR functions as the domain of the HR department supported by the line: line management is established policies and HR department support the implementation and operation.</p>		
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Table 3 Overview of the findings per article on HR function transformation

Author/ year	Journal	Research Design	Reason for transformation	Definition of transformation	Description of HRM transformation	Activities in transformation
Appelbaum, S. H. & Wohl, L. /2000	Managing Service Quality, Vol.10, No.5, P279-298	Research based on the analysis of American hospital in 1990s.	(1) External changing environment and demanding from market for services. (2) Use of the information technology	Concept of transformation including following points: (1) Certain activities that can give positive effective and improve the performance of organisation. (2)It is not only about improving something, but creating new contexts that not previously exist. And the outcome of transformation is positive. Link HR with business instead of linear HR function.	None	(1) Helping employees to understand the reason and method to change. (2) Overcoming barriers to change: providing the necessarily for changing, the information can be communicated effective;
Aston, C. /2002	Human Resource management International digest, Vol.10 No.5, P6-11	The research was taken 5-year at AT&T Consumer Services.	The impact from rapid development of technologies and market globalization.		(1) Strategic HRM processes can support the business improvement through performance development. (2) Link the HR strategies with business. (3) The collaboration between HR function and customer service department to making long-term cooperation with the customers. (4) Link HR with business processes at the business-unit level for problem solving, employee developing and human-performance system application. (5) HR function can add value for their business through involving in strategy and policy making process	(1) In the management of talent people, HR managers should support them to achieve organisation objective. (2) Evaluation the need of strategic business, getting familiar with the origination, making suitable HRM system for strategic implications.
Bear, M. /1997	Human Resource Management, Vol.36, No. 1, P49-56	Data collected by the task force through three days profiling meeting.	(1) Cost effectiveness. (2) Requirement of developing capability. (3) To gain competitive advantage through the knowledge management within the organisation and their people.	Reengineering and redefinition of the HRM function.	(1) Traditional HRM professionals focus on attracting, selecting and developing potential peoples and their new functions focus on attracting and development management leaders and efficiency team-work. (2) Traditional administrative, compliance and service role of HRM function adopt the strategic role and put more attention one the organisation development and	(1) Adopting new education and training program, establishing new performance appraisal and compensation system. (2) Making proper using of human resource systems and practices. It means some power should be delivered to lower level managers but not hold by HR executives themselves.

					capability management. (3) The administration and service function are moving out of HRM function. (4) HR specialist plays the strategic role, as the guidance of general managers and team. HR staffs should support diffusion the learning process within different department.	
Gutierrez, L. H. S. /1995	International Journal of Manpower, V10.16, No.10, P25-38	The empirical study based on the company which has "undergone an important restructuring process".	Restructuring of organisation. Including balance costs, improvement productivity and reorientation product market.	Reorientation of HR functions from the three elements: context, process and content.	(1) The HR management system is involving in HR director's cost readjustment work. (2) On the first reorientation process, HRM function focus on resolution of conflict, improvement of quantitative management of employees, and the evolution of HR specific. The second reorientation of HRM function starting realignment the HRM strategies and organisation objectives. HRM function shift from rational and technical oriented to strategic oriented.	(1) Providing training and studying program to help workforce to reach new qualification level and more productivity to meet the need of organisation. (2) HR director associates business strategy with employee training and management.
Klaila, D. /2000	Journal of Knowledge Management, Vol4, No.2, P138-144	Case studies. Analysis the businesses transformation process from different companies.	Forced by business successful.	"Transformation=knowledge + behavior"	(1)To meet the service requirement, HRM function should make the process of communication complex information effectiveness. (2) HRM should develop experiential learning program help employees recognizing new strategies.	(1) Choose the suitable model for transformation (2) Make the correct changing. (3) Identify the important behaviors and skills that required for successful transformation.
Knapp, D. /2004	Employee benefit plan review, Pg-14	Analyzed the survey of Mercer, which based on 300 US organisations.	(1) Changing of leadership. (2) Changing of changing business environment.	HR transformation was defined as the reinvention of the HR function. This including several activities, such as redesigning the HR structure, implementation of HRIS, outsourcing HRM, redesigning work process.	(1) Centralized HR service center. (2) The HR people send less time the administrative activities and more time on strategic designing. That is to say, they spend more time on designing HR programs or system, and less time on the activities without HR strategies such as the data recording activates.	(1) The Delivering HR services involving in the use of web-based technology. (2) Changing of HR staffs and skills to meet the need of transformation.
Lepak, D. P., Bartol, K. M., & Erhardt, N. L. /2005	Human resource Management review. P139-159	To develop a contingency framework of how HR departments organize the delivery of their HR practices.	(1)To contribute more macro or strategic organisational objectives. (2) On helping achieve firm-wide objectives.	Making the HR practices more strategy-oriented.	(1) HR practices become more transformational: HR functions will retain their delivery internally. (2) HR functions will internally deliver frequently performed transformation practices.	(1) Transformational or transactional is determined by which HR practices are used rather than the practice itself. (2) Participating in strategic planning, organizational

							development, knowledge management, insuring the HR practices meet the firm's strategic needs.
Mohrman, S. A. & Lawler, E. E. /1997	Human Resource Management, Vol.36, No.1, P157-162	None	Need to find solutions to integrate business and people needs under the organisation redesign.	Kind of HRM function evolution. Including reinvent its structure and organisation.	Role expanding (1) HRM function should use its competencies and capabilities to help developing business strategy from different directions. (2) It should play role as internal consultant to support organisation design and change with higher levels of capabilities and performance. (3) It should work with line managers to integrate the management practice of whole organisation.	(1) Making human resource effective to achieve goal of the organisation. (2) Information technology is using to tracking the efficient and effective activities of people between assignments. (3) Managing organisation knowledge and information share and distribution within organisation	
Robertson, K. /2000	Facilities, Vol.18, No.10/11/12, P 376-382	None	Technology development provides the possible for organisations to restructure their people to be more productive.	Work transformation: improving the key resource of organisations: people, space and technology to deliver greater business value.	HRM function is to attract and to retain the workers who can develop and use the new technologies in organisation.	(1) Widely use of information technology (2) Adjusting the new ways of people working. (3) Integration the corporate resource: human resource facilitates management and information technology.	
Rowley, C. & Bae, J. /2002	Human Resource Management, Vol13 No.3, P552-549	Case study of South Korea.	The globalizations of culture, labor market force the HRM in Korea to make some changes. The transformation also comes from the pressure of environment and downside of existing systems.	(1) Change and restructure the system (2) Rapidly changes in structure and practice according to the past. (3) Increasing multiformity.	(1) Employment relations change from stability to workplace flexibility. (2) Change from lifetime employment to flexible, external labor market and performance-based; from experience-based remuneration to performance-base remuneration.	(1) Supporting routine practices by making long-term employment, creating the 'paternalistic leadership', and self motivation efforts. (2) Enhancing the HRM system' competency.	
Sagie, A. & Weisberg, J. /2001	International Journal of Manpower, Vol.22 No.3, p226-234	The research was based on 194 Israeli companies, and data was collected between 1999 and 2000.	(1) Globalization of the country's market. (2) Shortage of high-tech professionals. (3) The more diversified workforce, faster development of technologies and more competitive business world asking for new role and modern activities of HRM functions.	Making the HRM strategy fitting the organization's culture and responsible for culture diffusion.	(1) HR manager is responsible for diffusing the organisation culture to employees in various activities, such as recruitment, selection, training and developing. (2) In low-tech industries the HRM functions are the traditional manpower tasks; in high-tech industries HR professionals acts more strategies on the culture supporting, and focus on employee motivation and development.	(1) Use various form of employment arrangements, including flexitime work, outsourcing and autonomous, self-managing teams. (2) HR managers should act as the role models for their employees.	
Schuler, R. S. /1990	Academy of Management	Data was collected through mail surveys in	(1) environment changing rapidly	It is repositioning the HRM function between HRM	(1) Line managers are starting to involve and take responsibilities of development.	(1) Employee competence management	

	Executive, vol.4 No.3, P49-59	1988 and interviews in 1989 of 250 human resource managers	(2) people are the core of organisation, however, they are uncertain.	department and line management. It is 'people-related business issues'.	HRM function. (2) HRM department pay more attention on business issue and customer focus: put human resource issue into the business strategies and operation plans. (3) Recruiting management becomes the job of the line managers. (4) Many new roles and competencies in the transformation, such as plan development, talent management, etc.	(2) Workforce diversity management (3) Enhance the competition abilities (4) Managing the globalization of human resource (5) 4 stages for reposition: finding current situation, making plan for transformation, implementing the plan, evaluating and improvement.
Selmer, J. /2001	International Journal of Manpower, Vol.22, No.3, P235-243	Case study of Japanese companies.	(1) Economy is becoming international (2) Problem of aging people and the changing value of younger generation (3)Rapidly development of technologies	It is a kind of slow and incremental change on HRM system.	(1) The judgment for wages and performance is changing from loyalty to employer to job experience. (2) Using external labor market instead internal promotion.	(1) Developing job ability-based wages system to incent individual employee performance, mainly focus on management level. (2) Creating breakthrough innovations and less incremental adjustments in product development to make the employment relationship more flexible, and can be based on external labor markets rather than internal experience employees.
Stockport, G. J. / 2000	European Journal of Innovation Management, Vol.3. Number 1, P45-52	Two case studies, Marks & Spencer and Intel. These cases are used to analysis how organisations managing strategic transformation.	The necessity of solving crisis that emerging on the organisation for long-term survives.	Strategic transformation is the radical change happened within the organisation. It is the ability of the organisation for long-term survival with transform.	None	(1) Find the objective of transformation. (2) Persuading the most powerful and capable managers to accept and implement the transformation. (3) Culture management is the important stage after transformation for organisation continued survival.
Svoboda, M. & Schröder, S. /2001	Human Resource Management, Vol.40, No.3, P261-273	A case study at Deutsche bank.	(1) The fast emergence of new challenges and developments.	Innovation in HR function	(1) Reframing HR strategies. (2) Becoming the business partner.	(1) Collecting the processes in the HRM function with using of e-business. (2) Learning programs are taking to ensure the ability for transformation. This including 3 types of learning: work-integrated learning, project work and e-learning.

Yeung, A., Brockbank, W., & Ulrich, D. /1994	Human Resource Planning, Vol.17 No.3, P1-16	The research was done by interviews in 10 corporations with more than 50 senior executives.	<p>(1) Cost reduction</p> <p>(2) Motivation HRM functions get the capacity to satisfy the needs of internal and external customers</p> <p>(3) Meet the strategic business needs and corporate success</p> <p>(4) Development of information technology</p>	Reinvention of the HRM function.	<p>(1) Most of the HRM functions are decentralized at the business level except: employee relations, resources, equal opportunity strategy and executive resources.</p> <p>(2) Line managers shared some people management issues with HR departments</p> <p>(3) HR professionals delivered most directly handling issue to line managers and focus on special issue of managers and team management.</p> <p>(4) HR professionals act as a consulting role instead of program-delivery role. They involve in strategic planning from people-management point.</p>	<p>(1) Using information system to record and store employee data.</p> <p>(2) Upgrade the HR services and save cost.</p> <p>(3) Extend line managers responsibilities</p>
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Table 4 Overview of the findings per article on HRIT

Author/year	Journal	Research Design	Goals of the article	Findings	Definition of HRIT	Activities of using IT
Aschbaugh, S. & Miranda, R. /2002	Public Personnel Management Vol.31, No.1, p7-20	Single case study.	To find out the business benefits that provided by the HRM system.	The system can align HRM to organisational performance issues, and can improve core business processes. It also can develop the human capital inventory and control position and budget.	HRMS is a subset of enterprise resource planning system, which is based on software that integrates information from diverse applications into a common database.	(1) the integration administrative systems can lead to enhance the strategic role of personnel management. (2) allow employee/manager self service on certain HR activities, and then can push data collection and maintenance activities to the source. (3) speed database management
Florkowski, G. W. & Olivas-Lujan, M. R. / 2006	Personnel Review Vol. 35 No. 6 p684-710	On-line survey and email survey to 1400 companies in the USA, Ireland Canada and the UK. 216 valid responses.	To determine the diffusion of HRITs influence the HR service-delivery to external, internal or hybrid.	The overall diffusion of IT is the outgrowth of internal influences. The results is similar with different national setting targeted end-user, and technology type.	HRIT is the software and hardware systems to automate the majority of vast transactional HR activities.	(1) talent, performance and stakeholder management (2)reviewing/updating/modifying personnel information (3)on-line training (4)information tracking
Gardner, S. D., Lepak, D. P., & Bartol, K. M. /2003	Journal of Vocational Behavior Vo.63 P159-179	They mailed surveys to 1969 HR executive in various organisations from a total sample of 2091 received from SHRM(Society for HRM), and got 455 HR completed surveys for a response rate of 25.1%.	To investigate how HR professionals are influenced by extensive us of HRIT, and how HR professionals handle HR information	IT have empowering function for HR professionals, providing a medium in which HR professionals can provide increased value in their work and IT enables HR professionals to more efficiency access and disseminate information.	None	(1) more extensive use of IT enables greater information autonomy for HR professionals. (2)HR professionals need to pay more attention on information systems training. (3)IT helps HR to be a more horizontal and self-learning organisation. (4)IT allows HR professionals to be more involved in strategy implementations and the development of organisational structure and reward systems. (5)IT enables HR professionals to focus on certain informational aspects and force HR professionals modify how to use their time.
Haines, V. Y. & Lafleur, G. /2008	Human Resource Management Vol.47, No.3, p525-540	They send mail survey to 1556 senior HR executives leading Canadian corporations, and got 210 completed questionnaires returned, generating a 13.6% response rate.	To examine the possible influence of IT on the roles and effectiveness of the HR function.	Greater use of IT-supported HR applications, greater positive assessments of the strategic effectiveness of the HR function,	None.	HRIT allow HR to manage large amount of information with great speed and accuracy and lead to more efficient information management, therefore, they noted the powerful IT applications would be associated with greater involvement of HR in the strategic role of business and change agent.
Hempel, P. S. /2004	Human Resource Management Vol.43, No.2, P163-177	The research based on examination for programs in the US that offered HR concentrations, and 22 degree programs examined.	To invest whether HR professionals are prepared well to meet the technology change and to provide suggestion on how to make HR professionals better prepared for the	Most emphasis on HRIT is focus on e-hr, which should not blind the fact that the technology is broadly transformation both work and organisation. It is necessary to change current structure and content of HR degree programs to meet	None.	(1) Employees and line managers are involved in HR activities such as filling application forms or determining salary levels. (2) Technology makes change to organisation and work, and then leads changes in HRM. (3) Executives and line managers can use IT to meet strategic objectives and solve operational problems.

			challenges.	those technology challenges for HR professionals.		
Hussain, Z., Wallace, J., & Cornelius, N. E. /2007	Information and Management Vol. 44, No.1, P74-89	Two techniques are used to investigate the impact of IS on HRM. Questionnaire survey was used to obtain responses from HR professionals in the UK organizations; in-depth semi-structured interviews targeted a small number of senior executives.	To determine whether HRIS usage was strategic and value-added for the organization, and its impact on HR professionals.	There are few differences between SEM and large companies on HRIS usage. And HRIS has strategic collaborating for organization but other professions said it was not experienced as pronounced.	The contemporary use of IS in support of the HR process.	(1) HRIS are used by HR professionals in support of strategic tasks. (2) The use of HRIS in support of strategic decision making in most organizations regardless of company size.
Neary, D. B. /2002	Human Resource Management Vol.41, No.4, P491-498	A case study at TRW INC.	Creating a company-wide, on-line, performance management system	The system can success by organisations seeking uniform and effective method to evaluate and develop employees.	HRIT is efficiency and efficacy management system on the entire employee performance management.	(1)the talent people can be searched all over the world with the system. (2) managers can check the developmental needs of all employees. (3)integrating all processes for all employees, including goal setting, performance appraisal, professional development, and succession planning.
Reiter-Palmon, R., Brown, M., Sandall, D. L., Buboltz, C., & Nimps, T./2006	Human Resource Management Review Vol.16, P294-309	Singe case study.	To describe the need for a web-based system to gather job analysis information and it development and implementation	The web-based job analysis process is more flexible and less resource intensive than traditional job analysis methods.	Use of internet for personnel practices.	To use web-based system, can make the work more flexible, effectiveness; the use of the system allow the information gathered in multiple ways, cost effectiveness. However, there are still several disadvantages: the system does not effectively address all types of tasks, such as social tasks; the system does not eliminate all sources of bias; the quality of the data generated is hard to control.
Shrivastava, S. & Shaw, J. B. /2003	Human Resource Management Vol.42, No.3, p201-222	Model test.	To introduce a model that describes the technology implementation process.	The installation of information technology including three processes: adoption, implementation, and institutionalization. And the technology can liberate HR only when it informs HR processes.	A technology-based system used to acquire, store, manipulate, analyze, retrieve, and distribute pertinent information regarding an organization's human resources.	(1)operational impact of IT refers to alleviation of administrative burden of HR and lowering of variable transaction costs and head count within HR. (2)relational impact of IT refers to the impact that technology has on relationships that HR enjoys with its clients. (3)transformational impact of IT refers to redefine the scope of HR by enabling the function to concentrate more on strategic activities, for instance, creating a learning environment, assisting in knowledge management, facilitating organisational transformation.
Strohmeier, S. /2007	Human Resource Management	Reviews literature and identify implications for future	To review and discussed some initial theoretical methodical	(1) Theoretical background is the central condition of the progress in this research	" e-HRM is the (planning, implementation and)	(1) e-HRM enable new internal and external actors participate into HRM (2) formulation and implementation strategy,

	Review Vol.17, P19-37	research on E-HRM.	and topical implications to support a future research program in e-HRM.	field. (2) Pluralism method is more appropriate than empirical research. (3) the research should ensure the general level of organizational analysis should be coordinated with appropriate level of technology. (4) The systematical research would be better by covering context, configuration and consequences.	application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities”.	<p>specifically the integration with business strategy.</p> <p>(3) Current researches are mainly concerning some single e-HRM activities, such e-recruiting, e-learning, e-selection, etc.</p> <p>(4) The relationship of electronic and conventional HR activities are need more special concern.</p> <p>(5) Research should find the actual patterns of technology are utilized while pay attention on different levels of technology.</p>
Stone, D. L., Stone-Romero, E. F., & Lukaszewski, K. /2006	Human Resource Management Review Vol.16, P229-244	Model development and test.	(1) find the impact of eHR on HR process (2)model explanation about the impact of individual and organisational factors on outcomes of eHR	For both individual and organisations, the eHR systems have showed a number of functional and dysfunctional consequences. First, the organisation might use the her systems to collect data about performance and write reviews, but the face-to-face interview can not be ignore and should be organized periodically. Second, the use of computerized monitoring systems which greatly limit the freedom of employee and control should be minimized.	None.	<p>(1) Individuals, the researchers considered if the following conditions can be met, the application of HRT system can be both accepted by individuals and will result in functional consequences. First, the information flows should be valid and bi-directional between and among individuals and systems. Second, social interaction among individual should be promoted. Third, the using of systems should be controllable.</p> <p>(2) Information technology systems have the potential to increase organisation efficiency. For instance they give great freedom and increase the ability for both organisations and individuals on accessing to information. Nevertheless, the usage of systems might decrease social interactions and incumbent performance, and affect the quality and accuracy of information.</p>
Tansley, C., Newell, S., & Williams, H. /2001	Personnel Review Vol.30, No.3, p351-370	The case study took place in a major UK engineering company between 05,1999 to 03,2000. Methods including: participant observation of project team. Interview, analysis of documentation.	To identify the reason of less successful in developing a transformation HRT than they might have been.	The factors of unable successful application HRT are: (1) lack of awareness and understanding of the potential of the HR system (2) HR process owners were mapping their own processes which limited the transformation afforded by the HR project (3) each HR process was mapped independently. (4) lack of support for the HR project team.	HRT is the element of an enterprise resource planning system will incorporate records for employee resourcing, rewards, training, etc.	<p>(1) individual employee can directly access to all their own data and input directly into the system.</p> <p>(2)senior management and the HR department can access to integrated data from organisation for strategic human resource planning.</p> <p>(3) The HR data is at least potentially available to anyone who may want to access it.</p> <p>(4)change the HR function through three steps: automate, information and transparent.</p> <p>(5) managers and employees can integrate their information for training, job and career planning, remuneration, etc.</p>