RESEARCH ARTICLE

HR ROLES AND E-HRM: SOME INITIAL EVIDENCE FROM MALAYSIA

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ARTICLE INFO	ABSTRACT
	Electronic Human Resource Management (E-HRM) provides the Human Resource (HR) functions with the opportunity to create new avenues for contributing to organizational success. This study is a preliminary investigation on perceived usefulness, perceived ease of use, and attitude towards using E-HRM among 51 HR professionals in Malaysia. This paper also highlights areas for future research on this unique topic among the HR professionals as a whole.

INTRODUCTION

Corporations are undergoing dramatic changes with significant implications for how human resources are managed and the Human Resource (HR) function is best organized and managed. The forces driving change include the rapid deployment of information technology, globalization of the economy, and the increasingly competitive dynamic business environments that corporation faced. The rapid development of the Internet during the last decade has also boosted the implementation and application of Electronic Human Resource Management (E-HRM). E-HRM is a new and intriguing field of research at the intersection of human resource management and information systems. In addition, E-HRM is now a vital aspect of many personnel-related decisions such as collecting job information, recruitment, employee selection, training, and performance management (Chapman and Webster, 2003).The topic of E-HRM is certainly not becoming obsolete, and its full potential is still anticipated (Ruel *et al.,* 2007), and therefore academic involvement in the topic needs to grow. Ruel *et al.* (2007) further stressed that research on E-HRM is still in its "youth-phase". In a similar vein, Strohmeier (2007) surmised that research on E-HRM stems from several disciplines and is scattered throughout numerous journals and since initial reviews are not encompassing (Anderson, 2003; Lievens and Harris, 2003; Welsh *et al.,* 2003), the results of these studies remain unclear at present. In addition, Stone *et al.* (2006) also highlighted that despite the widespread use of E-HRM systems, little research has focused on such issues as the degree to which they are accepted by users. Consequently, this paper tries to contribute to advancing this E-HRM research area.

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In the statement above described. Thus, research aims to examine the influence of HR roles on E-HRM. Recently, E-HRM has been studied increasingly by many scholars. Most of the studies on E-HRM were undertaken in USA and Europe. There are fewer studies from Malaysia, a country that is environmentally, economically, and technologically far different from the developed economies. Because of the huge difference in the market environment and the management mechanisms between developed countries and Malaysia, there should be much different research results on E-HRM. Previous studies on E-HRM have been conducted by various researchers in developed countries. Laumer *et al.* (2010) studied E-HRM in an E-Business environment among 144 HR managers from German top 1,000 firms. Their survey results revealed that HR managers' most pressing challenges are staff retention and internal and external employer branding. They concluded the importance for an E-HRM that needs to be both effective-adequately fill vacancies – and efficient – make best use of scarce resource. Strohmeier and Kabst (2009) examined the factors that influence the cross-national organizational adoption of E-HRM in Europe. Major general and contextual influence factors were derived and tested based on a large-scale survey with a sample of 2,336 organizations in 23 European countries using logistic regression. They revealed that E-HRM is a common practice throughout Europe since two-thirds of all organizations have already adopted E-HRM. They also found that major determinants of E-HRM adoption are size, work organization, and configuration of HRM.

Voermans and van Veldhoven (2007) conducted a study on attitude towards E-HRM. They utilized an online questionnaire, in which 99 managers and 257 employees within Philips (Electronics) Netherlands participated. They found that differences in perceived usability of current IT systems, as well as the preferred HR roles strategic partner (high preference) and employee champion (low preference), were related to a positive attitude towards E-HRM systems. For managers, user support was also found to be a predictor of a positive attitude towards E-HRM. Olivas-Lujan *et al.* (2007) conducted a case-based study in order to investigate how four of the most competitive

Mexican firms are implementing their E-HRM strategy. They discovered that to fully understand the way E-HRM is used in firms from emerging economies, it is important to take into consideration local idiosyncrasies. Ruel *et al.* (2007) examined the contribution of E-HRM to HRM effectiveness. They conducted their study in the Ministry of Internal Affairs in The Netherlands, where E-HRM in the form of employee self-service applications was introduced. They found that individual assessment of e-HRM applications influences HRM technical and strategic effectiveness. This is especially so in the perceived quality of the content and the structure of e-HRM applications which have a significant and positive effect on technical and strategic HRM effectiveness. They also found that the basic expectations are that using e-HRM will decrease costs, will improve the HR service level and will give the HR department space to become a strategic partner.

Ruel *et al.* (2004) conducted an explorative empirical study in five large companies on web-based HRM. They concluded that the goals of E-HRM are mainly to improve HR's administrative efficiency/to achieve cost reduction. They also found that international companies seem to use the introduction of E-HRM to standardize/harmonize HR policies and processes. Further, there is a "gap" between E-HRM in a technical sense and E-HRM in a practical sense in the five companies involved in their study. Finally, E-HRM hardly helped to improve employee competences, but resulted in cost reduction and a reduction of the administrative burden. Despite the growing interest in E-HRM in developed countries, there are very few studies on HRM technology in Malaysia. For instance, Yusliza, Ramayah, and Haslindar (2010) proposed a model based on Technology Acceptance Model and HR Roles that examine the relationship between HR roles and E-HRM adoption. Ramayah *et al.* (2006) studied the adoption and usage of a HR information system (HRIS) among HR executives and HR professionals working in companies in Penang. Their study revealed that compatibility and visibility were positively related and complexity was negatively related to extent of use of the HRIS. Hooi (2006) studied the extent of E-HRM practiced in the small and medium sized

manufacturing companies. The readiness and feasibility of implementing E-HRM in the SMEs is dependent on the availability of resources (expertise, financial, and technical resources) and the attitude of the employees. Based upon this literature, this paper aims to investigate the relationship between HR roles that might have significant contribution to E-HRM adoption.

METERIALS AND METHODS

This section details the context in which this research was conducted. It also explains the methodology and variables utilized in the study.

Research Site and Subjects

The study took place in a Seminar that was organized by one of the professional bodies in Subang, Selangor in November 1, 2010. The research idea and project were proposed to the President of the Institute, and he agreed to allow the participants (HR professionals) to participate. Their participation was voluntary. Initially, 55 participants completed the questionnaires, but four of them were discarded from further analysis as they contained many unanswered questions. The final sample consisted of 51 HR professionals, of whom 12 (23.5 per cent) were male, 37 (72.6 per cent) were female, and 2 (3.9 per cent) participants did not report their gender.

Procedure

The questionnaire was administered to the participants during the seminar. Almost all of the potential participants who were approached by the primary researcher in the context of this seminar agreed to take part in the study. At the beginning of the seminar, it was clearly stated to the participants that all the information contained in their questionnaires would remain confidential. Instructions on how to correctly answer the questions were given to them. Participants were asked to return the completed questionnaire at the end of the seminar. A token of appreciation was given to the responded participants as incentives. The basic information of the participants (gender, age, race, position, etc) was coded to ensure

absolute confidentiality and a better handling of the information. Respondents were told that they would be provided with the results of the study at their request.

Measures

The measures used in the study have all been gleaned from the literature and the details are presented in Table 1.

RESULTS

Profile of the Respondents

The characteristics of the respondents completing the questionnaires were. The majority of respondents (68.6 per cent) were Malays, followed by Chinese (19.6 per cent), Indians (5.9 per cent), and the remainder did not report their race. About 72.6 per cent of the respondents were married. Further, 47 per cent of the HR professionals have a bachelor degree, 23.5 per cent have Master degree, 17.6 per cent have either diploma or STPM, 2 per cent of the HR professionals have SPM, PhD, and certificate respectively. The remainder, they did not report their educational background. About 31.4 per cent of the participants are in HR/industrial relations field of study. For their current position in the organization, 43.1 per cent are HR executives/HR officer/Assistant HR manager, 41.2 per cent are HR manager/Senior HR manager, and 3.9 per cent are General Manager. The average of the participants is 38 years old. The average number of working experience in HR with the current organization is 5.6 years.

Company Adoption of E-HRM Facilities

Participants were asked to state whether their company have adopted E-HRM. As shown in Table 2, the majority of the participants, about 78 per cent, indicated that their company have already adopted E-HRM. Those who answered that their company has adopted E-HRM, were further asked to mention whether they use E-HRM at work or not.

Table 1. Variables and Measures

Construct	Items	Source
HR Roles *Strategic Partner*	HR develops processes and programs to link HR strategies to accomplish business strategy HR is seen as a business partner HR's credibility comes from helping to make strategy happen HR is an active participant in business planning HR helps the organization accomplish business goals	Conner & Ulrich (1996) 1 = Very Low, 7 = Very High
Change Agent	HR's credibility comes from making change happen HR is seen as a change agent HR is an active participant in organization renewal, change, or transformation activities HR makes sure that HR processes and programs increase the organization's ability to change HR works to reshape behavior or helps anticipate future people needs	
Employee Champion	HR develops processes and programs to take care of employee personal needs HR works to offer assistance to help employees meet family and personal needs HR is an active participant in listening and responding to employees HR spends time on listening and responding to employees HR's credibility comes from maintaining employee morale	
Administrative Expert	HR works to monitor administrative processes HR is seen as an administrative expert HR spends time on operational issues HR makes sure that HR processes are efficiently administered HR develops processes and programs to efficiently process documents and transactions	
Perceived Usefulness	Using E-HRM would increase my performance in handling HR activities Using E-HRM in my job would increase productivity in handling HR activities Using E-HRM would enhance my effectiveness in handling HR activities I would find E-HRM useful in handling HR activities.	Davis (1993) 1 = Strongly Disagree, 7 = Strongly Agree
Perceived Ease of Use	Learning how to apply E-HRM would be easy for me My interaction with E-HRM would be clear and understandable I would find E-HRM easy to interact with It would be easy for me to become skilful with E-HRM I would find E-HRM easy to use	Davis (1993) 1 = Strongly Disagree, 7 = Strongly Agree
Attitude towards E-HRM	Using E-HRM would be a good idea I like working with E-HRM In my opinion, it is desirable to use the E-HRM Using E-HRM is a pleasant experience Using E-HRM is a wise idea	Davis (1993) 1 = Strongly Disagree, 7 = Strongly Agree

Use of E-HRM at Work

Participants indicated that 76 per cent have use E-HRM at work. Only 22 per cent have not used E-HRM technology at work (Table 3).

E-HRM Use Extent

In order to examine the extent of use of E-HRM, it is vital to analyze the participants experience of using E-HRM by using 7-likert scale ranging from

Table 2. Company Adoption of E-HRM Facilities

Does your company adopt E-HRM facilities?	Per cent
Yes	78
No	20
Did Not Response	2

Table 3. Used of E-HRM at Work

Do you use E-HRM at work?	Per cent
Yes	76
No	22
Did Not Response	2

Table 4. Extent of Experience of Using E-HRM

How much experience do you have with E-HRM?	Per cent
1	6
2	8
3	10
4	14
5	33
6	19
7	8
Did Not Response	2

Table 5. E-HRM

E-HRM Variables	Mean	Standard Deviation
Attitude Towards Using E-HRM**	5.81	0.75
Perceived Ease of Use of E-HRM***	5.57	0.92
Perceived Usefulness of E-HRM***	5.68	0.90

Note: ***N=51; **N=50
"Scale from (1 = Strongly disagree to 7 = Strongly agree)"

Table 6. HR Roles

HR Roles	Mean	Standard Deviation
Strategic Partner	5.28	.98
Change Agent	5.42	1.03
Employee Champion	5.44	.96
Administrative Expert	5.24	1.11

Note: N=51
Scale from (1=Very low to 7=Very high)

Table 7. Reliability

Variables	Number of Items	Cronbach Alpha (α)
Perceived Usefulness	4	.94
Perceived Ease of Use	5	.96
Attitude Towards Using E-HRM	5	.93
Strategic Partner	5	.95
Change Agent	5	.97
Employee Champion	5	.94
Administrative Expert	5	.94

1 = Minimal Experienced to 7 = Very Much Experienced (See Table 4). A total of 33 per cent

rated on scale 5, followed by scale 6 (19 per cent), scale 4 (14 per cent), scale 3 (10 per cent), scale 7 and 2 (8 per cent respectively), and scale 1 (6 per cent).

Item Analysis

All variables in the study were tapped on a 7-point Likert-like scale. On a 7-point scale, the following criteria to indicate a low or high mean score is used: a score of 2.99 or less indicated a "low" mean; a score of 3.00 to 4.99 was categorized as a "moderate" mean; while a score of 5.00 to 7.00 was termed a "high" mean score (Pallant, 2005).

E-HRM

The mean scores for perceived ease of use, perceived usefulness, and attitude towards E-HRM are presented in Table 5. It is obvious that the HR professionals rank attitude towards E-HRM highest (Mean = 5.81), followed by perceived usefulness (Mean = 5.68), and perceived ease of use (Mean = 5.57). All E-HRM variables recorded moderate scores, with very little difference evident between the scales.

Extent of Experience of Using E-HRM

In order to examine the extent of use of E-HRM, it is vital to analyze the participants experience of using E-HRM by using 7-likert scale ranging from 1 = Minimal Experience to 7 = Very Much Experience (See Table 4). A total of 33 per cent rated on scale 5, followed by scale 6 (19 per cent), scale 4 (14 per cent), scale 3 (10 per cent), scale 7 and 2 (8 per cent respectively), and scale 1 (6 per cent).

The Role of Human Resources

Table 6 shows descriptive statistics for the role of human resources. There has been a shift in human resources roles: away from admin and record keeping and toward more employee champion role. HR professionals identified their role as employee champion as the highest ranked of HR roles (Mean = 5.44). In contrast, HR professionals report low in administrative expert role (Mean = 5.24). However, the differences for all HR roles are not

large. The change agent and strategic partner role have not achieved high mean, although there is evidence

transforming the function into a strategic partner is slower than the previous studies might predict. The time is now for human resources organizations to

Table 8. Correlations

		1	2	3	4	5	6
1	Perceived Usefulness						
2	Perceived Ease of Use	.55**					
3	Attitude Towards Using E-HRM	.73**	.67**				
4	Strategic Partner	.22	.31*	.45**			
5	Change Agent	.12	.41**	.35*	.86**		
6	Employee Champion	.09	.27	.27	.71**	.82**	
7	Administrative Expert	.25	.45**	.47**	.35*	.43**	.43**

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

that the human resources functional responsibility is shifting to change agent and business partner role and away from administering the HR function.

In all, this study provide a clear picture of emerging HR roles that add responsibilities and emphasize particular new focus—employee champion role, but ranked second and third in change agent and strategic partner role. All of this suggests that HR professionals need to be prepared to become a true strategic partner role and there is a need for a great deal of improvement in the HR management in the 21st century. The human resources function appears to be at the very beginning to become a business partner role. HR professionals need to determine the best way to configure the skills and roles to meet the needs of the business in a cost-efficient manner.

What Does the Future Hold for Human Resources?

A good guess is that change has just begun and that the next decade will see dramatic changes in the HR function in most organizations. The opportunity exists for human resources to become a true strategic business partner, and to help decide how the organization will be managed, what the human resources systems will look like, and how human resources services will be created and delivered. There is evidence in this study that the comfort level of HR professionals to achieve change agent and strategic partner role since these two roles ranked second and third in the analysis. Thus, it can be argued that the speed of change in

make the tough decisions about changing the way in which they are organized to provide the multiple value-added services organizations require. The competitive advantage of an organization's human resources rests in the creative ways in order to deliver value-added services.

Measures Reliabilities

Table 7 shows the reliability of the measuring instruments used in the study. Reliability refers to the degree to which a test yields the same or similar outcomes when administered over time (Hatcher and Stepanski, 1994). The results showed that the reliability of the scales ranged from "very high" to "satisfactory for research purposes". All Scales had Cronbach alpha coefficients above 0.70 as recommended by Nunnally (1978).

Relationship between All Study Variables

Due to the small sample size, correlations were used rather than multiple regression techniques. As shown in Table 8, attitude towards using E-HRM had a strong and positive relation with perceived usefulness ($r = .73$, $p < .01$) and perceived ease of use ($r = .67$, $p < .01$). In terms of HR roles, administrative expert ($r = .45$, $p < .01$), change agent ($r = .41$, $p < .01$), and strategic partner ($r = .31$, $p < .01$) affects perceived ease of use in a positive manner as well. Similarly, administrative expert ($r = .45$, $p < .01$), change agent ($r = .41$, $p < .01$), and strategic partner ($r = .31$, $p < .01$) also affects attitude towards using E-HRM.

The Limitations of the Research and Future Research Directions

The limitation of the research derives, first of all, from the fact that the sample of respondents was small in order to consider the results of the research applicable to the overall population of Malaysian HR professionals. Therefore, the ultimate aim is to extend this research to a bigger number of HR professionals. This research need to be continued (quantitative research) in order to prove their experience towards E-HRM during the implementation of the system. Therefore, it is suggested that further study is warranted in this area. Given the opportunities and challenges posed by the innovation-based economy and the capabilities inherent in sophisticated human resource information system, strategic HR work clearly needs to be handled by someone. This study hopes that it will be handled by the HR function, although that is certainly not a foregone conclusion.

The innovation economy, with the proliferation of companies that rely on innovation-based competitive strategies, offers an opportunity for HR departments to alter their role in the organization fundamentally and become true value-adding strategic partners. Advanced IT-based HR systems can off-load administrative tasks, freeing up HR professionals for more value-adding roles. More importantly, they offer the potential for HR to collect and analyze data to yield knowledge about the effectiveness of various HR approaches and about the feasibility of various strategic paths given the human capital of the firm.

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