

## NEW E-HRM MODEL BASED ON TECHNOLOGY ACCEPTANCE MODEL

Dr. Babita Dosajh<sup>1</sup> & Ms. Paramjit Sujlana<sup>2</sup>

### Abstract

E-HRM provides the HR function with the opportunity to create new avenues for contributing to organizational effectiveness. The topic of E-HRM is certainly not becoming obsolete, and its full potential is still anticipated and therefore academic involvement in the topic needs to grow. Besides, there has been a great deal of research on Technology Acceptance Model (TAM) in India. Less attention is given to examine the relationship between HR roles (strategic partner, change agent, employee champion, and administrative expert) and E-HRM by adoption of TAM. This paper intended to contribute to the Indian literature pertaining to this subject. Based on a review of extant literature on E-HRM, HR roles, and TAM, a model is presented and propositions outlined for future empirical testing.

**Key words:** E-HRM, HR roles, strategic partner, change agent, employee champion, administrative expert, technology acceptance model (TAM).

### INTRODUCTION

The development of information and communication technologies (ICTs) has radically changed our social and economic lives, and has had a profound effect on the way organizations are managed. As a result, internal service providers, such as human resource (HR) function, have been forced to re-examine their own roles in the light of a dramatic increase of organizational demands on them (Gloet and Berrell, 2003). Human resource management (HRM) departments using ICTs is becoming an increasingly important phenomenon commonly referred to as E-HRM. E-HRM provides the HR function with the opportunity to create new avenues for contributing to organizational effectiveness through such means as knowledge management and the creation of intellectual and social capital (Lengnick-Hall and Moritz, 2003).

---

<sup>1</sup> Professor, GJIMT, Mohali

<sup>2</sup> Asst. Professor, GJIMT, Mohali

We based our research on two theories from complementary areas. The first theory that we use as a starting point is the Technology Acceptance Model (TAM) by Davis et al. (1989). This model presents a theory of the acceptance and attitude towards IT systems in general. The second theory is a model of the role of the HR function (Ulrich, 1997) in the organization. Such a model can be used to describe the role actually played by HR within the organization. This research aims to examine the influence of HR roles on the usage of E-HRM. The contributions of this paper include the testing of elements of theoretical model in E-HRM implementation and to facilitate organization to diagnose the main reasons why E-HRM implementation is not achieving the expected objective. The outcome of the research could facilitate organization in understanding the main contributors to the usage of E-HRM and enable necessary corrective actions taken to enhance the usage of E-HRM. A research model is proposed using factors identified from the literature review.

### **Research Objectives:**

- To what extent have companies implemented E-HRM?
- How do HR roles (administrative expert, employee champion, change agent, and strategic partner) affect perceived usefulness and perceived ease of use?

### **Review of Literature:**

#### **Definition of E-HRM**

**E-HRM** is the (planning, implementation and) application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities.

e-HRM is a way of implementing HR strategies, policies, and practices in organizations through a conscious and directed support of and/or with the full use of web-technology-based channels.

Some definitions see e-HRM as conducting HR transactions using the Internet or intranet (Lednick-Hall and Moritz, 2003). Consequently, if a researcher is using such a definition, it could be argued that value created by e-HRM would likely be assessed as improvement of the

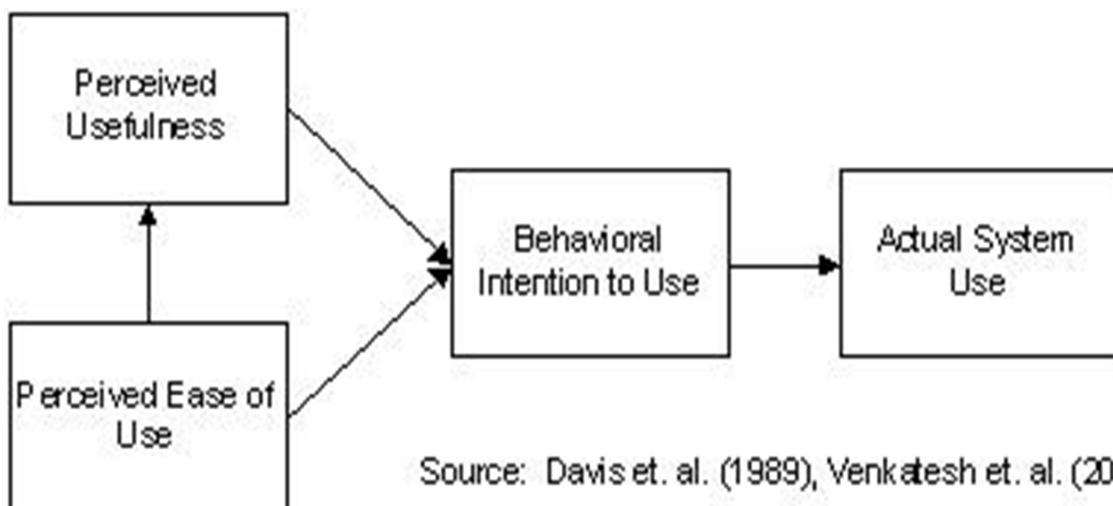
administrative HR processes. Here, transformational outcomes of e-HRM like employee involvement or workforce alignment might be ignored. Following the ‘transactional’ tradition, Voermans and Van Veldhoven (2007) write, ‘e-HRM could be narrowly defined as the administrative support of the HR function in organizations by using Internet technology’ (p. 887).

### Technology acceptance model

TAM (Fig.1) is an adaptation of the Theory of Reasoned Action (TRA) to the field of IS. TAM posits that perceived usefulness and perceived ease of use determine an individual's intention to use a system with intention to use serving as a mediator of actual system use. Perceived usefulness is also seen as being directly impacted by perceived ease of use. Researchers have simplified TAM by removing the attitude construct found in TRA from the current specification (Venkatesh et. al., 2003). Attempts to extend TAM have generally taken one of three approaches: by introducing factors from related models, by introducing additional or alternative belief factors, and by examining antecedents and moderators of perceived usefulness and perceived ease of use (Gloet and Berrell, 2003).

TRA and TAM, both of which have strong behavioural elements, assume that when someone forms an intention to act, that they will be free to act without limitation. In practice constraints such as limited ability, time, environmental or organisational limits, and unconscious habits will limit the freedom to act.

**Figure 1.** Technology acceptance model (TAM)



### The Ulrich Human Resource Management Four-Roles Model

The model of this research is linked to the Four-Roles Model first presented by Conner and Ulrich (1996), and later by Ulrich (1997). In the latter study, Ulrich's conceptual framework for the Four-Role Model consists of two main dimensions. The first reflects the continuum from an operational (present) focus to a strategic (future) focus, while the second reflects the conflicting demands of people and processes (Ulrich, 1997, Conner & Ulrich, 1996). Ulrich (1997) states that HR can help deliver organizational excellence by means of four methods. First, HR should become a partner with the management of the firm in helping with strategy execution. Second, HR should contribute expertise in the efficient and effective performance of work, so that costs are cut and quality is maintained. Third, HR should represent the concerns of the employees to senior management as well as working with employees to increase and ensure their ability to contribute to the organization through their competence and commitment. Finally, HR professionals should continually contribute to the process of change and help improve the organization's capacity to do so (Ulrich, 1997). The four roles that emerge and four ways HR professionals can contribute, based on two continual axes, are shown in Figure 2.

**Figure 2:** The Ulrich Model

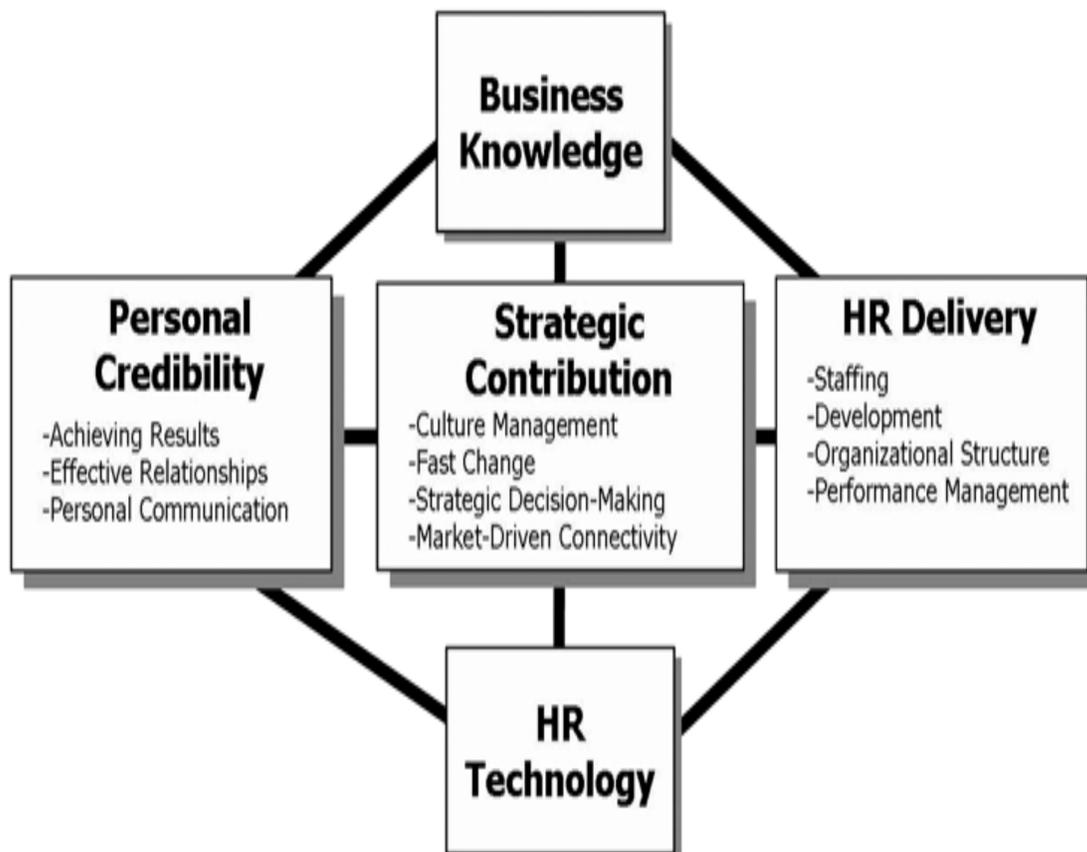


**Source:** Ulrich, D. (1997)

## HR Technology

HR professionals need to be able to leverage technology for HR practices and use e-HR/web-based (Fig.3) channels to deliver value to their customers (Mukherjee, 2001). Mukherjee (2001) further argues that the pace of technological innovation will continue to accelerate. HR can take advantage of these changes by automating HR processes and becoming more effective in communicating with its internal /external customers. More importantly, by absorbing the latest technology, HR can project a forward looking image that will help it earn the respect of skeptical colleagues.

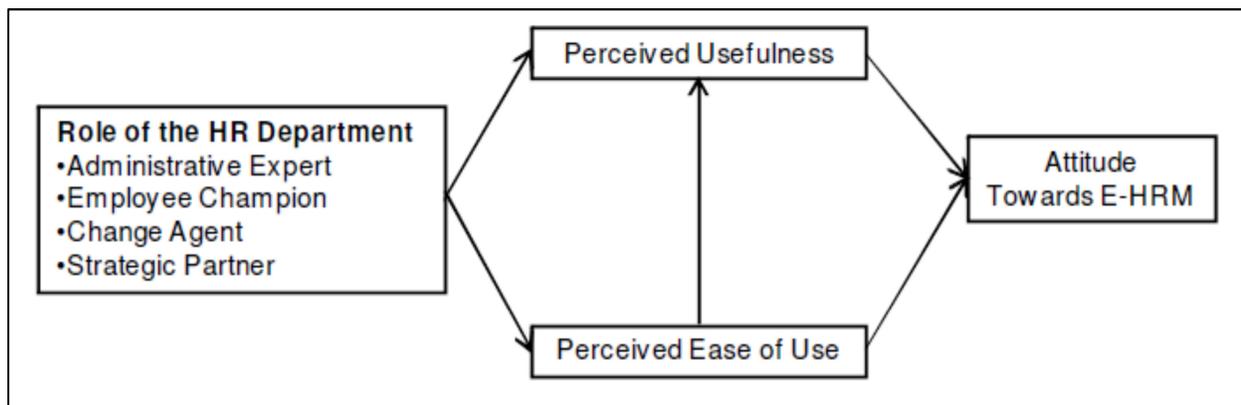
**Figure 3 :** The HR Competencies (Brockbank & Ulrich Model)



## THE PROPOSED RESEARCH MODEL AND PROPOSITIONS DEVELOPMENT

Because E-HRM has received such scant attention in the literature, it is necessary to address the question of what antecedents contributes to attitude towards E-HRM by looking at the literature representing disciplines other than E-HRM. In particular, TAM and model of HR roles will be used to develop the proposed framework. Figure 5 depicts the proposed research model of the relationship between HR roles, perceived ease of use, perceived usefulness, and attitude towards E-HRM.

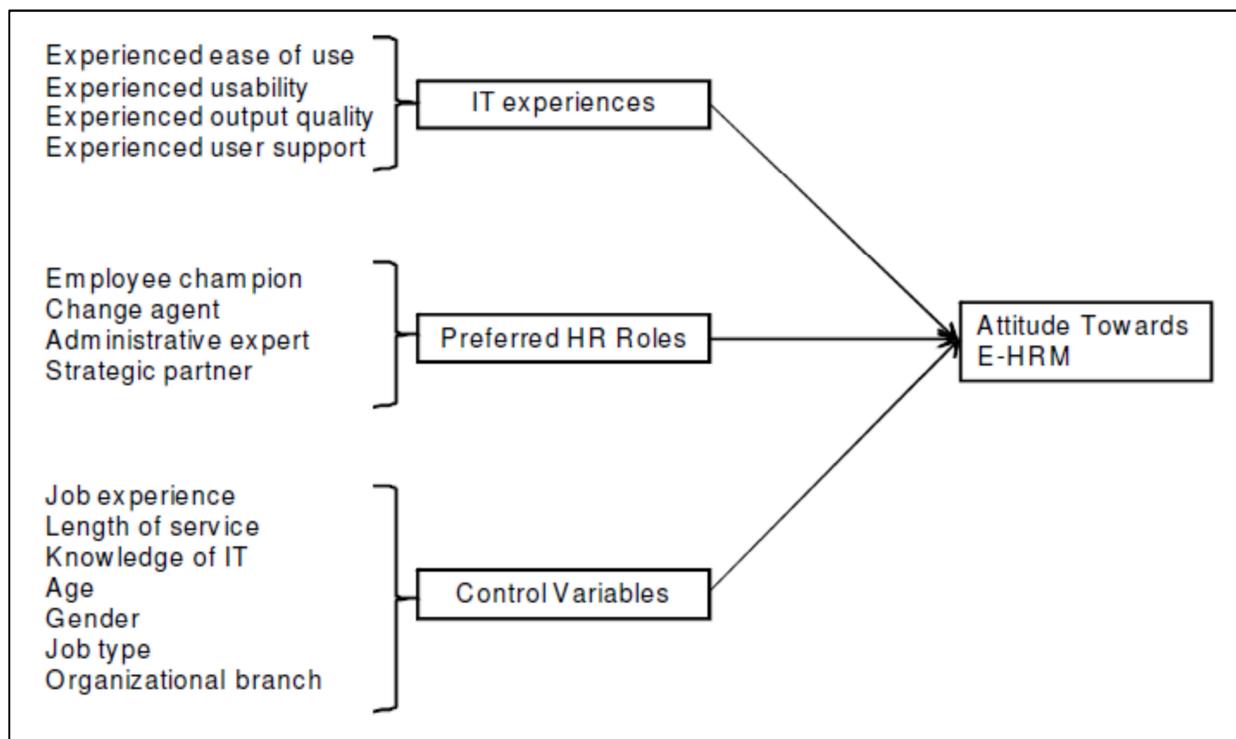
According to Voermans and van Veldhoven (2007), (see Fig. 4), a manager or shop-floor employee preferring the administrative expert role is expected to have a positive attitude towards E-HRM as well, as E-HRM is expected to improve this role in terms of quality and efficiency. Better quality and efficiency in administration is experiences by managers and employees as a higher degree of service delivered by the HR function. HR departments are being called upon to play a much more strategic role in organizations (Lawler and Mohrman, 2000).



**Figure 4.** Proposed research model

Furthermore, the HR function is beginning to redefine its role from one of administrative support to one of being a strategic partner. Since a manager or shop-floor employees are prefers to play a role as an administrative expert, it is expected that HR manager give less attention to administrative expert role towards E-HRM. Thus, role played by an HR manager as an administrative expert role will be negatively related with perceived usefulness and perceived ease of use. Voermans and van Veldhoven (2007) also argued that a negative effect on the attitude towards E-HRM is expected when employees or managers prefer the employee

champion role. They further stressed that this might be caused by fear of losing personal contact with HR professionals, which is one of the strongest needs displayed by employees and managers preferring an employee champion role for HR. It is therefore, HR manager will play more employee champion role in predicting perceived usefulness and perceived ease of use since employees or managers have a negative effect on the attitude towards E-HRM with employees champion role. Therefore, role of HR manager as employee champion will have positive relationship with perceived usefulness and perceived ease of use.



**Figure 5.** Research framework on attitude towards E-HRM (Voermans and van Veldhoven, 2007)

Voermans and van Veldhoven (2007) further argued that this positive relation is expected because of the possibility E-HRM provides and HR manager to focus on strategic HR tasks as opposed to more operational tasks. In Ulrich (1997) HR model, administrative expert and employee champion role are classified under operational tasks. Therefore, we predict a positive relationship will exist between strategic partner and change agent role and perceived usefulness and perceived ease of use.

Consistent with the above argument, the following propositions on the relationship between role of the HR department and perceived usefulness and perceived ease of use are articulated:

**P1: Role of the HR department will be related to perceived usefulness.**

**P1a: Administrative expert will be negatively related to perceived usefulness.**

**P1b: Employee champion will be positively related to perceived usefulness.**

**P1c: Change agent will be positively related to perceived usefulness.**

**P1d: Strategic partner will be positively related to perceived usefulness.**

**P2: Role of the HR department will be related to perceived ease of use.**

**P2a: Administrative expert will be negatively related to perceived ease of use.**

**P2b: Employee champion will be positively related to perceived ease of use.**

**P2c: Change agent will be positively related to perceived ease of use.**

**P2d: Strategic partner will be positively related to perceived ease of use**

**P3: Perceived ease of use will be positively related to perceived usefulness.**

**P4: Perceived ease of use will be positively related to attitude towards E-HRM.**

**P5: Perceived usefulness will be positively related to attitude towards E-HRM.**

## **Conclusion**

In this paper, we compiled an overview of E-HRM and TAM. This paper has proposed a set of HR roles that will be most significantly influence the attitude towards EHRM. They are administrative expert, employee champion, change agent, and strategic partner. For this purpose, in this research, we have proposed and delineated a research model to explore the relationships among HR roles and attitude towards E-HRM. In concluding this paper, we stress that E-HRM is being used increasingly by organizations in the United States and other countries. Their use is often predicated on unproven claims about their antecedents. Thus, we urge that well-designed studies be conducted to test the many relationships offered in this paper. The future results from this proposed research will provide valuable knowledge that can be used to design and implement E-HR that promote the welfare of both individuals and organizations.

### References

- Brockbank, W. and Ulrich, D., 2003. *Competencies for the New HR: Society for Human Resource Management*, University of Michigan Business School, Global Consulting Alliance.
- Conner, J. and Ulrich, D., 1996. Human resource roles: Creating value, not rhetoric. *Human Resource Planning*: Tempe. 19(3), p 38.
- Davis, F.D., 1989. Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 13(3): 319 – 340.
- Gloet, M. and Berrell, M., 2003. The dual paradigm nature of knowledge management: implications for achieving quality outcomes in human resource management. *Journal of Knowledge Management*, 7(1): 78 – 89.
- Lawler, E.E. and Mohrman, M., 2003. *Creating a strategic human resource organization: An assessment of trends and new directions*. Stanford, CA: Stanford University Press.
- Lengnick-Hall M.L. and Moritz, S., 2003. *The impact of e-HR on the human resource management function*. *Journal of Labour Research*, 24(3): 365 – 37
- Mukherjee, A., 2001. *HR transformation – can technology help?* [online] Available at: <[http://www.humanlinks.com/manres/articles/hr\\_transformation.htm](http://www.humanlinks.com/manres/articles/hr_transformation.htm)> [Accessed 23 November 2011]
- Ulrich, D., 1997. *Human resource champions: the next agenda for adding value and delivering results*. Boston: Harvard Business School Press.
- Venkatesh, V., 2000. Determinants of perceived ease of use: integrating control, intrinsic Motivation, and Emotion into the Technology Acceptance Model. *Information Systems Research*, 11(4): 342–365
- Voermans, M. and van Veldhoven, M., 2007. Attitude towards E-HRM: An empirical study at Philips. *Personnel Review*, 36(6): 887-902.