Chapter 3.1

The Benefits of Using Technology in Human Resource Management

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INTRODUCTION

The use of technology within human resource management has grown considerably over the last decade with the majority of organizations now using some form of HR information system (HRIS). For instance, in Europe, Watson-Wyatt (2002) found that 70% of the organizations surveyed used the Internet or Intranet to deliver HR services to employees with most respondents planning to enhance substantially their e-HR capabilities over the two years after the survey. In the UK alone, survey research by the Chartered Institute of Personnel and Development in 2005 showed that 77% of organizations used an HRIS. Research from Cranfield School of Management in 2003 found an even higher proportion of companies using HRIS at 82%.

An HRIS can perform a number of functions from the simple storage and communication of information, to more complex transactions. As technology advances, the range of functions that an HRIS can undertake increases. The use of HRIS can provide a number of benefits to the HR function, line managers, and the wider organization. On one level, the use of technology has been shown to lead to faster, more accurate and more efficient processes, and reduced HR costs. Technology can also be used to provide HR information and to enable managers and employees to perform simple HR tasks themselves. On another level, the use of HRIS to reduce the administrative and transactional burden on the HR function can lead to a change in the structure of HR and allow the function to play a more strategic role in the organization.

The reasons behind an organization's introduction of an HRIS may vary considerably from the need to facilitate efficient processes or cut costs, to improve communication and customer service, or the desire to create a shift in the role of the HR function from one that is mainly administrative to one that is more strategic. This chapter will discuss the potential impacts of technology on HRM in terms of the possible rationale behind the introduction of an HRIS. The chapter will draw on the past literature on HRIS as well as on case study research conducted by the author in conjunction with the Chartered Institute of Personnel and Development (Parry, Tyson, Selbie, & Leighton, 2006) to examine the possible components of a business case for HRIS and the benefits that such systems can potentially offer to an organization.

BACKGROUND

For the purpose of this article, we will use Tannenbaum's (1990) definition of an HRIS as a system that is used to "acquire, store, manipulate, analyze, retrieve, and distribute information about an organization's human resources" (p. 27). Kovach and Cathcart (1999) have used a similar definition of HRIS as any system for "collecting, storing, maintaining, retrieving and validating data needed by an organization about its human resources" (p. 275). An HRIS can have a wide range of uses and can range in complexity from simple spreadsheets, enabling complex calculations to be performed easily, to comprehensive HRIS solutions (see Kovach et al. for a discussion of the uses of HRIS). Technology may be used for different purposes within particular HR functions—for recruitment and selection, performance evaluation, compensation and benefits, training and development, health and safety, employee relations and legal issues, and retention and work-life balance (Enshur, Nielson, & Grant-Vallone, 2002); or to manage HR and employee information across the entire employment cycle. Martinsons (1994) distinguished between "unsophisticated" use of technology in HR such as payroll and benefits administration and "sophisticated" use such as recruitment and selection, training and development and performance appraisal. Organizations can also extend services directly to managers and employees via the Internet or Intranet using self-service systems.

As an HRIS can be used in such a wide variety of ways, it stands to reason that the reasons behind an organization's introduction of technology and the benefits that a company may realize as a result of an HRIS will also vary. Ngai and Wat (2006) observed that organizations need to be convinced of the benefits of HRIS for their company before they implement such a system. Therefore, an analysis of the potential benefits of technology in HRM is important both for HR practitioners and academics in this area. An examination of the literature suggests that the impact of technology in HRM falls into two main areas—the impact on the efficiency of the delivery of HR processes and the impact on the role of the HR function itself.

A number of authors have suggested that an HRIS can have positive benefits in terms of the efficiency of HR processes. Enshur et al. (op cit) discuss in some detail the impact of technology on the processes of acquiring, rewarding, developing, protecting and retaining human resources and conclude that the shift from traditional HR to e-HR can lead to "substantial reductions in cost and time for many HR activities" (p. 238). Snell, Stuber, and Lepak (2002) have also noted that IT may potentially enable HR to lower administrative costs, increase productivity and reduce response times. Likewise, Lengnick-Hall and Moritz (2003) suggested that e-HR, not only reduces process and administrative costs, but can speed up transaction processing, reduce information errors and improve the tracking and control of human resource actions. Lengnick-Hall et al. go on to note that many of these effects are likely to be realized early in the implementation of an e-HR system so can

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