Chapter 6.3
An IT-Architecture to Align E-Recruiting and Retention Processes

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ABSTRACT
As one of the top issues for CIOs nowadays the recruiting and retention of IT-professionals has received a lot of attention both in practice and research. While companies are in dire need of new strategies and integrated approaches in human resources, research has predominately observed the general attitude of IT-professionals to their work, their individual incentives and consequentially their turnover intention. We aim to relieve these needs in practice by introducing an approach containing an aligned IT-architecture of e-recruiting and retention processes. For this purpose we use a design science approach to develop an IT-architecture of retention processes and their related subsystems and combine this architecture with the next-generation holistic e-recruiting system invented by In Lee in 2007. This architecture could increase knowledge transfer and thereby improve the adjustment and performance of both processes. [Article copies are available for purchase from InfoSci-on-Demand.com]

INTRODUCTION
Threat pinpointed, threat averted – end of story? Not really. From the early beginnings of the IT-economy the potential threat of an IT-talent shortage was recognized by IT-corporations as well as IS research (LaBelle et al., 1980) but today, nearly three decades later, the threat not only exists but gets even worse. In the early stages Igbaria and Siegel (1992) advised IT-organizations to keep an eye on the growing shortages of IT-personnel and the increasing demand on the labor market. But they also identified that there might be multiple forces within these organizations which delay this process and distract from its importance (Igbaria & Siegel, 1992). A study of the career anchors of information systems personnel predicted that
reducing IS personnel turnover due to labor shortages will become an even more critical issue in the near future (Crepeau et al., 1992). Despite being recognized by several researchers and a few corporations, public institutions in the States like the General Accounting Office (GAO) still raised questions about the validity of the shortage estimates and the methodologies applied in the market surveys that were conducted (Garner & Weldon 1998; Ferratt et al., 1999). Further organizations, labor market analysts and external experts showed similar concerns about the various estimates of the talent shortages as well, but after a while they started to identify the problem and deduce that the IT-talent shortage really exists (Cappelli, 2000b; Brock, 2003; Sadin, 2003; Frank et al., 2004; Farrell & Grant, 2005; Acharya & Mahanty, 2008).

Given this situation, IT-management is compelled to develop new effective strategies to remain within this “War for IT-Talent” (Chambers et al., 1998; Keim & Weitzel, 2006). The IT-talent shortage demands that the companies compete effectively against competitors on the job market (Patel, 2002). One way is to use information technology to gain a competitive advantage regarding the recruiting of employees. A study with Germany’s Top-1,000 companies indicates that there is an increasing usage of IT to manage job postings (mainly on the Internet) and applications (mainly received by Internet channels such as e-mail or websites). At a level of 85.9 per cent, the majority of vacancies in 2006 were communicated to potential candidates by means of the company’s website and 59.0 per cent were published on internet job boards such as monster.com. At a level of 26.6 per cent job postings, printed newspapers or magazines are far behind. Therefore it is not surprising that 64.1 per cent of the hires generated are due to job postings on the internet. Furthermore the increasing usage of IT can be shown in the use of application methods as well. At a level of 51.3 per cent, more than half of the incoming applications are received by electronic channels by the Top-1000 companies in Germany (Eckhardt et al., 2007b). In addition this survey shows that companies who are using e-recruiting tools improve their overall business performance in terms of time, cost and quality. For example, more than 50 per cent of Germany’s Top-1,000 companies pointed out that they have increased the quality of applications (54.1 %) and the quality of applicants (52.0 %). Furthermore more than 50 per cent reduced the costs per hire (53.9 %), costs per job posting (61.2%) and for application tracking (59.6%). These figures indicate that using e-recruiting enables companies to perform better in the search for talent.

However, as several researchers have stated, managers who do not pay attention to recruiting and retention issues will face serious challenges in engaging and maintaining their IT-workforce (Agarwal & Ferratt, 2002). The open contest for competitors’ employees is no longer a rarity but is an accepted business method. Cappelli (2000a) described the central point in the following way: “To poach is fine, to be poached is not” (Cappelli, 2000a). Not all recruiting is the same; retention should be shifted from broad programs to highly targeted efforts aimed at individuals and groups of key employees (Cappelli, 2000a).

Based on these two critical issues for organizations the underlying research question of our approach is: How can one align recruiting and retention processes using e-services?

To answer our research question we took a design science approach (Hevner et al., 2004) in order to regard retention not only as the key process (Frank et al., 2004) in committing an employee to an employer but also in measuring their job performance and discover the employee’s personality in order to provide valuable results for subsequent retention processes. Therefore we took this design science approach to develop an IT-architecture to align corporate e-recruiting and retention processes.

Our design science approach (Hevner et al., 2004) is structured as follows. After the intro-