Given the current technological advances and the pace of environmental change, human resource professionals must proactively embrace technology and integrate their core human resource processes in order to maximize the value of human asset. Recently, a Web-enabled e-recruiting emerged quickly as a powerful method for both job seekers and recruiters. E-recruiting has driven companies to redesign the recruiting process and to move quickly to Web-based integrated human resource systems that provide standardized frameworks for key personnel processes (Cullen, 2001).

Conventional recruiting methods have been plagued with high hiring costs and frequent hiring delays. E-recruiting improves the recruiter’s ability to handle job applications and job postings by minimizing paperwork and automating key recruiting activities. The widespread adoption of corporate career Web sites by companies is driven by the rising cost and inflexibility of using the third-party job boards and traditional media advertisements. Companies use their career Web sites to give detailed job information, to explain the culture and benefits, and to promote long-term relationships with job seekers.

While e-recruiting goes through the same phases as the traditional process, the benefits of e-recruiting are accomplished with the extensive use of a central database and an array of Web-enabled integrated applications. Given the complexity of an integrated system, it is essential to create an architecture that will guide the development of interrelated components that support the e-recruiting phases and other human resource processes. If clear architecture has not been established, it is difficult to realize fully the e-recruiting potential. Having established a comprehensive architecture, companies then can undertake the development and integration of various e-recruiting technologies that are likely to lead to their desired results.

E-recruiting systems have evolved through numerous technological developments since their introduction in the mid-1990s. Our recent survey shows that Fortune 100 companies are in various stages of development. At the early stage of a corporate e-recruiting system, the purpose of the career Web site is simply to post job openings on the static Web page for job seekers’ information. As e-commerce technologies advance and recruiters gain more e-recruiting experience, the front-end e-recruiting systems add new features and functions, target job seekers better, and integrate with a back-end human resource management system. An advanced e-recruiting system of large companies has been powered by an enterprise-wide system and has incorporated best practice recruiting methodologies to achieve strategic advantage.

While e-recruiting has a potential to reduce hiring costs and time and to improve the quantity and quality of job applicants, there are four major challenges that remain to be overcome: organizational, managerial, legal, and technological challenges. The organizational challenges include the following: (1) business process redesign is needed across the entire human resource management process to realize the benefits of e-recruiting. Bottleneck and inefficient activities should be iden-
ified and redesigned so that the entire recruiting process moves quickly with an exchange of standardized data; (2) most qualified candidates are often passive job seekers who currently are employed but may be interested in new job opportunities. A strategy to identify qualified passive job seekers and to encourage them to apply should be developed; and (3) it is difficult to benchmark the best management practice and to develop a set of metrics that measure the effectiveness of different recruitment methods. There are no significant statistics available on the effectiveness of various e-recruiting tools and management practices because of limited experience with e-recruiting.

The managerial challenges include the following: (1) without a user acceptance of technology, technology would be of little use in the e-recruiting process. Recruiters and hiring managers should be comfortable and knowledgeable about the use of Web-based recruiting methods. A comprehensive training program should be developed for users; (2) the success of e-commerce does not lie in the technical sophistication of the career Web site but in the balanced combination of technology and management skills; (3) many job seekers are still not comfortable using the e-recruiting method. Given the limited financial resources, finding the optimal mix of different recruiting methods is a challenge for human resources managers; and (4) e-recruiting has helped companies to store and retrieve pools of talent quickly but often fails to screen the pools adequately.

The legal challenges include the following: (1) different reporting requirements for governments such as the EEOC report can be a problem for centralized recruiting for global companies (Flynn, 2002); (2) there is potential employer liability for violating employment discrimination laws, laws related to applicant background checks, and laws prohibiting false advertising (King, 2000). A comprehensive guideline for applicant data collection should be developed in consultation with legal professionals; and (3) e-recruiting is likely to affect the diversity of the company if conscious efforts are not made. Web users are computer-savvy, non-minority young people who are typically well educated. These biased demographic characteristics can create a serious impact on diversity; certain protected groups have less chance to be hired than others (Flynn, 2002). One way to solve the diversity issue is to maintain a portfolio of recruiting methods that will bring the right level of diversity to the company.

The technological challenges include the following: (1) integrating the e-recruiting process with existing recruiting processes is difficult due to limited software solutions. Paper-based resumes should be converted into a digitized form and stored at the database; (2) lack of security discourages the online job application. While security is one of the most important issues with job applicants, many leading companies do not explicitly address it at the career Web site; and (3) designing career database is a complex task. A job database should be designed to minimize redundant data and to optimize the performance of job search and candidate search. The search behavior of the applicants and recruiters should be understood fully.

There are numerous research opportunities in e-recruiting. Research on the perception of job seekers on different e-recruiting methods and Web site features will give a valuable design guideline to system designers. The longitudinal study of recruiting methods and job performance may provide important results that can be used to optimize the mix of recruiting methods and budget allocations. Many professionals, such as hiring managers, recruiters, software engineers, and human resource professionals, are involved in the recruiting process. An in-depth understanding of what information they ask for, how they use it, and how they interact with each other can be another interesting avenue of research.

REFERENCES
In Lee is an associate professor in the Department of Information Management and Decision Sciences in the College of Business and Technology at Western Illinois University. He received his MBA from the University of Texas at Austin and PhD from University of Illinois at Urbana-Champaign. He is a member of IRMA, Informs, and ACM. His current research interests include e-business technology development and management, agent-oriented enterprise modeling, and intelligent simulation systems.