Chapter 5.13
Perception Gaps about Skills Requirement for Entry-Level IS Professionals between Recruiters and Students:
An Exploratory Study

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INTRODUCTION

It gets more difficult to specify and prepare for the skills demanded by the profession in advance of beginning work activities (Barley & Orr, 1998; Mirvis & Hall, 1996). The rate of skill and technology change, and the number of factors from which the changes arise are increasing (Weick, 1990). Contemporary job roles require a significant amount of work activity that is contingent and hard to predict (Darrah, 1994). In accordance with this trend, an IS professional shows skill deficiency in various areas (Koh, Lee, Yen, & Havelka, 2001; Lee, Koh, Yen, & Tang, 2002; Lee, Trauth, & Farwell, 1995; Nelson, 1991; Trauth, Farwell, & Lee, 1993). IS Professionals are continuously adding, replacing, and retrofitting their expertise to ensure an adequate stock of knowledge and work skills (Adler, 1992; Carnevale, Gainer, & Shultz, 1994). IS professionals understand that they need to keep their skills up to date. But doing so requires knowing what skill sets are in demand (Prabhakar, Litecky, & Arnett, 2005).

The graduate of an IS program should possess the required skills and training to perform well at an entry-level position and to have a basis for continued career growth as a professional (Couger, Davis, Dologite, Feinstein, Gorgone, & Jenkins, 1995). However, the gaps (from a moderate to a very serious level) between knowledge/skills that are taught in academia and those that are demanded by the IS industry have been reported

by researchers (Lee et al., 2002; Lee et al., 1995; Nelson, 1991; Young & Lee, 1996).

The evolution of IS technology is the major cause of the dilemma confronting educators and managers as they try to prepare students or to recruit workers for the changing IT environment (Clark, Greer, & Maier, 2002). As technologies continue to change, university IS programs interested in continuous improvement and serving their students must repeatedly revise their curricula to remain current and relevant. The academic curricula changes are often constrained by available credit hour limitations (Braun, Crable, & Tesch, 2003) and lack of resources. Academic institutions are also asked to turn out IT graduates with a very wide range of skills, while there are severe pressures to cut costs and constrain curricula (Van Der Vyver & Lane, 2006).

Moreover, an IS recruiter tends to seek individuals with the ability to integrate their technical knowledge with other managerial skills such as communication, interpersonal, and organizational skills (Koh, Lee, & Tang, 2000/2001). An IS professional needs to possess and improve nontechnical skills (Dawn, Dinesh, Medlin, & Vannoy, 2001) to cope with the industry demand.

Recent developments in IS industry jobs and career paths have made it more difficult to ascertain the knowledge/skills required of an IS professional (Martinsons & Cheung, 2001). There are a variety of IS career paths, each of which may require somewhat different skill sets. Even within the same career path, IS practitioners are required to have different knowledge and skills as their careers progress (Koh et al., 2001). As a discipline, IS is always changing, with rapid advances in technology, shifting job descriptions, and an increasing number of diverse factors which affect job success in the field. Additionally, shifting industry patterns, intense competition, outsourcing, and rapid globalization are blurring both job requirements and which skills are in demand (Lee & Lee, 2006).

Since the end of the dot-com boom, time has been rough for IS professionals (Malykhina, 2004; Smith, 2004). According to Forrester Research, offshore outsourcing as a percentage of IT budgets rose from 12% in 2000, to 28% in 2003. This outsourcing trend influences the required skill sets for domestic IS students. The U.S. Bureau of Labor Statistics estimates that there are now 212,000 unemployed computer and mathematics professionals (Keefe, 2003). IS educators should feel the necessity of preparing their students for this adverse job market. In a relatively weak job market, keeping an eye on the skills demanded is increasingly important (Prabhakar et al., 2005).

Given the aforementioned changes and problems, the most current knowledge/skill sets required for entry level IS professionals in today's dynamic and competitive business environment need to be identified. In addition, the potential perception gaps between recruiters and students about skills required need to be investigated. The recognition of the gaps motivates students and faculty to adjust their skill sets and curricula design. Students and faculty know they must keep their knowledge and skills, as well as curricula, up to date, but doing so requires knowing what skills are in demand.

To gain a better understanding about the important skills and knowledge needed to succeed in today's business environment, a survey study was proposed in 2003. The objectives of the study were to: (1) assess recruiters' and students' perceptions of the important knowledge and skill sets for entry-level IS professionals; (2) identify and investigate any perception gaps that may exist between the two groups.

For the purpose of this study, an IS professional is considered to be a person whose main tasks are to develop information systems, to maintain them, or to help people use them within an organization. An IS student is considered to be a college student who majors in MIS (Management Information Systems) in the business school.