Mid-Level Information Technology Professionals: Skills and Traits Relevant to Fit, Individual and Organizational Success Factors

Vickie Coleman Gallagher, Cleveland State University, Cleveland, OH, USA
Kevin P. Gallagher, Northern Kentucky University, Highland Heights, KY, USA
Kate M. Kaiser, Marquette University, Milwaukee, WI, USA

ABSTRACT

A gap exists in understanding organizational career ladders for IT professionals. This gap is especially pronounced in organizations externally sourcing IT related activities to vendors, given that technical positions often feed the pipeline to mid-level roles. Based on prior research and qualitative discussions with key informants, this paper discusses the skills necessary for mid-level roles and proposes individual differences in social skills/traits for several key positions (project manager, senior system analyst, and relationship manager). The authors’ research informs IT professionals as to traits that are most strongly related to success within particular roles. Furthermore, the proposed model and the concept of “fit” will help employers and universities improve coaching and counseling regarding career paths, and contribute to the effectiveness of university curriculum. Finally, this research will inform the types of motivational techniques necessary for organizations to incentivize and achieve results in the form of increased performance, lower turnover, and increased satisfaction.

Keywords: Individual Differences, Knowledge Skills and Abilities (KSA), Management Information System (MIS), Mid-Level Information Technology (IT) Roles, Person-Vocation Fit, Political Skill, Social Skills, Traits

INTRODUCTION

The role of IT professionals is changing as technology offers organizations opportunities for increased efficiency, effectiveness, and innovation. Experienced IT professionals are key to delivering quality enterprise systems which in turn, deliver quality business performance. Very little has been written and investigated about the mid-level IT workers who are essential players in business and IT strategy. As such, we focus on these IT professionals who bridge entry-level staff and senior IT management. We are interested in what knowledge, skills, and
abilities (KSA) help these workers succeed, as well as social skills. While technical skills differentiate them as IT professionals, we propose that nontechnical skills and characteristics distinguish them and offer organizational value for managing IT resources. Our investigation applies to both IT professionals who work for service providers and those who work at non-IT firms (referred to as client firms) which outsource to providers.

The challenge for organizations is how to develop and retain these key individuals given entry-level recruiting practices. We draw from the organizational behavior literature to determine the best fit of social skills, individual traits and role preferences that can lead to organizational and individual success in the form of increased performance, lower turnover intentions, higher job satisfaction, and perhaps even higher levels of organizational citizenship behaviors that go above and beyond one’s role. These outcomes benefit the organization as well as the individual.

The paper reviews literature, describes the methodology employed, defines the constructs and presents propositions to be investigated in future research.

**BACKGROUND AND LITERATURE REVIEW**

Management information system (MIS) professionals enjoy promising career opportunities as the recession subsides. There is an ever increasing need for individuals who understand information technology (IT) and its role in helping companies identify business needs, design IT-related solutions, oversee delivery of projects, and manage vendor relations. There are also many baby boomers with years of IT experience who will soon retire, creating even more opportunities.

However, IT professionals and students with strong technical training face challenges in trying to secure positions in IT, as the role of IT professionals in organizations has changed from technical to an emphasis on business domain and project management skills (Hawk et al., 2012; Zwieg et al., 2006). Large and medium-sized organizations have outsourced some technical development work traditionally assigned to entry-level IT personnel, such as application programming and IT system operations, making entry to the field difficult for those interested in more technical roles.

Alternatively there is increasing demand for mid-level IT workers in positions such as project managers, systems analysts, and relationship managers (Gallagher et al., 2007; Zwieg et al., 2006), three key roles identified as vital to the IT department (Overby, 2007) according to an article in CIO Magazine. However, due to their lack of work experience, professionals may not be suited for the roles and responsibilities of these more advanced mid-level positions and what knowledge, skills and abilities (KSAs) are required in order to attain and succeed in such a role. Organizations struggle to define and outline IT career ladders for their employees. This is especially problematic if they no longer hire into traditional entry-level positions (Gallagher et al., 2007). One respondent explained (in our exploratory research described shortly), “I can buy skills in the application development world offshore…but my architects, I want to develop in house…[but then] I’m taking a large part of the feeder group out… I’m going to have a problem here.” Another executive explained that “developers are basically a commodity, so other than really specialized technical skills, those are things you would offshore”.

As a result, the pipeline of talent has become disjointed. A disconnect exists between the skills managers look for in entry-level hires (primarily technical) and those they desire in mid-level hires (business knowledge and project management). This raises questions as to where and how business knowledge and project management skills are acquired by those who perform these key roles. There is a gap emerging between the KSAs needed to attain what we term the key mid-level positions most in-demand in the IT profession (senior systems analysts, project managers, and relationship
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