A Model of Turnover Intention Among Technically-Oriented Information Systems Professionals

Petros Pavlos Rigas, Assumption University, Thailand

ABSTRACT

This study was motivated by the need to understand the factors that determine turnover intention among the large group of personnel working in technically-oriented information systems positions. Turnover rates among personnel in these positions have been consistently high and have been shown to have significant negative effects on an organization’s productivity and profitability. A model of the factors that determine turnover intention is developed based on the findings of previous studies and survey data collected from 437 personnel working in organizations in Thailand. The model is analyzed using Structured Equation Modeling techniques and the results are interpreted and compared to the findings of previous studies. Based on the findings managerial actions for reducing turnover among technically oriented personnel are recommended.

Keywords: growth need strength; job satisfaction; organizational commitment; organizational culture; organizational tenure; perceived workload; technically-oriented IS professionals; Thailand; turnover intention; work exhaustion

INTRODUCTION

Turnover among Information Systems (IS) personnel has a significant effect on an organization’s productivity and profitability due to direct costs associated with recruiting and training replacement staff and indirect costs associated with lost productivity and inefficiencies which constitute 80% of the turnover costs (Niederman & Sumner, 2001).

High IS turnover rates and associated problems have been reported consistently over at least the past 16 years. Igbaria, Greenhaus, and Parasuraman (1991) estimated that turnover rates for IS staff were more than twice the average for business managers and other professionals. Reichheld (1996) estimated that an increase in the turnover rate as small as 1 or 2% has a negative effect on profitability. McNee, Morello, Zidar, and Smith (1998)
reported annual turnover rates among IS staff to be 15-20% with only 80% of the vacancies filled by appropriately qualified personnel. Jiang and Klein (1999-2000) reported annual rates of 25-35% in Fortune 500 firms. META (2002) reports IS turnover rates averaging 10% annually exceeding the average rate for all occupations in the United States. Nelson and Todd (2004) estimated annual rates of 15% in many organizations and over 30% among IS consultants.

Attempts to reduce turnover rates by increasing salaries have not succeeded even though IS personnel are normally paid higher salaries than their counterparts with equivalent educational and career backgrounds (Strassmann, 2000). In addition, the problem is compounded by the need for an organization to provided training for new staff, which together with increased professional experience makes them more attractive to competing organizations (Gross, 2001).

Previous research on IS turnover has adopted two different theoretical perspectives: an intra-individual perspective; and the study of labor market attributes. From an intra-individual perspective turnover is theorized as the result of an individual’s psychological perceptions of factors such as job satisfaction, organizational commitment, work exhaustion, perceived workload, and growth need strength (Gallivan, 2003; Lee, 2004; Moore, 2000). Labor market studies have focused on internal labor market attributes such as promotability, wage levels, and skills demand as well as external attributes such as mobility and availability of jobs (Ang & Slaughter, 2004).

Most studies have been conducted in the context of western societies and Aharoni and Burton (1994) and Igbaria and McCloskey (1996) have emphasized the need to conduct research on IS turnover in contexts where culture and business structures are different from those in western societies. Studies that examine factors related to IS turnover intention in the context of non-western societies have been conducted in: Singapore (Lee, 1996); Taiwan (Igbaria & McCloskey, 1996); Egypt (Khalil, Zawacki, Zawacki & Selim, 1997), Asia-Pacific (not including Thailand) (Couger, Burns, Dengate, Farn, Ma, Motiwalla, 1992); and Japan (Couger & Ishikawa, 1995). In most of these studies the concern was not to develop a model of turnover intention but to examine relationships among factors that are important to understanding the nature of the IS profession in those contexts. The findings from these studies are included in the literature review section and form part of the basis for the formulation of the model developed in this study.

The study reported in this chapter adopts an intra-individual perspective and was conducted in the context of the nation of Thailand where culture and business structures are different from those in western societies. No other studies of IS turnover in Thailand have been found and measures of IS turnover rates are difficult to locate. The most recent estimates are 12.8% in 2002, and 10.6% in 2003 despite salary increases averaging 5.3% across these years (Hewitt Associates Thailand, 2006). Panthawi (2004) reports an incongruity in Thailand between the type of IS skills required by organizations and the type of skills that new graduates possess. This skills gap and turnover rates comparable to those in western societies result in a significant loss of idiosyncratic skills for organizations and excessive costs in attempting to fill vacant positions. Consequently, an understanding of the factors that affect IS turnover rates in Thailand is essential in order to control the negative affects of IS turnover.

The purpose of this study is to develop and analyze a model of the factors that determine the turnover intentions of IS personnel working in organizations in Thailand. The study develops basic theoretical knowledge with practical implications for the management of IS turnover. A proposed model is developed based on the findings of previous studies and a preliminary statistical analysis of survey data. Using Structured Equation Modeling (SEM) techniques the proposed model is simplified and a final model is developed and analyzed. The results of the analysis are interpreted and compared to the findings of previous studies.