IDEA GROUP PUBLISHING ITB11804

701 E. Chocolate Avenue, Suite 200, Hershey PA 17033-1240, USA
Tel: 717/533-8845; Fax 717/533-8661; URL-http://www.idea-group.com

This chapter appears in the book, *Advanced Topics in Information Resources Management, Volume 5* edited by Mehdi Khosrow-Pour © 2006, Idea Group Inc.

Chapter VII

Toward a Greater Understanding of End-Users' Acceptance of ERP Systems

Fiona Fui-Hoon Nah
University of Nebraska - Lincoln, USA

Xin Tan
University of Nebraska - Lincoln, USA

Soon Hing Teh
Singapore Power, Singapore

ABSTRACT

Despite huge investments made by organizations in ERP implementation, maintenance, and user training, ERP implementation failures and less than expected productivity improvements are not uncommon. End users' reluctance to use newly implemented ERP systems is often cited as one of the main reasons for ERP failures. To understand the lack of end-user acceptance of ERP systems, we examined end users' attitude toward system use and symbolic adoption; the latter refers to users' voluntary mental acceptance of a system. Four instrumental beliefs—perceived usefulness,

perceived ease of use, perceived compatibility, and perceived fit—were modeled as the antecedents. The research model was tested using a survey on end users' perceptions in adopting and using a newly implemented ERP system. The findings show that perceived compatibility and perceived ease of use have both direct and indirect effects (mediated by attitude) on symbolic adoption, while perceived fit and perceived usefulness influence symbolic adoption via attitude. The study provides managerial implications for organizations in engendering positive user acceptance of enterprise systems and applications.

INTRODUCTION

Enterprise resource planning (ERP) systems provide an integrated enterprise-wide business solution to organizations to help achieve their competitive goals. An ERP system can be viewed as an enterprise-wide information system that integrates all aspects of a business. At the core of an ERP system is a single comprehensive database, which collects data from and feeds data into modular applications supporting virtually all of a company's business activities—across functions, across business units, across the world (Davenport, 1998).

To reap the benefits of ERP systems, organizations across the globe have invested heavily in ERP implementation, maintenance, and user training. Despite the huge investments, there are many cases of implementation failures and less-than-satisfactory productivity improvements (Davenport, 1998). One of the commonly cited reasons for ERP failures is end users' reluctance to use the newly implemented ERP system (Barker & Frolick, 2003; Scott & Vessey, 2002; Umble & Umble, 2002; Wah, 2000). The lack of user acceptance can lead to rote rather than sophisticated use of the system and cause disgruntled morale problems in the organization. Therefore, a good understanding of end users' acceptance of ERP systems is vital to ERP implementation success.

A literature review of past ERP studies indicates that only a few studies have empirically investigated end users' acceptance of ERP systems. The majority of them drew heavily on the technology acceptance model (TAM) (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989). An analysis of the findings of these studies, together with a review of literature on end users' acceptance of information technology (IT) in mandatory settings, led us to contend that TAM needs to be revised and extended in the ERP context.

By drawing on established theories and empirical findings in IT adoption, we developed a model of end users' acceptance of ERP systems. Specifically, our model depicts the effect of users' instrumental beliefs regarding an information system on their attitude and voluntary mental acceptance of the system. This proposed model was tested using a survey of ERP end users in a large institution.