

Chapter 3.17

An Evaluation System for IT Outsourcing Customer Satisfaction Using the Analytic Hierarchy Process: The Case Study in Korea

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Abstract

Many companies have recently been choosing information technology (IT) outsourcing in response to complicated information systems and various internal requirements. In order to monitor and maintain a high quality of IT outsourcing vendors' services, it is necessary to develop a system to evaluate IT outsourcing customer satisfaction. The system can be used as a tool for choosing IT outsourcing providers. Through the literature reviews and experts' interviews, we propose the evaluation system of IT outsourcing customer satisfaction. Using AHP (analytic hierarchy process)

technique, attributes associated with customer satisfaction in IT outsourcing environments are then rated in terms of their importance. The customer satisfaction evaluation system is applied to IT outsourcing service receivers in Korea to demonstrate its practical implications.

INTRODUCTION

Recently, IT outsourcing has been recognized as a strategy for increasing efficiency and cutting costs of the information systems implementations. A properly implemented outsourcing strategy

brings together industry knowledge and IT to create systems that help organizations acquire and maintain a competitive advantage and provide better service at a lower cost (Sengupta & Zviran, 1997). In IT outsourcing environments, customers' requirements and feedback are essential to the development of information systems applications and the improvement of the service quality of IT service vendors or companies. From the vendor's perspective, it is important to minimize the reasons for complaints and dissatisfaction, as well as the cost of a service recovery plan (McCollough, Berry, & Yadav, 2000). It is also important for vendors to establish a track of direct feedback from customers on their reactions to the complaints and dissatisfaction (Abubakar, Mavondo, & Clulow, 2001). Therefore, it is particularly useful to develop a customer satisfaction evaluation system for IT outsourcing providers and their customers.

This chapter aims to introduce a systematic evaluation system for the evaluation of IT outsourcing customer satisfaction that reflects outsourcing environments as well as customer feedback. In this chapter, we present an evaluation framework for IT outsourcing customer satisfaction through the literature reviews and experts interviews, and develop the IT outsourcing customer satisfaction evaluation system using AHP analysis. AHP is used for weighting and ranking key customer satisfaction factors. The system is applied to IT outsourcing customer companies in Korea to demonstrate the practical value and effectiveness of the proposed system. This study may be useful and helpful to practitioners, IT managers, and customers who are faced with outsourcing services. Using the evaluation system as a tool for measuring IT outsourcing customer satisfaction, IT outsourcing providers can monitor their service level and understand customers' requirements precisely. The observed values of customer satisfaction can provide important guidelines in the improvement of IT outsourcing services and improve their competitive position in the market. For customers, they can utilize the

results of customer satisfaction in choosing IT outsourcing vendors.

First, we review information technology outsourcing, customer satisfaction, and related information system evaluation models in section 2. In section 3, our research method, including AHP, is explained. In section 4, the evaluation system for IT outsourcing customer satisfaction is described, and the weights and priority in the evaluation system are explained in section 5. In section 6, a case study is summarized to prove its practical value.

LITERATURE REVIEW

Information Technology Outsourcing

IT outsourcing is defined as the act of subcontracting part or all of a company's IT function to one or more external vendors (Cheon, 1995; Gelbstein, 2002; Grover, Cheon, & Teng, 1996; Lacity & Willcocks, 1995; Loh & Venkatraman, 1992; Sengupta & Zviran, 1997). Corporations introduced IT outsourcing until the mid-1990s chiefly to achieve cost-effectiveness and thus, mostly pushed ahead with computing-related services or system integration in the form of strategic alliances (Grover et al., 1996; McFarlan & Nolan, 1995). However, recently, with new forms of IT outsourcing models such as ASP having been developed, and existing computing services or system integration or system management outsourcing having been segmented and specialized, new characteristics are appearing that are totally different from those of traditional IT outsourcing (Young & Berg, 2001).

Various approaches to IT outsourcing have been studied. The transaction cost theory offers a method of evaluating the relative advantages of different internal and external organizations for handling transactions (Cheon, 1995). It also provides an excellent framework for analyzing the outsourcing options (Lacity & Hirschheim,

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