An Evaluation System for IT Outsourcing Customer Satisfaction Using the Analytic Hierarchy Process

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ABSTRACT
Many companies recently have 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 expert interviews, we propose the evaluation system of the 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.

Keywords: AHP; customer satisfaction; customer satisfaction evaluation system; IT outsourcing

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 to 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 complaints and dissatisfaction (Abubakar et al., 2001). Therefore, it is particularly useful to develop a customer satisfaction evaluation system for IT outsourcing providers and their customers.

This paper 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 paper, we present an evaluation framework for IT outsourcing customer satisfaction through the literature reviews and expert interviews, and develop an 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 in order 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 precisely understand customers’ requirements. 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 a related information system evaluation model in the second section. In the third section, our research method, including AHP, is explained. In the fourth section, the evaluation system for IT outsourcing customer satisfaction is described, and the weights and priority in the evaluation system are explained in the fifth section. In the sixth section, 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 et al., 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

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