ABSTRACT

This study uses the concept of absorptive capacity to provide a framework for exploring benefit realization in the post-implementation phase of ERP systems. Success factors of ERP adoption such as: training, communication, process change, and integration extension are organized into two types of knowledge absorptive capacity: potential capacity and realization capacity. This study proposes that absorptive capacity is one of the key determinants of benefits realization from ERP implementation. Although the frequently mentioned factors training and communication are important activities for organizations to assimilate the knowledge of the system processes, these represent potential capacity that requires realization through refinement and execution of what has been absorbed. ERP adopting organizations wishing to continuously generate benefits need to both build potential absorptive capacity by investing in training and education and leverage realized capacity through extension of integration of the system processes.

Through in-depth case study of four firms in Taiwan, this study verified the propositions about absorptive capacity in post-implementation of ERP systems. The results further revealed some findings: 1) More iterations of the cycle of absorptive capacity leads to greater benefits of ERP systems. 2) Knowledge retention is important for accumulating potential resources. 3) Provide some guidance of educational program planning. 4) Environment provided by companies can encourage assimilation of knowledge and full use of the ERP system. 5) Business training is necessary for IT professionals. These findings are helpful for managers to well assimilate and exploit knowledge. And furthermore, this study suggests that companies need to acquire, assimilate, transform and exploit knowledge in a dynamic cyclical path to adapt to the changing business environment and sustain competitive advantage over the long term.

Keywords: ERP post-implementation absorptive capacity

This paper has been accepted as