

## Chapter 6: CONCLUSION

### 6.1 Conclusion

To date, some research (Finney and Corbett, 2007; Shang and Seddon, 2007) has investigated ERP systems use, generating innumerable academic and managerial findings but ignored post-implementation use of ERP systems. For instance, Finney and Corbett (2007) collected 45 articles in a search for the CSFs of ERP system implementation, including top management commitment and support, change management, BPR, and others. And furthermore some literatures have focused on *how* to benefit after ERP systems implementation. These researches inform managers need to continuously manage changes, enrich usage and extend systems with other information technology to fully exploit ERP systems.

However, they do not explain *why* organizations can initiate these activities. Thus, this study organizes the success factors of post-ERP systems implementation and adopts theory of absorptive capacity to answer the question “*why are organizations able to gain benefits from ERP systems after implementation*”.

Based on the concept of absorptive capacity, this study formed an understanding of benefits realization after ERP implementation. Success factors of ERP adoption include: training, documentation, communication, change management, process optimization, integration/extension, informate and enrich usage. These are organized into two types of absorptive capacity: potential capacity and realization capacity.

The propositions are based on the recognition that absorptive capacity is one of the key determinants of value creation in the post ERP implementation period. Though frequently mentioned factors such as training and communication are important activities for organizations in assimilating the knowledge of system processes, these represent potential capacity that needs to be realized through targeted activities to refine and execute what has been absorbed.

The in-depth case study on the four companies has confirmed the first proposition and not confirmed the second proposition. Companies cannot expect that benefits will automatically be generated and processes/systems be automatically integrated. They should perform activities such as change management and process optimization to realize the benefits of the system. However, before implementing such activities companies need to assure that employees absorb the knowledge and skills offered in training programs. Only then can organizations fully exploit their ERP systems.

Our cases show that great assimilation does not always lead to great exploitation. To achieve the benefits of the ERP systems two players, ERP systems users, and ERP systems implementers, (including third party) need to effectively collaborate in educating and inspiring exploitation.

- ERP systems implementers should not only provide professional skills and knowledge to complete the initial implementation and exploitation, but also inspire users to innovatively use and employ ERP systems.
- ERP systems users need to retain external and internal knowledge and provide knowledge-friendly environment and mechanisms to encourage employee sharing, transferring, and exploiting, of knowledge and skills.

This study suggests that companies should view ERP systems implementation and use as knowledge activities and carefully deal with the knowledge related to ERP systems. 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.

## **6.2 Academic and Managerial Implications**

This study has taken an important step in delineating the relationship between post-adoptive behaviors and performance after ERP adoption, and provides a reference for effective planning for ERP management, as well as a framework for further work.

Many companies are concerned about the return on their investments in ERP system implementation and use. This study points out some issues companies need to think about when they consider their expected performance outcomes for their ERP systems. Companies cannot merely provide training for users and then sit back and wait for full exploitation of their ERP systems. Similarly, they cannot expect great exploitation without proper training.

Companies seeking to gain great benefits from ERP systems need to both build the potential absorptive capacity by investing in training and education and leverage the realized capacity by extending the integration of the system processes.

## **6.3 Research Limitations**

Concerns arose in the planning of this study. One was with the participants in the interview. Due to resource restraints, this study interviewed CIO of each company to ask about the assimilation and exploitation of ERP systems knowledge. Although such individuals can view knowledge absorption and utilization from the perspective of the entire company, they are unable to provide detailed descriptions of whether employees assimilate knowledge and where they actually gain the knowledge to exploit. Therefore, in order to obtain more precise research findings this study suggests that the interviewees include employees who have attended trainings.

Secondly, although the companies in this study were suggested by industry experts, the conditions of the companies are significantly different, such as IT investment, employee

capability and external support. This study thinks these factors may affect the results of the degree of knowledge assimilation and exploitation. For example, some local and traditional industries do not rely heavily on ERP systems, but still operate well. They are satisfied with their incomplete exploitation of their ERP systems, and apparently believe that they can realize such benefits without active acquirement and assimilation of knowledge. On the other hand, some companies can gain great support from headquarter without absorbing lots of knowledge. This study suggests that IT capability can be included in the factors of influencing assimilation and exploitation.

Third, the common situation in many Taiwan companies is acquiring a lot but absorbing little. The CEO of company has many future plans of company and IT development. However, these plans are too advanced to operate. The CEO may ignore the gap between employee capability and exploitation plans. Lastly, they cannot achieve the objectives. Thus, this study thinks that the policy of company can influence allocating resource and exploitation of company. The factors of company policy and leading policy are not discussed in this study.

#### **6.4 Future Research**

As prior mentioned, this study provides a preliminary research that delineates the relationship between post-adoptive behaviors and performance after ERP adoption. Thus, future research may place greater focus on how companies realize their potential capacity. For instance, what kind of environment and mechanisms can inspire employees to realize their potential? Future research also may focus on the type and timing of training to bring such benefits into full play. Concepts that link post-adoptive behaviors of ERP systems and absorptive capacity presented in this study may provide a useful basis for further research.