ABSTRACT

An enterprise resource planning (ERP) system is an information technology-based system used to collect data about business processes, from supply chain management to production, to distribution, to marketing and sales, and to administrative practices. The firm then uses the information collected by the system to control and refine its existing practices and modify them in order to improve the firm's efficiency and productivity. Implemented properly, an ERP system may provide a substantial competitive advantage for the firm due to increased knowledge about the firm and the ability to implement changes in its operation based on the findings. However, ERP failures can be particularly problematic in developing countries due to a significant gap between firm capacity and resources and the requirements and assumptions of the ERP software. This means that firms in Thailand that are hoping to implement ERP software have a significant challenge in their realisation of this goal, given the wide range of potential failure points for implementation. This high rate of failure and the potential gap between resources and ERP design requirements mean that Thai companies hoping to implement ERP systems need to be aware of critical success factors in implementation. This research addressed the use of an ERP system in an agricultural production firm in Thailand. The study addresses has four main research questions: (1) what are the important factors that influence the level of user satisfaction with an ERP system?; (2) what are the relationships among the factors identified in question 1?; (3) which relationships identified in question 2 represent significant causal effects?; and (4) what are the theoretical and practical implications of the answer to question 1 - 3?.

The study focused on the use of an ERP system within the company which has four different sites all located in Chiang Mai. Each of these sites belongs to a different business unit or subsidiary company, and is located in a different area of Chiang Mai. A questionnaire survey was used as a research instrument to collect data from all of the firm's employees. These participants all had an educational level of Bachelor or higher, and most were in their early to mid career period (i.e. with 10 or fewer years professional experience). This research was: partly basic and applied; partly descriptive and explanatory; and cross-sectional in time. Descriptive statistical techniques were used for data preparation and preliminary analysis and structural equation modelling techniques were used for the analysis and development of a theoretical model which was derived from existing theory and previous studies.

From a theoretical perspective the structure of the final model was a primarily a single-cluster model and the findings supported most of those in previous studies whereby Top Management Support had the greatest effect on User Satisfaction followed in order by Perceived Usefulness, System Quality, and Information Quality while Business Process Reengineering and Education and Training had relatively small effects on User Satisfaction. New findings showed that contrary to those in previous studies: Top Management Support and Education and Training did not have significant effects on System Quality; Business Process Engineering only had significant indirect effects on Perceived Usefulness and User Satisfaction; and Education and Training only had a significant indirect effect on User Satisfaction. From a practical perspective the findings enabled the formulation of a hierarchy of objectives aimed at increasing user satisfaction each with an associated hierarchy of actions.