

ABSTRACT

This study analyzes how information technology is used in pharmaceutical industry to provide competitive advantage in supply chain management. In particular, we study Pharma Co. (a pseudonym is used to maintain company confidentiality.), a medium size multinational pharmaceutical company in Thailand and how it can apply a web-based and business standard information flow (in this case, a standard called RosettaNet) to improve efficiency in its supply chain, In particular, we study the information flow in the process of order transactions between hospitals, Pharma Co, and distributors.

The methodology for evaluating this project comes from various fields. The key efficiency indicators are operation efficiency, down-time, timeliness of information, and accuracy of information. A mathematical model is used for financial analysis of applying a new information flow system to replace the existing manual system. The data for the analysis was gathered from Pharma Co., hospitals, system providers and key distributors. The results of the study, in terms of key efficiency indicators, show improvements from the new system with a valuable benefit of return on investment and payback period.