

A Study on Integration of Supply Chain Management and Information System

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Abstract

Due to the globalization and computerization, an enterprise must provide customer with better service and more value-adding product to become competitive and to survive. An enterprise needs to use a more efficient and effective approach to integrate the raw material purchase, production planning, manufacturing management, work-in-process management, quality control, inventory management, and delivery and logistics. The integration of supply chain management (SCM) and information systems such as enterprise resources planning (ERP) can help an enterprise to quickly respond to customer demands. Based on a case study of a company providing high-purity chemical to high-tech industries such as the manufacturing of semiconductor and liquid crystal display, this research discusses the detailed information flow and material flow of the integration of supply chain management and information systems. Key performance index and key factors to success of the system integration are studied. The procedure of system implementation and integration is also illustrated. Furthermore, strength, weakness, opportunity, and threat (SWOT) analysis are conducted. The research results can be used by industries in the implementation and integration of supply chain management and information systems.

Keywords: Supply Chain Management ; Information System ; Enterprise Resources
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