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## An Integrated Supply Chain Management to Manufacturing Industries

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**Abstract :** Manufacturers have been exploring innovative strategies to achieve and sustain competitive advantages as they face a new era of intensive global competition. Such strategy is known as Supply Chain Management (SCM), which has gained a tremendous amount of attention from both researchers and practitioners over the last decade. Supply chain management (SCM) is considered as the most popular operating strategy for improving organizational competitiveness in the twenty-first century. It has attracted a lot of attention recently due to its role involving all of the activities in industrial organizations, ranging from raw material procurement to final product delivery to customers. Well-designed supply chain systems can substantially improve efficiency and product quality, and eventually enhance customer satisfaction and profitability. In this paper, a manufacturing engineering perspective on supply chain integration is presented. Research issues discussed include the product and process design for the supply chain, design evaluation of manufacturing in the supply chain, agent-based techniques for supply chain integration, intelligent information for sharing across the supply chain, and a development of standards for product, process, and production data exchange to facilitate electronic commerce. The objective is to provide guidelines and references for manufacturing engineers and researchers interested in supply chain integration.

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