

Quick methodology based in the SCOR model for supply chains reengineering of international trade

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Abstract

A critical task to a successful understanding of the operations dynamics in a supply chain is the modeling of all processes and interactions of the participants in it. The idea of having a strategic tool that integrates a conceptual framework and a language to model each one of the processes involved on the chain in a structured way, turns out to be a necessity. A tool to meet those needs is the SCOR reference model proposed by the Supply Chain Council. This model is highly accepted worldwide for researchers and practitioners because it integrates the characteristics described above and provides an opportunity to measure the performance of the supply chain in various dimensions; in addition, it allows benchmarking comparisons against peer companies and best-in-class business practices. A SCOR model feature is its breadth and generality, providing the opportunity to model a large variety and value chain configurations; however many times this strength becomes a weakness by not offering more detail on the calculation of metrics and lack of a detailed roadmap. Indeed, several researchers report the SCOR model inability for modeling certain supply chains and industries under certain conditions. This paper presents a case study where an SCOR model adaptation was performed. The objective of our proposed SCOR variant is to quickly and efficiently model a sample of supply chains including international trade processes. The result was a semi-structured survey type instrument to collect information on the current status "As-Is", as a fundamental base to develop a reengineering process. The main contribution is the detailed system and processes tailored to the operating characteristics of a supply chain with foreign trade operations metrics, together with a road map on how to use the model.

Keywords

SCOR, supply chains reengineering, foreign trade

Biography

Carlos Otero is part-time Professor of the Industrial Engineering Department at Universidad del Norte, in Barranquilla (Colombia). He earned a B.Sc. in Industrial Engineering from Universidad del Norte, candidate for master's degree from Universidad del Norte and second year Ph.D Student in Universidad del Norte. Carlos has participated in research projects with both private and public parties in Colombia. His research interests include supply chain management and supply chain collaboration.

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