

# Supply chain as a collaborative virtual network based on LARG strategy

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## Abstract

The structure, organization and integration it is crucial to improve global supply chains performance and help them to achieve strategic and operational goals. Literature suggests that agile, resilient and sustainable supply chains strategies enable them to be more competitive in order to adapt to the dynamic and unstable scenario.

This paper aims to present a model for implementing a strategy based on LARG paradigms (Lean philosophy, Agility, Resilience and sustainability-"Green"), used to denote the necessary strategy for competitiveness in an international automotive supply chain.

Using "building theory approach", supported by a case study, conducted in four companies that integrated automotive supply chains, three hypotheses were defined to be validated through an explanatory model and Key Performance Indicators (KPI's) were defined to measure supply chain overall performance.

This study brings contributes to management knowledge by empirically investigate the main effects of LARG strategy on supply chain performance, proposing a process approach applied to a collaborative virtual network structure, in order to improve network efficiency.

Data analysis supports some interesting conclusions, as the more important KPI's to measure LARG strategy, and the evolution from Supply chain to Supply Network.

**Keywords:** Supply Chain, Collaborative network, Lean, Agile, Resilient and Green Supply Chain.