Challenges of Strategic Supply Chain Planning and Modeling

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Managers today have a growing interest in data-driven supply chain management at all levels of planning, strategic, tactical and planning. When they seek to develop and apply descriptive and prescriptive models to support strategic decision-making, managers and modeling practitioners face a range of challenges. These include:

- Overcoming barriers to holistic supply chain planning
- Extending supply chain optimization to enterprise optimization
- Identifying the firm's heterogeneous resources
- Constructing consistent and comprehensive scenarios of the firm's long-term future
- Articulating quantitative descriptions of risk
- Positioning the firm to better compete and collaborate
- Expanding the firm's decision-making processes to exploit data-driven strategic planning

In this paper, we address these issues and provide examples of challenges and solutions.