
Editorial

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Biographical notes: Ajay Das, Editor *IJISM*, is a Professor in the Operations Management Group at the Narendra Paul Loomba Department of Management at the Zicklin School of Business, Baruch College, New York, NY. He obtained a PhD in Operations Management from Michigan State University, building on several years of industry experience in supply chain management. His research interests currently concern innovation and quality in the supply chain. He has an extensive research record with publications in leading journals such as *Decision Sciences Journal* and the *Journal of Operations Management*, and welcomes collaborators with similar research interests.

We have an interesting collection of studies in this issue of *IJISM*, all concerned with the journal's thematic focus on issues impacting supply chain integration. Consistent with this focus, the studies in this issue variously look at optimal shipping rates and retailer pricing, DC location, supply chain resilience and supply chain reliability, in the context of supply chain operations.

Dalalah and Aldaihani address optimal shipping rates within a supply chain (SC) in a stochastic demand environment. An algorithm is developed with minimal information sharing, achieving steady state averages. Benefits include returns maximisation and steady inventory levels.

Zabihi and Bafruei examine coordination of two-echelon supply chains with stochastic demand, dependent on retailer price and time. The study develops models for objective functions of supply chains members, with retail price implications.

Kazemi and Szmerekovsky author a deterministic MILP model to determine the optimal location of the distribution centres, capacities and product allocation in the downstream petroleum supply chain. The MILP minimises the multi-echelon multi-product cost for the petroleum industry along the refineries, DCs and demand nodes. GIS is employed to analyse spatial data and develop spatial maps of data.

Patil and Kant use a fuzzy analytical network process approach to pick optimal knowledge management strategies to develop resilient supply chains. The method is implemented in the field, and dynamic knowledge management strategies are found to enhance supply chain resilience. The results support theory that tie knowledge management strategies with supply chain resilience.

Ivanov et al. wind up this issue with an investigation of supply chain survivability under disruption. They propose the genome concept and its dual analogue to quantify SC structure reliability, with minimum edge-cuts to represent a group of suppliers (or a critical supplier) whose failure amounts to SC disruption. Exact and heuristic algorithms are developed, enabling the comparison of different SC designs on reliability criteria. The study suggests that different forms of SC design structures with similar efficiency may have significantly different reliability performance.

We hope that this issue will stimulate further research on the multi-dimensional theme of supply chain integration. We would also appreciate your ideas on supply chain issues of contemporary significance to our community. We can create and publish special issues of the *IJISM*, for appropriate topics, with your assistance as a special issue editor.

I would also like to take this opportunity to thank the *IJISM* editorial board, and the many reviewers who have been so gracious with their time and knowledge. My sincere thanks to our publication editor, Mrs. Barbara Curran, and the entire *IJISM* support team, for their hard work and consistent support.