

Editorial: Supply Chain Management

Dimitrios Aidonis

Alexander TEI of Thessaloniki, Department of Logistics, Branch of Katerini
Kanelloupolou 2, 60 100, Greece
Telephone: +30 23510 20940
Email: daidonis77@gmail.com

Dimitrios Folinias

Alexander TEI of Thessaloniki, Department of Logistics, Branch of Katerini
Kanelloupolou 2, 60 100, Greece
Telephone: +30 23510 20940
Email: dfolinias@gmail.com

Dimitrios Triantafillou

Alexander TEI of Thessaloniki, Department of Logistics, Branch of Katerini
Kanelloupolou 2, 60 100, Greece
Telephone: +30 23510 20940
Email: riantafilloudimitrios@yahoo.gr

Abstract

This special issue has followed up the 2nd Olympus International Conference on Supply Chains held on October 5-6, 2012, in Katerini, Greece. The Conference was organized by the Department of Logistics of Alexander Technological Educational Institution (ATEI) of Thessaloniki, in collaboration with the Laboratory of Quantitative Analysis, Logistics and Supply Chain Management of the Department of Mechanical Engineering, Aristotle University of Thessaloniki (AUTH). During the 2-Days Conference more than 50 research papers were presented covering the following thematic areas: (i) Business Logistics, (ii) Transportation, Telematics and Distribution Networks, (iii) Green Logistics, (iv) Information and Communication Technologies in Supply Chain Management, and (v) Services and Quality. Three keynote invited speakers addressed interesting issues for the Humanitarian Logistics, Green Supply Chains of the Agrifood Sector and the Opportunities and Prospects of Greek Ports chaired Round Tables with other Greek and Foreign Scientists and Specialists.

Keywords: 2nd Olympus International Conference on Supply Chains, special issue, selected papers

Acknowledgements: Special thanks to our reviewers who have provided relevant and detailed comments to the authors of all papers submitted and helped us in the selection process.

EDITORIAL

This special issue is composed of six selected papers from the 2nd Olympus International Conference on Supply Chains held on October 5-6, 2012, in Katerini, Greece, covering different aspects of the Supply Chain Management. The selected papers were submitted in two double-blind review process by academics. The first review process was conducted for the purpose of the Conference and the second for the special issue, ensuring a significant contribution to higher quality papers. A short presentation of the selected papers is following.

Blanas et al. in “Reverse logistics strategic antinomies: The case of the automotive sector” examine the impact of the European Parliament Council (2000) Directive 2000/53/EC on the European Union automobile sector reverse logistics activities in the light of the Extended Producer Responsibility (EPR) principle. Their analysis reveals that while reverse logistics can save considerable energy and materials to the society as a whole, a number of strategic structural antinomies impede its wider application in the automotive industry.

Zikopoulos in “Remanufacturing Lot-sizing under Alternative Perceptions of Returned Units’ Quality” studies a remanufacturing system in a multi-period setting in which returns’ quality information is exploited during remanufacturing planning. Author’s objective is to examine the advisability of acquiring advanced quality information in order to be used during sub-optimal decision-making processes, in comparison with alternative policies which do not take explicitly into account returns’ quality information. Finally, an extensive numerical analysis is conducted in order to examine the implications of alternative considerations regarding returned units’ quality on remanufacturing planning, lead-time and service-levels and evaluate their impact on the overall system operational cost.

Vidovic et al. in “Two mathematical formulations for the containers drayage problem with time windows” study the containers drayage problem in ISO container distribution and collecting processes, in regions which are oriented to container sea ports or inland terminals. Authors propose methods for the optimal trucks’ routing in containers drayage operations by presenting two optimal MIP mathematical formulations for the case when pickup and delivery nodes could be visited only in specific time intervals - time windows. Finally, numerical examples are provided in order to examine the proposed approaches and obtain useful managerial insights.

Adamidis et al. in “An evolutionary algorithm for a real vehicle routing problem” examine the NP-hard Vehicle Routing Problem (VRP). Specifically, an Evolutionary Algorithm is developed in order to solve the VRP of a specific transportation company in Volos, Greece with different vehicle capacities. The algorithm has been tested with different configurations and constraints, and proved to be effective in reaching a satisfying solution for the company’s needs.

Vidalis et al. in “Performance evaluation of a merge supply system with a distribution centre, two reliable suppliers, one buffer and Erlang lead times” examine a two echelon merge supply chain. A supply network is modeled as a continuous time Markov process with discrete states. The structures of the transition matrices of those systems are explored and a computational algorithm is developed. Authors’ objective is to generate stationary distributions for different values of system’s parameters so as the various measures of the system can be estimated. Finally, for the mathematical programming model and the rest of the calculations the Matlab software is used.

Folinis and Aidonis in “The effects of economic crisis to logistics outsourcing” investigate the effects of the economic crisis on the logistics services sector in Greece. Authors analyze the findings of a research, which, via a questionnaire, asked managers at the examined sector first to identify the effects and second the practices and approaches that the managers suggested to confront with these effects. The findings of the research revealed that the logistics’ service providers have been significantly affected by the crisis and these effects have influenced all the main functional areas of the logistics management. This research can be considered as a pilot study, as the Greek economy has been seriously affected during the global financial crisis. Worldwide, 3pl companies can use the findings of this study in order to overcome potential difficulties that might face in near future.

The papers received to this call for contributions gave a clear sign that supply chain management will still remain to be a hot topic of research in the forthcoming years. Specifically, supply chain optimization has been a topic of significant academic interest in the operational research discipline for the last decades. There are many issues that are still not fully resolved but, the authors of the above papers have made their contributions to bring this ultimate goal one step closer.