Editorial

Ming K. Lim*

Derby Business School, University of Derby, Kedleston Road, Derby DE22 1GB, UK E-mail: m.lim@derby.ac.uk *Corresponding author

Albert Tan

Malaysia Institute for Supply Chain Innovation, Bukit Jelutong, Shah Alam, 40150 Selangor, Malaysia E-mail: atan@misi.edu.my

Mahender Singh

MIT Center for Transportation and Logistics, 77 Massachusetts Avenue, E40-276, Cambridge, MA 02139, USA E-mail: msingh@mit.edu

Biographical notes: Ming K. Lim is currently the Head of Centre for Supply Chain Improvement and a Professor of Supply Chain and Logistics Operations at Derby Business School, University of Derby, UK. His research interest is in the area of radio-frequency identification technology (RFID), agile/lean principles, reconfigurable manufacturing systems/logistics network, system optimisation, multi-agent systems, simulation, and heuristic algorithms. He has published in leading journals, such as *European Journal of Operational Research, International Journal of Production Economics, International Journal of Production Research, Expert Systems with Applications*, and *Journal of the Operational Research Society*. He is the Editor-in-Chief of *International Journal of Information Processing and Management* and *Advances in Information Science*.

Albert Tan is currently the Director for Education in MISI and Associate Researcher at MIT CTL. Prior to that, he was the Associate Director at The Logistics Institute – Asia Pacific, NUS; managing the Double Master Programme in Supply Chain Management and Logistics Management. His research works have been published in international journals and he is an editorial board member for various international journals. He holds an MBS from the National University of Ireland and a PhD in Supply Chain Management from the Nanyang Technological University. He is a Certified Fellow in Production and Inventory Management from APICS.

412 *M.K. Lim et al.*

Mahender Singh is the CEO/Rector of the newly launched Malaysia Institute for Supply Chain Innovation (MISI). MISI is a joint initiative between the Massachusetts Institute of Technology, USA (MIT) and the Government of Malaysia. He is currently also the Executive Director of the MIT Global SCALE Network in Asia at the Center for Transportation and Logistics. He has over 17 years of experience in the field of supply chain management. His research and teaching is focused on operations and supply chain management, with particular interest in exploring the underlying structure of complex supply chains.

Due to the global market becoming increasingly dynamic and competitive as well as the recent economic downtown, the logistics industry is experiencing a tough time in reducing operating costs and enhancing operational efficiency. Enterprises in this industry are exploring ways to achieve competitive advantage in their market. Within the last decade, active sourcing from low cost economies has taken place and this has led to the logistics network becoming globalised and more complex. Adding on the uncertainty in the market due to the turbulent economy, some existing operations may have become obsolete or less efficient in coping with the market. In academic papers and business articles, a wide range of works can be found focusing on different aspects in enhancing logistics operations. However, it can be seen that these publications are rather segregated with respect to their real impact on businesses as a whole and their potential to cope with existing market needs. This segregation forms the purpose of this special issue, which is to gather innovative and high impact research papers focusing on the right scope and areas in logistics operations to enhance their complete competitiveness in the current market. The issue aims to bring to light the impact of work that matters to industrial practitioners and to identify the great potential of the domains that will inspire academics for their future research direction.

This special issue has collected nine articles covering various aspects of improving logistics and supply chain operations and with some case studies from different geographical regions.

Sabine Allmayer and Herwig Winkler produced an article entitled 'Supply chain interface problems affecting productivity'. The article presents specific problems that arise at supplier-buyer interfaces, such as organisational, personnel and procedural problems, which potentially disrupt the value-added processes within supply chain partnerships, leading to negative effects on the supply chain partner's productivity. An empirical research study was conducted in which 101 companies were surveyed. In the article, productivity-enhancing interface management instruments were also presented.

Patricija Bajec and Marina Zanne contributed a paper entitled 'The current status of the Slovenian logistics outsourcing market, its ability and potential measures to improve the pursuit of global trends'. This paper aimed at exploring how competence are Slovenian logistics providers meeting market challenges by offering a high level of logistics outsourcing while pursuing lower cost and higher profit. The research has shown that the current level of Slovenian logistics outsourcing is far below international standards. The paper also proposed a number of suggestions within the scope of implementation methodology and building a trusted partnership to ensure their existence and greater competitiveness.

Editorial

Cristina Mora et al. produced an article 'A planning model for the optimisation of the end-of-life vehicles recovery network', which proposed a mixed integer linear programming model for end-of-life vehicles closed-loop network design. The key features of this model are the network cost minimisation objective function, the integration of forward and reverse logistics and the inclusion of remanufacturing activities for vehicle module reuse. The proposed model was applied on an Italian case study and the results of a sensitivity analysis are presented to identify the parameters most affecting the model outcomes.

'Contribution of supply chain to corporate strategy: a case study in agriculture machinery industry' was produced by Javad Feizabadi et al. In this article, a conceptual framework for investigating the contribution of supply chain management to corporate strategy was developed and applied in agriculture machinery industry. The results indicated that supply chain contribution to the corporate strategy is significant in multi-business firms that are characterised by low clock-speed industry, high reciprocal interdependence between OEM and immediate suppliers, related diversification strategy, focus on economy of scale advantage, and that are looking for synergies such as vertical integration, centralised procurement, asset improvement and centralised inbound and outbound logistics.

Gabriela Zitz and Aristides Matopoulos produced a paper on 'Developments and prospects of freight railway transport in Northern Germany: A Delphi survey', which focuses on whether the railway network could contribute to improved traffic development in North Germany and also whether or not the existing logistics practices are effective enough to cope with the traffic problems in the region. The research based on the Delphi technique, collected, analysed and summarised the opinions of a group of experts in the aforementioned issues. Results indicate that railways could represent the solution to the forecasted growing freight volumes in the next years and the existing logistics and freight traffic concepts are not sufficient, financing is too scarce, while emerging issues like sustainability, environment protection and working conditions are taken into little consideration.

In relation to the construction industry, Balan Sundarakani et al. produced an article, entitled 'System dynamics-based modelling and analysis of greening the construction industry supply chain'. This paper analyses the environmental implications of the rapidly growing construction industry in UAE using a system dynamics approach. The potential carbon savings and the impact of each factor are calculated using scenario development analysis. The paper has addressed in detail the various drivers and inhibitors of carbon emission in the construction industry supply chain and ways to evaluate the carbon savings.

Another article, entitled 'Automation in internal logistics: strategic and operational challenges' was submitted by Anna Granlund and Magnus Wiktorsson. This paper highlighted the existing strategic and operational challenges using automation in internal logistics. A three-phased empirical study has been conducted, including case studies and a survey. The findings reveal an inadequate insight of the current state of internal logistics operations as well as a lack of vision and strategy for the ideal state of operations for the future.

414 *M.K. Lim et al.*

For automotive industry, Lea Hannola et al. produced a paper on 'Characteristics of the Finnish transportation corridor for the Russian automotive industry', aiming at investigating the factors that hinder or enhance the utilisation of the Finnish transportation corridor by the Russian automotive industry. A case study and interviews with five companies (in Finland and Russia) were conducted and studied. The results indicate that the competitiveness of Finnish transportation corridor looks promising, e.g., the security and border-crossing practices of the Finnish corridor are considered to be at a high level, whereas nationwide marketing strategies and the cost-effectiveness of the corridor need to be improved.

Lastly, Alvin G. Wang contributed an article on 'Service parts logistics network model selection for different industries in Asia' that analyses different industries and various SPL network models in Asia region. Through the theoretical and empirical analyses, they find that a centralised 1-echelon network is generally suitable for aerospace and automotive customers whereas a decentralised 2 or 3-echelon network is suitable for high-tech customers. This paper also proposed an easy-to-use framework for selecting the right service logistics network based on different logistics performance elements. Several managerial implications were also given to improve logistics business and capture potential revenue.

The editors expressed their up most appreciation to all the authors contributing their quality articles to make this special issue possible. Special thanks are also expressed to Inderscience and Editor-in-Chief of *International Journal of Logistics Systems and Management*, Professor Angappa Gunasekaran, in assisting us in publishing this special issue. Nevertheless, we also want to thank the independent, anonymous reviewers for their constructive comments to improve the papers. We trust that the readers will find this special issue useful in widening their research perspective.