Guest editorial

Strategic supply chain and logistics management in Greater China: evolution, innovation and future challenges

Overview

Following on from the inaugural Special Issue on "Contemporary strategic supply chain management and logistics issues in Asia" published in Volume 45 Issues 9/10, 35 papers were submitted to the second Asian-focused special issue for the Greater China region. From these, eight papers passed through the rigorous peer review process and are accepted for publication. The special issue comprises two distinct groups: papers that reflect the dynamic nature of strategic supply chain (SC) management in Greater China and papers that focus on examining the strategic developments of the third-party logistics (3PL) service providers in the region. Several papers in this special issue build on and extend research studies published in the first Asia special issue published in 2015.

Greater China, that includes Mainland China, Hong Kong, Macau and Taiwan, is an immense and diverse geographic area. Over the past three decades, tremendous influxes of financial and human capital have contributed towards the development of a complex and dynamic mix of domestic and global SCs. Moreover, rising labor and rent costs, stricter environmental regulations, escalating trade conflicts and regional political instabilities have dramatically impacted and changed SCs in the region. Thus, Greater China continues to represent a particularly fertile region for studying strategic SCM and logistics phenomena.

Rapid changes make collecting empirical data for strategic SC management research studies in Greater China somewhat challenging for multiple reasons. The first group of four strategic SC management studies in this special issue can therefore be viewed as a continuation of the pioneering attempts in the first special issue to expand understanding of the strategic SC advances in Greater China, one of the most economically vibrant regions in Asia. The editor and guest editor sincerely hope this special issue will continue to stimulate additional future research on strategic SC and logistics management developments in this region.

The second group of four 3PL studies published in this special issue, all chose survey design approaches and used structural equation modeling (SEM) method for their data analysis. However, several case-based studies investigating emerging 3PL issues such as performance-based logistics, low carbon logistics, truck fleet management in the region were also submitted but failed the rigorous standards for publication in the journal. Although strategic 3PL research incorporates mature theories (particularly in the relationship management area) that researchers can refer to and utilize for formal theoretical study, it may be incorrect to conclude that 3PL in Greater China is already a mature research field as is the case in more developed regions. Rather, the dynamics and diversity involved in the 3PL industry in Greater China call for more studies on relevant emerging 3PL issues in the region using explorative approaches with enhanced rigor.

Dynamic SC management in Greater China: Papers 1-4

The first four papers in this special issue explore very different but highly relevant strategic SC management issues using totally different research approaches. The first paper uses a typical literature review approach to study cross-border e-commerce (CBEC) logistics; the second paper applies a survey approach with SEM to investigate green supply chain (GSC) issues; the third paper looks in detail into how information technology (IT) capability enables

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SC network capabilities using a case study approach; and the final one utilizes interviews with procurement experts in western manufacturing buying firms to examine SC disruption causes and mitigation management strategies when buying from Chinese suppliers.

In the first paper "Cross border B2C e-commerce to Greater China and the role of logistics: a literature review", Giuffrida, Mangiaracina, Perego and Tumino review scientific publications in the field of logistics pertaining to CBEC to China. In total, 32 papers published from 2002 to 2016 in international peer-reviewed journals and/or proceedings of international conferences, retrieved from bibliographic databases and science search engines, are reviewed. It is found that the existing literature is quite fragmented and seems to be predominantly descriptive. This research methodology builds familiarity with the extant research, but does not contribute towards developing more precise insights on how the complexities could be dealt with in managing CBEC logistics to Greater China.

The authors propose two "core" streams and two "related" streams for future research to address the existing research gaps. Two main issues that should be addressed are distribution network design and logistics outsourcing. These themes were identified by relying on literature produced in fields related to CBEC logistics, i.e. logistics and SC management, e-commerce and international business that could reasonably be extended to the CBEC logistics context. A roadmap for building future research is also provided. Two-related research streams as future development paths are also proposed; they are defined as "related" because they are derived from the intersection of logistics and other research fields.

The first related direction is "risk analysis of logistics supporting a CBEC initiative in China" and the second is "more inclusive studies that analyze logistics in connection with other strategic pillars of a CBEC initiative," e.g., logistics and regulations, marketing or platform selection. Since CBEC fuels China's emphasis on both importing and exporting, a greater interest from "foreign" scholars is expected and desirable in the future. The need to investigate, share and diffuse knowledge about this through international research collaboration is emerging and is encouraged by this paper.

Building on Chen *et al.*'s (2015) study on environmental SC in Taiwan, the second paper "Drivers of green supply chain initiatives and performance: evidence from the electrical and electronics industries in Taiwan" by Huang, Huang and Yang investigates how internal and external factors simultaneously drive firms to adopt GSC initiatives drawing upon institutional theory, stewardship theory and view of performance. Responses from 380 manufacturers in the electrical and electronics industries in Taiwan were collected and analyzed via SEM and bootstrapping. The analyses identify several valuable results. First, institutional pressures affect firms' GSC initiatives. Second, institutional pressures influence managers' environmental stewardship behaviors (ESBs). Third, managers' ESBs affect firms' GSC initiatives. Fourth, firms' GSC initiatives influence their environmental performance, economic performance and competitiveness. Fifth, the bootstrapping results reveal that institutional pressures indirectly affect the GSC initiatives of firms through the ESBs of managers. Apart from analyzing field- and organizational-level data simultaneously, this paper is also the first to demonstrate the relationships among institutional pressures, ESBs of managers, GSC initiatives and firm performance.

The third paper "Developing SCM framework associated with IT-enabled SC network capabilities" by Chen, Ou-yang and Chou takes an in-depth case study approach to explore how IT enables SC network capabilities, by capitalizing on SC's existing set of resources and, at the same time, managing new combinations of SC resources to meet future market needs. The study also develops a conceptual SCM framework associated with IT-enabled SC network capabilities. The model includes the operating processes with IT-enabled activities to achieve ambidextrous SC network capabilities, and the relevant framework functions in network resources and co-management activities including information co-governance, information interoperability, community engagement strategy, cyber-physical dexterity and control enactment, which lead to SC alliance improvements for dynamic environmental changes. The proposed model reveals that developing IT-enabled SC network capabilities is a dynamic process whereby an organization's major SC managerial activities are divided into specific network resource mobilizing and adaptive co-management arrangements.

Kumar *et al.*'s (2015) paper in the first Asian special issue confirmed that SC disruptions can result in negative impacts on stakeholders' stock prices. As a response to their call for more research on disruption management and mitigation practices, the final paper in the first group "Disruption causes and disruption management in supply chains with Chinese suppliers: managing cultural differences" by Durach, Glasen and Straube adopts a more cultural and philosophical perspective to examine an important research topic using a unique research approach. The authors draw upon a predominantly Germanic sample to identify and rank SC disruption causes for western buying firms in the Chinese market. Their research identifies supplier-relationship-specific mitigation strategies for avoiding and resisting such disruptions, and develops and proposes a framework of relational SC disruption management with Chinese suppliers. Two group exercises with 42 representatives from western manufacturing buying-firms and nine in-depth interviews were conducted. The group exercises applied the nominal group technique, and 22 disruption causes were identified and ranked. By evaluating the five most urgent causes of disruption, 43 mitigation strategies were identified for implementing strategic relationships with Chinese suppliers. A framework of relational SC disruption management for western buying firms is developed with six propositions on primary constructs, mediators and moderators, highlighting *guanxi* as a fundamental construct of relations within the Chinese culture. This study depicts how cultural differences between Chinese suppliers and Western buyers influence relational SC disruption management strategies. Using the study findings, managers of Western buying-firms are informed regarding the most pressing disruption causes in the Chinese market and the value and strategic use of Chinese-supplier relationships.

Strategic development of 3PL in Greater China: Papers 5-8

As pointed out by Chen *et al.* (2010), the 3PL industry in Greater China has experienced rapid growth in recent years and demand for logistics services has grown tremendously. Meanwhile, 3PL firms in the region are facing intense competition in the logistics market, and such competition has forced many 3PLs to reconsider their competitive advantages from a resource-and-capability point of view. In particular, as pointed out by Tian *et al.* (2010), logistics users' satisfaction with 3PLs in Mainland China is lower than the level satisfaction in more developed countries and the range of service provisions seems to be much narrower.

The four 3PL papers further reveal the crucial status regarding the contemporary strategic developments of 3PLs in the Greater China region. Interestingly, the four papers all use SEM as the key research method for their data analysis, showing the popularity of the more advanced statistical method among Greater China logistics and SCM scholars who conduct survey-based research. Three papers examine 3PL topics from the resource-based view (RBV) of the firm and the factors affecting horizontal alliances and firm performance while the other paper reflects the views of 3PLs' customers regarding the relationships between dependence and integration with trust as the mediating factor.

In the first paper "Relational resources and performance of Chinese third-party logistics providers: the mediating role of innovation capability", Shou, Shao and Chen build on extant research to further examine the effects of relational resources on firm performance in the Chinese logistics industry. The authors surveyed randomly selected 3PL providers across different regions in China with 203 valid returned questionnaires, resulting in a usable response rate of 20.3 percent. The results of this research confirm that relational resources have a positive effect on firm performance. However, such effect is not direct; instead, it is realized through the mediation of innovation capability. This study indicates that relational resources are important for 3PL providers to achieve superior performance, and innovation capability plays a mediating role between such relationships. This finding corresponds to the core idea of the RBV, which argues that firms deploy strategic resources through capabilities in order to achieve competitive advantages and superior performance.

The second paper in the group "Revisiting the resource-based view on logistics performance in the shipping industry" by Yang and Lirn investigates the impact of intrafirm resources, interfirm relationships and logistics service capabilities on logistics performance by surveying Chinese 3PLs in the container shipping industry. Logistics services for the container shipping industry is a niche logistics market. The survey was sent to 513 managers from selected members of the National Association of Shipping Agencies and Companies and the International Ocean Freight Forwarders and Logistics Association in Taiwan, which resulted in 138 useable responses. The findings show that interfirm relationships and logistics service capabilities act as mediators between intrafirm resources and logistics performance. This study reveals that intrafirm resources and interfirm relationships act as unique inputs that are critical to logistics operations, as well as mechanisms through which container logistics operators interact with partners and customers to learn the knowledge, skills, practices and procedures that help them improve their logistics service capabilities. The study findings also strongly suggest that container logistics operators should not view their intrafirm resources (including logistics IT and teamwork organizational culture) or interfirm relationships (including informal communication with key stakeholders and evergreen relationship with key stakeholders) separately; instead, it is a holistic system with close interactions.

In the competitive logistics market, complex customer demands often cannot be satisfied by one single 3PL. An effective strategy for 3PLs is to form alliances with other 3PLs, which is known as the horizontal alliance. By combining core competencies and resources of competitors or non-competitors, 3PLs are able to respond flexibly to demand fluctuations, increase the productivity for core activities and reduce the costs of non-core activities. At the same time, such alliances can broaden their service scopes, enabling individual 3PL to tender with large shippers for larger contracts and help to protect the 3PL's market share.

The third paper "The impact of partner similarity on alliance management capability, stability and performance: empirical evidence of horizontal logistics alliance in China" by Gao, Yang, Yin and Ma explores the impact of partner similarity on the success of horizontal alliances of 3PLs in China. Primary data were collected via questionnaire to 380 chief executive officers and managing directors in 262 small and medium logistics enterprises in China. A response rate of 83 percent yielded 316 valid questionnaires for further analysis. This research verifies the positive relationship between partner fit and management capability. That is, partner similarity and logistics alliance management capability are positively correlated with alliance stability and performance in horizontal alliances among Chinese 3PLs, especially for competence similarity and cultural similarity. Moreover, alliance stability mediates the impacts of partner similarity and logistics alliance management capability on alliance performance.

The study findings are particularly meaningful because many 3PL users in Greater China face significant control issues when managing their relationships with 3PLs. As pointed out by Tian *et al.* (2010) and others, China provides a fertile ground for investigating 3PL issues due to the fact that the 3PL industry in China is still emerging where all types of logistics service providers exist. The growing logistics requirements of Chinese companies and complex logistics operating environment also present significant challenges for managing logistics outsourcing in China. In particular, China is a country full of local and unwritten rules that are intertwined with complex and subtle social networks. Managing informal relationship elements can be critical to business success in China because partners often prefer to exchange favors before they engage in formal actions.

Extending Huo *et al.*'s (2015) research in the first Asian special issue, Huo, Liu, Chen and Zhao re-examine the relationships among dependence, trust and integration in the Chinese 3PL context from 3PL users' perspective in the final paper "Dependence, trust, and 3PL integration: an empirical study in China". Instead of simply using logistics outsourcing categories as the outcome variables, this paper connects dependence management with integration with 3PLs. 3PL integration is manifested in two key dimensions: information sharing and process coordination in their study. In total, 2,000 companies across the Greater China region were randomly selected as the sampling frame. Within the designated data collection period, 361 useable samples were collected, with the sample sizes from Mainland China, Hong Kong and Taiwan being 130, 119 and 112, respectively. The results show that switch dependence is indirectly related to information sharing and process coordination through goodwill trust, while goal dependence has direct linkages with both integrative behaviors. The findings indicate that goodwill trust mediates the relationship between dependence and integrative behaviors but that ability trust does not mediate any of the hypothesized relationships. The analysis also validates the direct link between process coordination and financial performance but does not find a direct relationship between information sharing and financial performance. In contrast to most previous studies on similar topics, the study examines the impacts of specific dimensions and types of dependence and trust on 3PL integration. As a result, the findings are more meaningful and have direct relevance to effectively managing 3PL relationships in Greater China.

The 2015 editorial by Professor Chen (in Volume 45, No. 3) that was commissioned by the Editor, Professor Ellinger and myself expresses our sincere wish to capture the growing vitality of the Asian SCM and logistics research community and to encourage scholars in the field to perceive *IJPDLM* as the journal of choice for publishing their best research.

Two years after the inaugural Asian context special issue of *IJPDLM* (Su, 2015), this Greater China special issue reinforces the commitment of Emerald Publishing, the editor of *IJPDLM* and the *IJPDLM* editorial team towards providing publication opportunities for scholars investigating strategic SC and logistics management developments in Asia and its key regions. The eight valuable and diverse manuscripts in this special issue perfectly illustrate the highly dynamic nature of the Greater Chinese economy and are a great reflection of *IJPDLM*'s unwavering commitment to the research in this region.

As the Special Issue Editor, I greatly appreciate all the authors who submitted their research to this Greater China special issue of *IJPDLM* and all the reviewers who spent their precious time providing professional reviews for the submitted papers. Congratulations to the authors whose research is included; regrets also to the authors whose research is highly relevant but may not have met the rigorous standards of *IJPDLM*.

Finally, and most importantly, we hope submitting authors can continue their valuable research journeys to facilitate the progress and advancement of strategic SC and logistics management research in Asia no matter whether their research is included in this special issue or not. *IJPDLM* will continue the effort to serve their publishing needs and provide an open platform to enhance knowledge in the field of strategic SC and logistics management.

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Further reading

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