AMC Project Advertisement

Title:

Evaluation and Critical Assessment of Port Integration in Supply Chains

Type:

2018 John Bicknell Scholarship

Value & Duration:

The John Bicknell Scholarship is equivalent to a University of Tasmania Elite scholarship (current RTP rate + $7,500 top-up per annum), with additional operational funds of up to $5,000 per annum) for a term of 3 years (with a possible 6 month extension). The scholarship is available to domestic and international applicants, and the awardee must meet or exceed the criteria of a University of Tasmania Elite award. It is awarded on an annual basis, subject to funds being available.

Closing Date:

11:59pm (AEST), Monday 19 March 2018

The Research Project:

The role of ports in emerging economies, while trade is growing continuously, is still limited to productivity and output to gain efficiency. Achieving efficiency through integration in the supply chain, which would cover a broad picture of foreland, port itself and hinterland management, might be a far off scenario (Zhang and Lam, 2013, 2017; Huo, Zhang and Chen, 2017). Monopolistic situation and limited facilities could be addressed as the prime reason for congestion. However, there is still lack of innovation, ignorance to potential demand and significantly insufficient cooperation and collaboration with different stakeholders.

This study aims to examine the level of cooperation and collaboration mechanisms of port authorities with both hinterland and foreland operators. To achieve this objective, a systematic literature review will be conducted first, followed by data collection through structured interviews and surveys for the identification of possible factors or variables. The influence of these variables will be analysed by both qualitative description and quantitative data analysis approaches. Multiple-criteria decision-making (MCDM) will also be used to explicitly evaluate multiple conflicting criteria in decision making. A management and operation framework will subsequently be suggested in relation to cooperation and collaboration along with the resultant benefit in terms of both cost and customer satisfaction for the port and partners along the supply chain.

In theory, this research will contribute to current studies in understanding port significance in supply chain integration. It will also enrich the studies in port cooperation and collaboration in achieving both cost effectiveness and customer satisfaction along the supply chain. In practice, this research will optimise the available resources which mitigates the never ending demand of additional port facilities from the traditional perspective of the input-output mechanism in emerging economies. It will also help port entities to be realistic and rational in relation to port investment as well as achieving sustainability.

References:

Zhang, W. and Lam, J.S.L., 2013. Maritime cluster evolution based on symbiosis theory and Lotka-Volterra model. Maritime Policy & Management, Vol. 40(2), 161-176

Huo, W., Zhang, W. and Chen, P., 2017. Recent development of Chinese port cooperation strategies. Research Transportation Business & Management. (Accepted)

Zhang, W. and Lam, J.S.L., 2017. Maritime cluster evolution: an empirical analysis from the port development perspective. Transportation Research Part A: Policy and Practice, Vol. 105, 219-232.

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Eligibility:

The following eligibility criteria apply to this scholarship:

- The scholarship is open to domestic (Australian and New Zealand) and international candidates;
- The degree must be undertaken on a full-time basis;
- Applicants must already have been awarded a First Class Honours degree or hold equivalent qualifications or relevant and substantial research experience in an appropriate sector;
- Applicants must be able to demonstrate strong research and analytical skills.

Candidates from a variety of disciplinary backgrounds are encouraged to apply. Knowledge and skills that will be ranked highly include:

- Shipping, ports, or supply chains
- Statistics technique or optimisation skill

Funding:

This scholarship is being funded by the commemorative John Bicknell Scholarship.

Application Process:

Applicants who require more information or are interested in this specific project should first contact the listed Supervisor.

Information and guidance on the application process can be found on the Apply Now website.

Information about scholarships is available on the Scholarships webpage.

More Information:

Please contact Dr Vera Zhang vera.zhang@utas.edu.au for more information.