

The Mediation Impact of Supply Chain Risk Management on the Relationship between Supply Chain Integration and Supply Chain Performance

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In recent years, the supply chain has become increasingly globalized. Driven by low cost, companies are encouraged to move to a global sourcing and manufacturing model. Therefore, many global supply chains are used to achieve global procurement and manufacturing chain. Evidently, supply chain integration as a practical means to improve supply chain performance which can be applied to various supply chain networks since it is vital to increase the span of the supply chain network. However, the global supply chain has been interrupted incessantly by natural disasters, epidemics, and human errors in the past decade. For examples, in 2011, the earthquake in Japan and the floods in Thailand caused a global shortage of car spare parts and hard disk drivers. In 2020, the COVID-19 pandemic ravaged the world and had led many factory closures, which disrupted the global manufacturing and retailing industry. In 2021, the obstruction of the Suez Canal cut off the shipping line between Europe and Asia, and over 300 ships were delayed in this accident. Therefore, the implication of supply chain risk management to respond to the risk is necessary for supply chain participants to achieve high-level performance. With the expansion of supply chain integration, the interdependence of supply chain partners has increased, whereas the vulnerability and risk of the supply chain have also increased. On the other hand, supply chain integration emphasizes information sharing and strategic collaboration with supply chain partners, which may positively impact supply chain risk management. In other words, although supply chain integration and risk management are both widely accepted and applied supply chain management methods, the relationship between these two variables needs to be further verified. Thus, the mediation role of supply chain risk management on supply chain integration and supply chain performance needs to be investigated. The main purpose of this paper is to propose a conceptual framework to investigate the relationship. Further, there are two objectives of this paper. Firstly, to review how supply chain integration affects supply chain risk management and the impact of supply chain risk management on supply chain performance. Secondly, to ascertain the mediation impact of supply chain risk management on the relationship between supply chain integration and supply chain performance. A questionnaire is designed for the data collection purpose. After the pilot test, the questionnaire will be modified to improve the reliability and validity. Finally, the questionnaire will be distributed to the company owners and supply chain managers in mainland China to collect data. Structural equation modeling will be employed to assess the relationship among the dimensions. This study expects to identify the impact of supply chain integration on supply chain risk management and generates novel insight into the implementation of supply chain integration and risk

management. The study will contribute to recent debates concerning supply chain integration and risk management by providing understandings into the implementation of supply chain integration to achieve appropriate supply chain risk management in supply chains and then acquiring higher supply chain performance.

Keywords: *Performance, Risk, Supply Chain Integration, Supply Chain Risk Management*