

Chapter 8

Identification of Contextual Relationship Among Collaboration, Cooperation, Coordination, and Innovative Green Procurement Practices

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ABSTRACT

Globally, every organization is focusing on minimizing the usage of scarce resources in production. The authors have used resource dependence theory (RDT) as the theoretical lens to develop the foundation of the chapter. RDT suggests that firms within the supply chain network should coordinate and collaborate to achieve superior performance. Under RDT, the most important assumption is that firms cannot be fully independent with regards to strategically critical resources for survival. The purpose of this chapter is to explain the contextual relationships between collaboration, coordination, cooperation, and innovative green procurement practices. Here, interpretive structural modeling (ISM) technique has been used to develop the SSIM matrix with the assistance from five experts based in the South African steel and engineering sectors. The ISM model depicts the contextual interrelationships that may help supply chain managers in quality decision making. The chapter concludes with managerial implications and directions of future research.

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INTRODUCTION

In today's competitive era focal companies have supplier networks comprising of multi tier suppliers located in different countries and continents. The purpose of sourcing from both local and international suppliers is primarily to mitigate supply risks and gain costs benefits. Many past studies have reported about numerous big suppliers of reputed firms were actually involved in child labor practices, polluting the surrounding environment and not complying with local and international laws and regulations. There are high risks involved in doing business with such suppliers who fails to adhere to the triple bottom line principles. Thus the concept of sustainability has gradually extended towards supplier networks and attracted attention of SCM researchers.

In this study we use Resource Dependence theory (RDT) as a theoretical lens for preparing the research foundation. RDT suggests that member firms within the supply chain should coordinate and collaborate to achieve superior performance. Under RDT the most important assumption is that firms cannot be fully independent with regards to strategically critical resources for survival (Sarkis et al., 2011).

Under Green procurement practices, the eco-design of products and materials recovery is outstanding organizational resources requiring partnership with key suppliers to extract performance benefits (Zhu et al., 2005). From the RDT viewpoint, customer and supplier relationships are important links for firms to reduce the uncertainty surrounding their operating environment (Carter & Rogers, 2008).

While establishing theoretical foundations for three Cs' and innovative green procurement practices, the following research question is proposed: Do Collaboration, Coordination and Cooperation create value in improving innovative green procurement practices of firm?

There are few brilliant studies available in the area of supplier relationship management, supplier integration and collaboration and has been discussed further to understand the breadth and depth of study available in the area of sustainable procurement.

Bag (2016b) studied the interrelationship between green strategy, supplier relationship management and supply chain performance. Important variables such as supplier integration, ethics, trust, culture and flexibility has been considered in the study to develop supplier relationship model. Green purchasing positively influences flexible systems which in turn reduces operational cost. Bag (2016c) also argued that flexible procurement systems is key to supply chain sustainability. In that study the important variables considered were supplier integration, supplier responsiveness and strategic sourcing. The findings suggest that manufacturing organizations having a strong sourcing policy successfully integrate suppliers. This helps to achieve greater level of flexibility and develops more innovative products successfully. It was also

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