

Chapter 4

Sustainable Supply Chain Management: A Conceptual Framework and Prospects for Future Research

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ABSTRACT

The use of sustainable supply chain management practices allows companies to increase their revenues, while still balancing the triple bottom line of sustainability, which covers economic, environmental, and social concerns. Companies are looking to enhance their environmental performance by using sustainable supply chain management practices. The effect of supply chains on the environment cannot be understated. Numerous studies have been conducted investigating different facets of supply chain practices. However, research on sustainable supply chain management frameworks is fragmented, providing little or no guidance to practitioners. Thus, there is still a need for the provision of a comprehensive framework for optimizing the environmental impact of production and distribution processes. The overall objective of this study was to identify existing frameworks and propose a framework to guide practitioners and academics. A systematic literature review and meta-analytical methodology were applied. The analysis considered 92 articles. The study specifically used content analysis. A comprehensive sustainable supply chain management framework was developed from the eight practices that were derived and categorized. Emerging sustainable supply chain management practices such as green procurement, reverse logistics and cooperative with customers have been included in the framework. This sustainable supply chain management framework provides a guide to supply chain managers about which practices to focus on. Future research should study the barriers of implementing sustainable supply chain management practices.

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INTRODUCTION

Today, companies must address the problem of rapid climate changes and deal with the global public interest in environmental sustainability and energy efficiency. Sustainable supply chain management has been suggested for improving sustainability in production and distribution processes. The integration of sustainability into supply chain management is not just an ethical obligation, but it is a strategic imperative for businesses looking to thrive in an increasingly competitive and environmentally conscious global marketplace. Sustainability initiatives drive cost savings, reduce risks, and open up new markets for the companies. In recent years, sustainable supply chain management has become a topic of interest for academics and practitioners. Reducing the environmental impact of production and distribution processes is an ongoing effort that requires commitment, collaboration, and innovation throughout the supply chain. Organizations must make significant strides toward sustainability and contribute to a more environmentally responsible future. This chapter contributes to the ongoing discussions on how sustainable supply chain management can be used to reduce the environmental impact of production and distribution processes. This calls for the attention of policymakers, researchers, and companies to develop a sustainable supply chain management framework. The remainder of the chapter is structured as follows: section 2, background of study, Section 3; methodology and meta-analysis, section 4, results and section 5, contribution.

BACKGROUND TO THE STUDY

Numerous research have touched on supply chain. Only the effectiveness and responsiveness of a system from the receipt of raw materials and production processes to the delivery of goods to consumers were taken into account by supply chain management (Giunipero, Hooker & Denslow, 2012). Researchers concluded that supply chain management required modernization. The environmental impact of supply chains made consideration of sustainability necessary (Carter & Jennings, 2002). There have been an increasing number of studies that have a particular focus on sustainability. According to Lis, Sudolska and Tomanek (2020) and Sanchez-Flores, Cruz-Sotelo, Ojeda-Benitez, and Ramirez-Barreto (2020), the phrase “sustainable” has been added to the field of supply chain management. Most companies are under pressure from social media, non-governmental groups, the global community, and customers to change their supply chain policies in favor of sustainable supply chain management (Sarkis, 2001).

Sustainable supply chain management is the development of coordinated supply chains through the voluntary integration of economic, environmental, and social concerns to manage the material, information, and capital flows to satisfy stakeholder needs and improve profitability, competitiveness, and sustainability (Ahi & Searcy, 2013). Companies that employ sustainable practices today have considerable competitive and financial advantages over those that do not. The value of sustainability and how to incorporate it into supply chain planning is recognized by businesses. To include sustainability into the supply chain, three streams of literature on the topic have been established. These include figuring out the obstacles impeding the adoption of sustainable supply chain management (Morali & Searcy, 2013) and research on sustainable supply chain management practices and their performance. According to Ashby, Leat, and Hudson-Smith (2013), academics need to create more useful tools to adopt sustainable supply chain management. There has been a lot of research done on finding sustainable solutions in various industries to reduce environmental impact (Ahi & Searcy, 2015; Taticchi, Garengo, Nudurupati,

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