

Building the Circular Supply Chain

Subjects: **Economics**

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The circular supply chain involves return processes and the manufacturer intends to capture additional value in the supply chain. In this paper, value chains have been mapped to visualize the links and interactions between the different stages and actors to understand the complexities of these systems and to make informed decisions. It can be concluded that to develop a new relationship capacity will allow for reaching more frequent, closer relationships with more actors. These relationships will be developed within an adapted organizational and logistical framework that is framed in new business model archetypes. However, dimensions related to the business environment such as sectoral, legislative, and fiscal frameworks must be incorporated.

circular supply chain (CSC)

circular supply chain management (CSCM)

circular economy

sustainability

literature review

value creation

1. Circular Supply Chain Management (CSCM)

Circular supply chain management (CSCM) offers a compelling perspective that includes the vision of a zero-waste economy and the restorative and regenerative cycles designed based on circular thinking.

For this restoration and regeneration of materials to achieve the vision of zero waste, business model and supply chain designs must be adapted with the participation of a wide range of stakeholders ^[1]. For them, distributors must be considered from a broader perspective, since they are no longer considered only as the company's suppliers—closed-loop—but also as others in the same sector—open-loop, same sector—and even in other sectors—open-loop, cross sector ^[2]. Decision making in supply chain management should be done with the estimation of different types of costs. This estimation generally depends on several factors that make up the supply chain ^[3], which will be analyzed from the main theoretical perspectives in strategic management literatures.

2. Theoretical Perspectives in Strategic Management Literature

There is a lack of theoretical basis from the perspective of business management or social aspects, since research has mainly focused on production and operations ^[4]. For all these reasons, it is interesting to apply certain theories from the field of strategic management—resource-based view, industrial ecology, agency theory, strategic networks, and institutional theory—in order to convert the circular supply chain into a favorable instrument that

allows managing its resources and strategic capacities as well as its influence on the creation and maintenance of competitive advantages.

3. Conceptual model for circular supply chains

The current competitive environment requires companies to be innovative in their production systems and to rethink the current use of resources and waste management. Four dimensions have been identified to support the development of these new supply chains—greater intensity in the relationships established in the supply chain, adaptation of logistics and organizational, disruptive and smart technologies, and a functioning environment. A holistic framework helps companies ensure they are more environmentally-conscious in circular supply chain activities.

References

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