

Chapter 4

Overcoming Barriers to Circular Supply Chain Entrepreneurship

Shashank Mittal

O.P. Jindal Global University, India

Ajay Singh Chandel

 <https://orcid.org/0000-0002-4585-6406>

Lovely Professional University, India

Shubham Kumar

University of Minnesota, Minneapolis, USA

ABSTRACT

This chapter explores the transition to circular supply chain entrepreneurship, highlighting its significance in achieving sustainability and economic resilience. By shifting from linear models of “take, make, dispose” to circular practices, businesses can enhance resource efficiency, reduce waste, and create new revenue streams. The chapter addresses key barriers such as high costs, logistical complexities, and consumer awareness, offering strategies for overcoming these challenges through technology, collaboration, and supportive policy frameworks. Case studies and best practices provide practical insights into successful circular supply chains. Looking ahead, emerging trends like digitalization, evolving business models, and changing consumer behaviors are expected to shape the future of circular entrepreneurship. The role of policy and governance is crucial in facilitating this transition, providing the necessary support for businesses to thrive in a circular economy.

DOI: 10.4018/979-8-3693-3386-0.ch004

INTRODUCTION

The global economy has reached a corner where the traditional linear model of production and consumption, epitomized by the “take, make, dispose” paradigm, is more and more perceived to be unsustainable. Growing concerns with the environment, resource scarcity, and pressure from stakeholders have provoked the concept of a circular economy as a panacea for transformation. At the core of this transformation is circular supply chain entrepreneurship, by which loops in supply chains will be closed through fundamentally rethinking product design, manufacturing, usage, and end-of-life practices (Ada et al., 2021).

Circular supply chain entrepreneurship combines innovative business models with the regeneration of resources, minimizing waste and extending lifetimes. While in a linear economy, value is lost as a product reaches the end of its life, such a model bestows value through recycling, remanufacturing and refurbishing. These entrepreneurs will not just help to generate economic value in the space but will be key for tackling environmental and social challenges (Ganguly et al., 2023). However, the journey to shift from a linear to a circular economy is not without its problems. While entrepreneurs trying to actualize circular supply chains inevitably face high entry barriers, which are likely to impede progress to the point of scaling innovations slowly (Batista et al., 2018).

One of the principal challenges of circular supply chain entrepreneurship is the economic one. More often than not, a transition to a circular model requires an upfront investment in new technologies or, in the worst-case scenario, retooling of manufacturing processes and developing new business models. One of the major challenges underpinning circular economy business models is the uncertainty of ROI on circular initiatives, especially in the early stages, which may lead to investors and entrepreneurs shying away. Moreover, given that present-day markets lean towards low-cost, high-volume production, this offers very little room for circular businesses, particularly in terms of price competition. This economic scenario is a big factor that hinders the overall adoption of circular practices (Bianchini et al., 2019).

Regulatory barriers also significantly shape the environment in which entrepreneurial businesses operate in the circular supply chain. The present policies and regulations continuously back the linear models in production and consumption and rarely consider the circular practices. The inconsistency of the regulatory frameworks in being supportive often puts businesses that intend to transit to a circular model at a state of uncertainty. Market confusion can also happen without standardized definitions and certifications of circular products: another barrier to consumer uptake. For many entrepreneurs, this means navigating a complex regulatory environment with little if any direction, which tends to stymie the rate at which new innovations can be launched or scaled. While there exist hundreds of technologies

36 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/overcoming-barriers-to-circular-supply-chain-entrepreneurship/357458

Related Content

Modeling Supply Chain Performance: A Structural Equation Approach

Rajwinder Singh, H. S. Sandhu, B. A. Metriand Rajinder Kaur (2013). *International Journal of Information Systems and Supply Chain Management* (pp. 18-41).

www.irma-international.org/article/modeling-supply-chain-performance-a-structural-equation-approach/100784

Examining Sustainable Packaging Designs in the Automotive Industry: A Case Study of a Luxury Car Manufacturer

Augustus Jones, Yingdan (Catherine) Caiand Rifat Kamasak (2024). *Strategies for Environmentally Responsible Supply Chain and Production Management* (pp. 206-227).

www.irma-international.org/chapter/examining-sustainable-packaging-designs-in-the-automotive-industry/341522

The Firm Boundary Decision for Sustainability-Focused Companies

Ozan Özcanand Kingsley Anthony Reeves (2011). *International Journal of Applied Logistics* (pp. 49-68).

www.irma-international.org/article/firm-boundary-decision-sustainability-focused/54714

Drivers and Barriers to Green Supply Chain Management Practices: The Views of Turkish and Egyptian Companies Operating in Egypt

Selin Kucukkancabas Esenand Sahar Sobhy El Barky (2017). *Ethics and Sustainability in Global Supply Chain Management* (pp. 232-260).

www.irma-international.org/chapter/drivers-and-barriers-to-green-supply-chain-management-practices/173949

The Agricultural Routing Planning in Field Logistics

Amalia Utamima, Torsten Reiners, Amir Ansaripoorand Hasan Seyyedhasani (2018). *Contemporary Approaches and Strategies for Applied Logistics* (pp. 261-283).

www.irma-international.org/chapter/the-agricultural-routing-planning-in-field-logistics/196931