

Sustainable Business Model Archetypes - A Systematic Review and Application to the Plastic Industry

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Abstract : In the last few decades, the rapid growth of the use and disposal of plastic items has led to their overaccumulation in the environment. As a result, plastic pollution has become a subject of global concern. Today plastics are used as raw materials in almost every industry. While the recognition of the ecological, social, and economic impact of plastics in academic research is on the rise, the potential role of the 'plastic industry' in dealing with such issues is still largely underestimated. Therefore, the literature on sustainable plastic management is still nascent and fragmented. Working towards sustainability requires a fundamental shift in the way companies employ plastics in their day-to-day business. For that reason, the applicability of the business model concept has recently gained momentum in environmental research. Business model innovation is increasingly recognized as an important driver to re-conceptualize the purpose of the firm and to readily integrate sustainability in their business. It can serve as a starting point to investigate whether and how sustainability can be realized under industry- and firm-specific circumstances. Yet, there is no comprehensive view in the plastic industry on how firms start refining their business models to embed sustainability in their operations. Our study addresses this gap, looking primarily at the industrial sectors responsible for the production of the largest amount of plastic waste today: plastic packaging, consumer goods, construction, textile, and transport. Relying on the archetypes of sustainable business models and applying them to the aforementioned sectors, we try to identify companies' current strategies to make their business models more sustainable. Based on the thematic clustering, we can develop an integrative framework for the plastic industry. The findings are underpinned and illustrated by a variety of relevant plastic management solutions that the authors have identified through a systematic literature review and analysis of existing, empirically grounded research in this field. Using the archetypes, we can promote options for business model innovations for the most important sectors in which plastics are used. Moreover, by linking the proposed business model archetypes to the plastic industry, our research approach guides firms in exploring sustainable business opportunities. Likewise, researchers and policymakers can utilize our classification to identify best practices. The authors believe that the study advances the current knowledge on sustainable plastic management through its broad empirical industry analyses. Hence, the application of business model archetypes in the plastic industry will be useful for shaping companies' transformation to create and deliver more sustainability and provides avenues for future research endeavors.

Keywords : business models, environmental economics, plastic management, plastic pollution, sustainability

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