

Striving for sustainability through circular service systems: A Multiple Case Study

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In a search for sustainability, customers, firms, and governmental bodies increasingly embrace the circular economy principles of regenerating natural systems (for instance by applying organic farming methods) and designing out waste (for instance by offering compostable packaging). Yet, a circular economy also requires to keep products in use, especially since many products – like clothes and cars – are most of the time left unused (De Bruyne & Verleye, 2023). To achieve this end, there is need for businesses that offer services to increase the utilization rate of products, such as rental and sharing services. When incumbent or new businesses launch this type of circular service systems and hence increase their level of servitization, they may be confronted with a lack of engagement among customers (e.g., low willingness-to-pay), suppliers (e.g., products not designed for longevity), and governments (e.g., taxation systems that disfavour renting/sharing compared to buying) (Fehrer et al., 2023; Verleye et al., 2023). Against this background, key questions revolve around (1) the way in which businesses that implement circular service systems circumvent these engagement issues in their ecosystems and (2) how these initiatives affect their sustainability from an economic and environmental perspective.

To address these questions – which have been listed as key priorities for service scholars (Fehrer et al., 2023; Karpen et al., 2023) – this research relies upon multiple case study research. More particularly, we select five businesses with rental and sharing services that participate in the Green Deal Renting & Sharing in Flanders, Belgium, which is a living lab to strengthen the rental and sharing sector supported by the Flemish Government (<https://vlaanderen-circulair.be/en/cases/detail/green-deal-renting-and-sharing>). The products these businesses offer for renting or sharing – i.e., children's bicycles, chainsaws, tents, electrical kitchen appliances, and concrete panels – differ in terms of electrification and seasonality. Additionally, some of these businesses exclusively offer rental and sharing services while other businesses offer these rental and sharing services in addition to their retail services.

Based upon document analyses in combination with observations and interviews with key informants linked to each business, the present research identified a set of strategies through which these businesses engaged different actors within their ecosystem. These strategies relate to internal facets of their business models (e.g., resources and activities and cost structures) and external facets of their business models (e.g., value proposition and partners). To gain insight into the way in which these strategies affect their performance, we will assess the economic performance of these businesses by analysing the financial statements up to 2023. Additionally, we will complement these analyses with a life cycle assessment (LCA), which is an established methodology to quantify environmental impact, of the rental and sharing model in comparison with its retail-based counterpart. By assessing the sustainability of different servitization strategies from an economic and environmental perspective, this research advances the servitization and circular economy literature.