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# A review of key dimensions for designing environment-driven collaboration practices with external business partners

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Environmental sustainability challenges are of growing interest in the business world and collaboration with external business partners is considered a key means to tackle them. Nevertheless, collaborating with external business partners to develop and deliver greener products and services is not straightforward for companies, and recommendations from academia, as well as industry practices remain scarce. Guidance is needed for designing collaboration practices and their implementation when developing and delivering greener products and services. Pursuing this aim, the present paper reviews environmental management literature fields and extracts indications regarding practices of such collaboration with external business partners. We outline three key dimensions affecting collaboration practices and their implementation and consolidate them in a framework. We suggest that tailored implementation approaches should be based on the clarification of the company's objective for collaboration, the company's organizational profile for collaboration and the company's value network context. As a final point, we derive needs for further research.

## Future-adaptability for energy and resource efficient vehicles Thomas Nyström<sup>1</sup>, Lisbeth Svengren Holm<sup>2</sup>, Patricia van Loon<sup>1</sup>

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In contrast to linear business models, circular business models (CBMs) assign the product value and its lifecycle responsibility to a manufacturer or service provider where customers get access to functionality and performance during multiple use cycles. A CBM requires (due to the increased business risk for product obsolescence) suitable products designed for long service life, changes in service content, repair, upgrades and remanufacturing. This paper illustrates drivers that can make three categories of vehicles obsolete in a circular business model. We propose a conceptual framework where drivers for obsolescence are used as enablers for future adaptable design, exemplified with industry cases. Future adaptable vehicles have the potential to be both profitable and energy and resource efficient during use and in end of life in a CBM. However, it will challenge today's business models with a design logic that rewards longer and more flexible product life. Current barriers are legislation, standards and certification, and consumer acceptance. Besides organizations barriers and a general reluctance to changes.

**THURSDAY, AUG 24** 

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