

The Dark Side of Modularity: How Product Module Boundaries Affect the Evolution of Collaborative Ventures in Nascent Markets

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Collaborating with rival firms can be important in dynamic environments, yet deciding the scope of such collaborations is not straightforward. This in-depth case study of the evolution of the Symbian collaborative venture explores these dynamics of cooperation and competition and the role of module boundaries, i.e. which parts of the product are developed inside as opposed to outside the collaboration. We find that the use of modular designs allows for flexibility, but that this flexibility can also trigger unexpected complexity and more competitive behavior. As the collaboration is restructured in response to these dynamics, it becomes increasingly difficult to set module boundaries. Together, these difficulties can subsequently limit the ability of a venture to both create and capture value. Overall, our framework helps understand how collaboration and competition co-evolve with product design, highlighting the unexpected dark side of flexibility.