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Modularization Across Managerial Levels and Business Domains: Literature Review & Research Directions

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Abstract

Modular system architectures in both product and manufacturing domains are of high interest in both academia and industry, as having modular product platforms and reconfigurable manufacturing systems are a key enabler for companies to obtain the strategic flexibility needed to respond to rapidly shifting market and customer requirements. Previous research has focused extensively on modularizing products and manufacturing equipment. However, to fully reap the benefits of modularization, this cannot be treated solely as engineering efforts taking place in one domain or cross domains with co-platforming, but rather as a top management initiative. The purpose of this research is to review state-of-the-art literature on modularization/platforming looking across managerial levels and business domains, market, product, and manufacturing.

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