Configuration of technology networks in the wind turbine industry. A comparative study of technology management models in European and Chinese lead firms - DTU Orbit (09/11/2017)

Configuration of technology networks in the wind turbine industry. A comparative study of technology management models in European and Chinese lead firms

Through a comparative analysis of technology management at the component level by wind turbine manufacturers from Europe and China, this article compares strategies of internalisation of core technology components by European and Chinese lead firms and outlines how different internalisation strategies impact the networks established by the two types of lead firms. Building on the concept of governance developed by the global value chain literature, the article identifies two different types of networks: European lead firms internalise core technology components and keep strong captive or relational ties with key component suppliers, whereas Chinese lead firms modularise and externalise core technology components, hence adopting a more flexible approach to technology management. The latter model mirrors a strategy of overcoming technological barriers by tapping into knowledge through global innovation networks. The article contributes to the network governance literature by introducing scales of component technology complexity and lead firm capabilities for understanding network constructs.

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