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Different paths for sustainability through PSS

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Abstract

Pressures from globalization lead manufacturing companies particularly in the healthcare sector to increasingly incorporate services into their offerings. They shift their core business processes to become solution providers such as Product-Service Systems (PSS) and create value for their customer base. This shift has also been termed servitization. The focus is often on business-to-business (B2B), where the PSS provider maintains and ensures operability of the equipment for a customer organization. Business models for PSS usually grow around the physical asset, which can be owned by the PSS provider who offers the asset's use or owned by the customer who requests additional support for the asset. Value is added through ensuring the product performance and availability. Product-service Systems (PSS) increasingly characterize sectors with public-private partnerships such as healthcare. The adoption of such PSS can vary depending on the contingency of the business environment favoring different levels of servitization adaptations. This paper investigates how the pressures from the business environments constitute drivers for PSS development. The paper presents evidence from two case studies set in the healthcare industry in Brazil and Denmark. The presented data includes semi-structured interviews with managers and engineers involved in the PSS as well as secondary data. This paper shows that the business environments in the healthcare industry are characterized by increasing level of regulation and differ in their level of investments that determine whether the PSS development is customer pulled or provider pushed. The customer-pull in Brazil led to a quick adoption of result-oriented PSS while the provider-push in Denmark was characterized by a slower adoption of product-focused PSS. Both cases showed different levels of economic, social, environmental and operational issues. This paper contributes to current literature by understanding the different paths of PSS development is enhanced by explaining the drivers for providers and customers to engage in a servitization strategy and develop the required capabilities to be successful in this business opportunity. The most important drivers identified financial, operational and environmental.

Keywords: *Product-service system; case study; environment; healthcare.*