Designing Product-Service System Inventory Control: System Requirements Analysis of Raw Material in Automotive Industry

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ABSTRACT

During the past decade, growing attention to Product-Service System (PSS) is given a massively important role in development from traditional product-based business model to provision of industrial services. Every production task will incur some level of inventory, and this requires the collection and processing of both physical and information elements. Inventory control in PSS creates a more extensive set of uncertainties that the automotive industry needs to manage due to the enhanced scope and complexity of the product and service offering. There is a limited diffusion of new business models, especially by the automotive industry, and in particular in managing inventory control of raw material. To deal with this difficulty, this paper aims: firstly, suggests a generic model using IDEFØ for systematic and comprehensive analyses of how PSS inventory control characteristics in raw material integrate. Finally, this paper proposes the inventory of raw material in automotive industry characteristics to make it possible to better understand the dynamics of scope and complexity of the product and service offering.

KEYWORDS: PSS Inventory; control IDEFØ; Raw material inventory

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