



"CLEANER PRODUCTION TOWARDS A SUSTAINABLE TRANSITION"

Proposal for a Value Stream Mapping Method Integrating Sustainability Indicators

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Abstract

In the current scenario, in generally the companies are increasingly looking to the use of sustainable practices in their business processes in order to maximize their profits, with best environmental practices, and especially the company's image enhancement to the community through actions social. Given these variables today and other of the past, operations management models have evolved over time due to the need imposed by society. However there are many challenges in the quest for sustainability, but this work of the emphasis in the manufacturing process in the pursuit of sustainable products and sustainable transformation. In the process of transformation practices and initiatives LM (lean manufacturing) has been used to reduce waste, minimize environmental impacts and provide better social conditions. The use of the VSM tool (Value Stream Mapping) developed by the LM is used to map a process flow in order to highlight the seven major waste losses. However some studies have added social and environmental indicators by the VSM, evaluating them independently. This work aims to present a methodology for developing a method of value stream mapping integrating sustainability indicators, in order to assess the level of sustainability of a manufacturing process as a whole (economic, environmental and social). With the proposed method was possible to measure the sustainability level of grip in the manufacturing process.

Keywords: sustainability indicators, lean production, operations management.