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A critical assessment of prevailing models for measuring lean manufacturing (Conference Paper)

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Abstract

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Lean Manufacturing (LM) is a thought developed in Toyota, thus, there is lack of studies investigated whether the implementation of LM is appropriate for different enterprises' or not because of different organizational and social culture of enterprises and labor. This paper critically analyzes eleven prevailing models for LM in an attempt to find a unified model that can be applied inside enterprises. In the literature several models have a tendency to focus only on a few single components. However, different enterprises use diverse dimensions and models for measuring LM. It aims to review the various LM models prevailing in the contemporary research papers along with presentation of an in-depth analysis exploring the similar and dissimilar aspects. The dimensions of the LM models adopted by different enterprises are quite diverse as revealed through this investigation. The contribution of this review is twofold: various models for LM are critically analyzed followed by a comparative evaluation with a vision to propose a potential model for LM that is applicable for manufacturing enterprises. Results show that the unified model comprises of 11 components for LM initiated from the principles of Toyota Production System (TPS). © IEOM Society International. © IEOM Society International.

Author keywords

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