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Improving the Processes by Applying Lean Six Sigma Tool (VSM): Case Study in KSA

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Abstract

The primary objective of this research is providing an overview of the current knowledge of integrating Value Stream Mapping (VSM) to improve, analyzing and enhancing the processing operations in developing nations. The authors reviewed the current literature focusing on integrating Value Stream Mapping (VSM) in developing countries. In this research, various concepts of identifying and eliminating waste and bottlenecks to enhance operational efficiency, reduce lead times, optimize resource utilization, and ultimately increase customer satisfaction. By integrating these approaches with recent the quality improvement tools, an improved process of a certain company in developing nations system is proposed in providing better services to customers. The study works as a guideline in developing strategies for implementing continuous improvement philosophy in system design, enhanced customer satisfaction, waste reduction and increased process visibility. Therefore, future research should focus on evaluating the outcomes of of a certain company to ensure that customers in developing countries have access to high-quality and result in cost savings, loyal customers, and better decision-making.

Keywords

Lean Manufacturing, Six Sigma, Optimization, Waste Reduction, VSM.