

## **A Collaborative Application of Six Sigma and Value Engineering in Supply Chain and Logistics**

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**Abstract :** This paper deals with the application of six sigma methodology in supply chain (SC) and logistics. A detailed cram about how the SC can be improved and its impact on the organization are dealt with and also how the quality plays a vital role in improving SC and logistics are identified. A simulation has been performed using the ARENA software to determine the process efficiency of a bottle manufacturing unit. Further, a Value Stream Mapping (VSM) analysis has been executed on the manufacturing process flow model and the manner by which Value Engineering (VE) holds a significant importance for quality assertion on the products is also studied.

**Keywords :** supply chain, six sigma, value engineering, logistics, quality

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