Challenges to Apply Lean Methodology and Logistics to Coordinate Distribution Management

Abstract:

Lean six sigma and logistics associated with business-to-business transactions have changed the way the warehouse and distribution systems operate. Small and medium enterprises (SMEs) in developing countries face problems in coordinating the lean application and distribution logistics due to lack of resources and improper directions. The purpose of this paper is to develop a framework to enhance the effective use of warehouse systems and develop a matrix to improve productivity. The coordination matrix includes the structural relationship among different factors of lean improvement and logistics tools, which is responsive to distribution logistics strategic decision making. A total of 20 enablers for lean and logistics for coordination of distribution management have been identified based on the best practices and literature reviews. These factors are grouped into five categories, such as waste control, flow management, quality assurance, warehouse operations smoothness, and continuous improvement. The paper has explored the major factors for coordination of the lean and logistics simultaneously to gain potential benefits in distribution management. It will be of great value for SMEs in developing their strategies for coordination in distribution planning.

Keywords: Lean methodology, Logistics, SMEs, Distribution Management

Paper: forth coming.