

End to End Supply Chain with Kankan (Pull System) and Sequencing on Production Lines

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Abstract

Supply chains from automotive industry are very complex. Reason for its complexity becomes from a great number of partners, from suppliers (inbound supply chain from automotive industry include a huge number of supplier tiers), producers, distributors to retailers and customers, and also from great number of different components that are necessary for final product. This level of complexity is present also in supply chains from electronic industry, aviation industry etc. Logistics management represent imperative for efficient and effective managing of automotive industry, as a very complex area. Each partner in supply chain has a task to integrate all aspects of logistics: Internal logistics with focus on networking procurement, transportation, inventory control with information systems, planning, production, inspection, and delivery of final product in one process. And external logistics with focus on networking internal operations with sub-suppliers, sales, warehouse management, distribution networks, service providers, and customers.

The challenge of this paper is to create new concepts and tools of monitoring to develop production on sequencing, remove 3PL from supply chain and optimizing space and stock value (Handling & warehouse cost) in fact the product cost to be optimized.

The aim axis will be following this chronologic:

- ✓ Theoretical study of the market expectation: Literature review
- ✓ Research methodology: Analyzing of Sample and define of hypotheses
- ✓ Research results and discussion

Keywords:

Automotive industry, supply chain, concepts and tools, production.

Biographies

Jabir Arif is currently serving as an Assistant Professor at Abdelmalek Essaâdi University. He is graduated as a State Engineer from the National School of Applied Sciences, Tangier, Morocco, and he completed his PhD's degree in Industrial Engineering and Logistics at Sidi Mohamed Ben Abdellah University, Fes, Morocco. He's main research area is the Supply Chain Management, Risk Assessment and Industrial engineering. Apart from teaching and research, he is acting as a reviewer for the International Journal of Industrial and Systems Engineering (IJISE) indexed in Scopus. He is also assigned as a reviewer for the 8th International Conference on Industrial Engineering and Operations Management, Bandung, Indonesia.

Zakaria Tobi received the Master degree in industrial Engineering from Sidi Mohamed Ben Abdellah University, Fes, Morocco. He is currently a Phd student in National School of Applied Sciences, Tetouan, Morocco. He is working as a Supervisor Planner within a multinational company operating in the automotive wiring harness.