

# **Continuous Improvement Integrating Technological Tools to Assertively Accelerate Decision-making of Logistics. Case Implemented in a Construction Materials Supplier Company**

Segura-Henriquez, A., Troncoso-Palacio, A., Vera-Ruiz, J., Munoz-La-Rivera, F.

## **Abstract**

Considering that many of the logistics infrastructure designs around the world are often supported by studies with various computational tools, but most of these solutions are using in isolation and little understandably. Therefore, it is proposed, to develop this research based on a Logistics Reference Model, which will allow, visualize, manage and analyze the different processes and logistical scenarios of the system, with in aim to execute the best cost-benefit strategy in a company dedicated to the distribution of construction materials. By implementing this methodology, the management of the company studied was able to make the best decision for the structuring of its processes in the area of picking and dispatch. The results showed a 50% reduction in inventory review time, equal an increase in reliability 7% that leaves the company in around location close to 85.68%; a decrease in cycle time in each order between 20% and 40% which positively impacted the customer service level. In addition, a decrease in lead times for the receipt of materials to suppliers was achieved between 15% and 30%, and a decrease in the number of warehouses, went having from 5 independent to maintain one single distribution center.

## **Keywords**

Decrease lead times, Improvements in warehouse, Logistics Reference Model, Materials Building supplies, Simulations and Optimization