## World Academy of Science, Engineering and Technology International Journal of Industrial and Manufacturing Engineering Vol:10, No:02, 2016

## A Performance Model for Designing Network in Reverse Logistic

Authors: S. Dhib, S. A. Addouche, T. Loukil, A. Elmhamedi

**Abstract :** In this paper, a reverse supply chain network is investigated for a decision making. This decision is surrounded by complex flows of returned products, due to the increasing quantity, the type of returned products and the variety of recovery option products (reuse, recycling, and refurbishment). The most important problem in the reverse logistic network (RLN) is to orient returned products to the suitable type of recovery option. However, returned products orientations from collect sources to the recovery disposition have not well considered in performance model. In this study, we propose a performance model for designing a network configuration on reverse logistics. Conceptual and analytical models are developed with taking into account operational, economic and environmental factors on designing network.

Keywords: reverse logistics, network design, performance model, open loop configuration

Conference Title: ICEOPM 2016: International Conference on Engineering, Operations and Production Management

**Conference Location :** Paris, France **Conference Dates :** February 22-23, 2016