ABSTRACT

PTF is one XYZ factory engaged in the fast moving consumer goods (FMCG) which produces snacks and beverages. PTF is currently experiencing problems in scheduling activities and distribution of products crackers. PTF often can not fullfill the entire demand due to the unavailability of the product in the factory or the lack of capacity of the delivery fleet, causing debt post. Therefore,PTF requires an allocation planning and scheduling freight distribution. One method that can be used is the Distribution Requirement Planning.

DRP method is the method that handles the procurement of products in a multi-echelon distribution network so that the success in the fulfillment of the request would be more optimal. DRP is a set process needs to ensure that the location of inventory and fulfillment source will be able to meet the demand. DRP have the goal of sending supplies to customers effectively through the aggregate transport capacity planning and delivery assignments.

In this study, the data required is the demand depo July-December 2013, the period ending inventory PTF June 2013, information holding and set-up depo cost, lead time, the purchase price of the product and the data debt in 2013. DRP is done at every depo in the region Jabar 1-month depo of demand data from July to December 2013. Uses lot sizing with wagner whitin method to determine the optimal size of the reservation based on minimizing the holding and set up cost. The end result of this research is allocation planning and scheduling freight distribution from July to December 2013, with a decrease in total debt after planning and scheduling by use of DRP is to be as big as 103,055 cartons equivalent to 91%.

Keywords: Distribution Requirement Planning, Distribution, Wagner Whitin, Allocation, Scheduling