ABSTRACT

PT. XYZ is the biggest wholesaler in Indonesia that located in Pasar Rebo, East Jakarta. Based on type, product are grouped in three major categories of Dry food, Fresh food, and Non food. Products in the category Dry food are the most widely product that give highest share value for company as many as 71% (based on sales data in 2012). Product category Dry food are grouped in seven sub-categories which is sub-category drinks/milk has highest value stock during 2012.

PT. XYZ has not use mathemathics method yet for decide inventory policy. Inventory policy was taken just by estimate right amount for supply the demand during certain period without use mathematics calculation. This caused overstock and out of stock happen in PT. XYZ and effect increase of total inventory cost.

Customer demand of product whic is sells by PT.XYZ is varying so demand is probabilistic. improvement in inventory policy are needed to increase company performance on supply demand. In this research will use probabilistic inventory management method Fixed Order Quantity Models and Fixed Time Period Models.

Based on company needs and the other factor that be related to company inventory policy then the conclusion is the optimum inventory policy for PT. XYZ is by using Fixed Order Quantity Models. This inventory management method giving output the optimum reorder quantity which in every single order the amount is constant and reorder point is doing every stock in warehouse reach certain amount. This method will decrease in the amount of 38% total inventory cost and increase service level until 3,1%.

Keyword : Inventory, Probabilistic, Fixed Order Quantity Models, Fixed Time Period Models