ABSTRACT

PT XYZ is the first pharmaceutical industry company in Indonesia that expanded throughout Indonesia. One of its branches is located in Bandung. PT XYZ has a Business Manager (BM) who is responsible for supervising some of the Pharmacy Services in an area and handling the purchase, the storage, the delivery of goods, as well as the administration of the pharmacy service.

During this time, the inventory policies of PT XYZ is not managed properly. The inventory policies are taken by estimating the right amount for each purchase, which causes overstock and it lead to the increasing total cost of inventory.

The purpose of this research is to determine the optimal number of ordering on drugs, medical devices, and daily requirements, so the total cost of inventory decreased by using ABC matrix tool that will result in 3 categories, A there were 22 drugs, B 34 drugs, and C 58 drugs. Fuzzy Mamdani method is implemented in this research, because Fuzzy mamdani can be used in inventory systems with uncertain demand condition.

The implementation of Fuzzy Mamdani on the inventory of drugs, medical devices, and daily requirements results supply cost savings on the category A by 15% or Rp. 3.811.090,87.

Keywords: Overstock, Fuzzy, Fuzzy Mamdani