

ABSTRACT

PT XYZ is a manufacturer that produces Jamu and as a distributor for some modern retailers. So far PT XYZ has a problem in the absence of policies from vendors and retailers about the amount of inventory, causing excess inventory. Thus the company as the vendor will lose if this problem is not addressed immediately.

Based on these problems inventory policy needs to be made to balance the inventory and minimize the losses that can be experienced by the company. In this research, inventory policy is determined in the case of single vendor multi retailer using Vendor Managed Inventory approach with Consignment Stock for each retail request is different. The decision variables determined in this study are replenishment cycle, shipping quantity, total vendor cost, total retail cost, to total vendor and retail system cost thoroughly, until finally determined inventory level before and after delivery in each retail.

The actual calculation results show that the total cost of vendor and retail is higher with the calculation of proposal. The model generates a constant recharge time for each retail as well as the delivery quantity and inventory levels before and after delivery. And sensitivity analysis is done that the total cost only slightly changed because the change of paramter influenced by the quantity of its production.

Based on the results of the calculation of the optimum policy proposal using VMI-CS approach with three models of No Partnership, VMI-CS, and Centralized resulted optimum policy on the VMI-CS model by saving vendor and retail system cost by 35.25%.

Keywords : Inventory Policy, Overstock, Vendor Managed Inventory, Consignment