

ABSTRACT

PLANNING AND SCHEDULING OF PRODUCT DISTRIBUTION WITH DISTRIBUTION REQUIREMENT PLANNING (DRP) METHOD

(Case Study at PT Novell Pharmaceutical Laboratories Palembang)

PT Novell Pharmaceutical Laboratories Palembang, as one of the distribution companies engaged in the distribution of medicines with the average sales of beauty products brand Nutrafor White Beauty packaging content of 30 capsules for 1 month are 448 pcs. Delivery of products is done in accordance with the request of each branch by using the means of land transportation which has a risk of delay in delivery, which can lead to stock deficiency. The average stock deficiency is as much as 20-30 pcs per month due to fluctuating demand in the cities of Bangka Belitung, Jambi and Bengkulu. Planning and scheduling of distribution activities or Distribution Requirement Planning is required to improve the distribution system so that inventory shortages can be avoided.

Planning and scheduling distribution activities using the DRP method starts from forecasting demand for the next six months based on emerging data patterns. After that proceed with calculate Safety Stock and Lot Size by using method EOQ, L4L, FPR then continued by doing scheduling DRP. After that compare the total cost of distribution with distribution costs applied by the company. From the existing calculation, the best method is DRP and FPR because it gives decrease of distribution cost of Rp 9.573.300,- for the next six months so company can save distribution cost equal to 49,45%.

Keywords : Distribution Requirement Planning (DRP), Lot Size, EOQ, L4L, FPR