ABSTRACT

CV XYZ is a company engaged in soybean commodity distribution activities, located in Tangerang Regency. It distributes its products to five retail outlets spread across Jabodetabek using two operational vehicles. In its existing condition, CV XYZ faces problems in its distribution scheduling, lacking a fixed policy for distribution activities. This occasionally results in additional delivery trips due to insufficient stock at CV XYZ and the suboptimal existing scheduling system. Consequently, the demand fulfillment needs of each retail outlet are not met, reaching only 93% of the Company's 99% target, resulting in a 6% gap that the Company aims to improve. The proposed distribution scheduling plan is created using the Distribution Requirement Planning (DRP) method. The results of the distribution activity scheduling plan using the DRP method show an increase in meeting the demand requirements of each retail outlet, rising to 99.8%. Additionally, the total distribution cost is successfully minimized, as evidenced by a reduction from the initial Rp593,980,120 to Rp551,934,498, resulting in a cost saving of Rp42,045,622, which is 7% of the existing total distribution cost.

Keywords - Inventory, Scheduling, Distribution, Distribution Requirement Planning (DRP)