

ABSTRACT

Distribution is one of the important drivers of overall revenue obtained by the Company because it affects costs in the supply chain and customer value directly. The various products marketed by producers are increasingly varying according to the needs and demands of consumers. PT. XYZ is a snack distribution center located in Bekasi, West Java. As a distribution center for PT. XYZ has 10 retailers for snack products that will be supplied. The existing conditions experienced by PT. XYZ only has one operational vehicle for supplying snack products. The average percentage of retail demand fulfillment carried out by PT. XYZ is 92% with this it can be concluded that PT. XYZ has not been optimal in distributing its products to every retailer. The service level owned by PT. XYZ is 99% therefore it is necessary to optimize the distribution activities carried out. Thus PT. XYZ needs an optimal solution for distributing products from the distribution center to retail with the limitation of having one vehicle for delivery. The problems faced by PT. XYZ can be proposed by designing distribution scheduling to fulfill product delivery at retail using the Distribution Requirement Planning (DRP) method. This DRP method is able to solve the problems faced, namely the number of deliveries that do not match needs, distribution activities that are not optimal due to the availability of goods that are experiencing stockouts or overstock. With the DRP Method, it is possible to increase the level of fulfillment of PT's requests. XYZ from a minimum of 99% to 100%. Apart from that, the DRP method can minimize distribution costs by 18% of the actual distribution costs. The results of this research show that it can improve performance in supply chain activities, especially distribution activities.

Key Word: Schedule, Distribution, Distribution Requirement Planning (DRP).