

## **Abstract**

*PT. XYZ is a company engaged in the food and beverage industry. Based on observations, the Company has not implemented a special method in planning demand for its distribution areas and does not have a distribution activity schedule for the products it distributes. Demand for products is not fixed, so if the products in the warehouse are insufficient, the company will only send products according to the available stock in the warehouse. This resulted in the company experiencing a loss of sales because it could not meet the demand for its distribution area and made the distribution costs that the company had to pay to be high because it did not have optimal distribution activities. This study aims to make demand planning for the company as well as scheduling the company's distribution activities for each distribution area using the Distribution Requirement Planning method. Distribution Requirements Planning is a planning method to determine the needs that occur in the distribution process, especially in terms of stocking goods. By applying the Distribution Requirement Planning method, the company's distribution costs are reduced by Rp. 9,031,210.00 or the equivalent of 18.46% even though it has an impact on the increase in product storage costs and the company can also plan the demand for each distribution area and schedule for its delivery.*

**Keywords** : *Demand Planning, Distribution Activities, Distribution costs, Distribution Requirement Planning*