ABSTRACT

PT. XYZ is a fashion company located in Tangerang City that focuses on women's fashion products such as party dresses for important events. PT. XYZ is known as one of the local fashion brands that is popular among the public due to its high-quality products at affordable prices. The lead time for PT. XYZ vendors is 62 days from the time an employee places an order until the product arrives at the warehouse. PT. XYZ sells several types of products, including Party Dress, Kurviig, and limited-edition Kaftan. The special product category sold by PT. XYZ is Kaftan, as this category features unique designs, is available in only one size (all size), and is exclusively sold during the Lebaran holiday season. The marketing and sales period for these products spans four months, from January to April. In 2024, the company incurred a loss of -Rp54,761,041, or approximately -3% of total capital, due to excess inventory with inbound reaching 13,500 pieces and outbound at 8,067 pieces, resulting in excess inventory of 5,433 pieces (40%). Given the issues and limited product types, the inventory policy employs the Newsvendor Model, which involves calculating the A/F Ratio, conducting a normality test on the A/F Ratio, estimating the expected forecast and standard deviation, and calculating the Critical Ratio. Calculating the Actual Demand, the number of items ordered, the Expected Lost Sales, Expected Sales, Expected Leftover Inventory, and Expected Profit. Using demand data from the 2023 historical data with forecasting values for 2024. The results of the Newsvendor policy calculations are as follows: total inbound of 9,177 units with sales of 8,647 units, resulting in 530 units of leftover inventory and a profit of Rp1,230,491,258.

Keywords – Excess Stock, Newsvendor, Profit