

ABSTRACT

The production process in a garment manufacturing company such as Neo Prima Bandung relies heavily on the availability of raw materials, particularly polyester yarn. Poor inventory management can lead to excessive costs, either due to overstock, which increases storage expenses, or stock shortages, which disrupt the production process. Previously, Neo Prima Bandung had not applied an appropriate inventory control method, as raw material orders were still based on estimated monthly demand. This study aims to compare the Economic Order Quantity (EOQ) method with the company's existing system to improve inventory cost efficiency. The results indicate that by implementing the EOQ method, the company can determine an optimal order quantity of 526 kg per order, with only six orders per year, a reorder point of 200 kg, and a safety stock of 130 kg. Using the EOQ method results in a total annual inventory cost of IDR 2,496,100, significantly lower than the previous method, which cost IDR 8,640,000. These findings demonstrate that the EOQ method is more efficient and is highly recommended for raw material inventory control at Neo Prima Bandung.

Keywords: Inventory Control, Economic Order Quantity (EOQ), Inventory Cost, Raw Materials, Neo Prima Bandung