

ABSTRACT

PT XYZ is a fabric company specializing in interior design such as curtains and sofas made of polyester. PT XYZ serves various kinds of customers such as hotels, curtain shops, housing, and households so that the types of interior fabrics sold are quite large, namely 1450 types of fabrics and the quantity of inventory is quite large. Fabric supplies are used to meet the demand for interior fabrics. However, the demand for fabric fluctuates and follows the existing trend so that the order quantity is not optimal. PT XYZ's problem is overstock. This causes the cost of fabric inventory to be high. The company has a budget cost limit that must be spent on inventory costs per year and, the company's inventory costs are still not in accordance with its budget target. Based on these problems, the company needs an inventory policy so that the costs incurred can adjust to the existing budget. This final project research uses continuous review (s,S) and periodic review (R,s,S) methods as a comparison with the most optimal results.

The initial stage for designing the proposed inventory policy is to identify problems in the fabric inventory at PT XYZ. The next step is to collect data, namely fabric demand data, lead time data, ordering costs, storage costs, and costs of existing shortages. The next step is to classify fabrics using ABC analysis and from the results of ABC analysis, then only category A is used as the data for this study. The next step is to calculate the inventory policy using a continuous review (s,S) and periodic review (R,s,S) method. The calculation of this inventory policy will result in the order lot size, maximum inventory level, reorder point, safety stock. The next step is to calculate the total inventory cost according to the method used and determine the minimum total inventory cost with the most optimal inventory policy between the two methods used.

After comparing the methods, the determination of the method that is suitable for use with PT XYZ's category A fabric inventory problem is the proposed inventory policy with the continuous review method (s,S) with a decrease in total inventory costs of 82.41% and the resulting inventory cost is Rp461.955.319.

Keywords: Inventory Policy, Interior Fabric, Overstock, Continuous Review (s,S), Periodic Review (R,s,S)