ABSTRACT

PT XYZ is a company that produces yarn, carpets, prayer mats and mattress fabrics located in Majalaya, Bandung Regency. The company has a Make To Stock (MTS) and Make To Order (MTO) production system. At PT XYZ, there is a warehouse for storing finished products in the form of carpets. The four main products stored in the warehouse are SPL, SPLD, SPLL, and SPM. After making direct observations, it was found that the problems faced by PT XYZ were found. Based on data on PT XYZ's inventory for the 2021-2021 period and demand data for SPL, SPLD, SPLL and SPM products, there is a very large number of product stocks in storage from 2020 resulting in a buildup of products in warehouses. In addition, the amount of stock kept exceeds the amount of customer demand.

In calculating the percentage of absorption of funds, it was found that the SPLD product had the highest absorption of funds, which was 50%, followed by SPL products at 19%, SPLL at 17% and SPM absorbed the least funds with a percentage of 13%. Based on the distribution test that has been carried out, it is found that the SST product has an exponential distribution so that the calculations carried out will use a monte carlo simulation. Then for SPLD products inventory policy calculations will be carried out immediately using the continuous review method. From the results of the paired t-test, the calculated t-value is 0.673, which is smaller than the t-table value of 2.201. So that H0 is accepted with the conclusion that the data can represent actual conditions. In designing the inventory policy, it was found that the total cost of inventory savings was 10,64% from the existing condition of Rp. 292,571,671,920 to Rp. 261,442,002,932 so that it decreased by Rp. 31,129,668,358. Then the third validation target is to provide an optimal level of service. In designing the inventory policy for SPLD products, the expected service level is 99,78% and SPL products are 99,85%. The design results meet the three predetermined validation targets. then you can make policies for other products so that optimization can be maximized

Keywords— analisis abc, kebijakan persediaan, *continuous review*