

ABSTRACT

CV.XYZ is a slaughtering house company that produce broiler chicken into several product such as carcass, parting chicken (thigh, drum, breast, and wing) and frozen chicken. In CV.XYZ many sales frozen product that make company losses.

This is because of inaccurate demand forecast and the company does not yet have proper inventory policy and decision making in determining the number of poultry quantity order.

To solve this problem, in this study used single moving average and single exponential smoothing forecasting method because the data plot of demand is horizontal and have the smallest forecasting error. Forecasting data become an input for mathematical optimization model which has objective function maximation profit.

Based on calculation, the optimum number of poultry quantity order for the first week until forth week are 57263, 84910, 101753 and 100557 kg. So the profit gained from calculation by Rp.7.460.248.743 or more 1% than existing condition. For frozen cost gained Rp.98.796.547 less 23% than existing condition and for storage cost gained Rp.70.643.590 less 13% than existing condition.

Keywords: Inventory, frozen product, Inventory Policy, forecasting, single moving average, single exponential smoothing, inventory mathematical model for perishable product.