OPTIMALISASI JUMLAH PEMESANAN *SLAP* DENGAN MENGGUNAKAN METODE EOQ DAN POQ PADA PT PRASIDHA ANEKA NIAGA TBK

ABSTRACT

Planning for purchasing raw materials must be managed properly so that it can provide benefits for the company PT Prasidha Aneka Niaga is one factory that purchases raw materials every day so the possibility of the cost of the message produced will be large. Moving in the production of crumb rubber will certainly be very important if you have a good raw material inventory plan (slap). Viewed from the form of the data pattern, the purchase of slap has a horizontal pattern so that to predict the next period is very suitable using the moving average and single exponential smoothing methods. The results obtained are that the least error value is the moving average method m = 4 with MAD value of 42134.75 and MAPE of 0.23. After doing the forecasting, optimal raw material planning is calculated with the Material Requirement Planning (MRP) with two methods, namely the Economic Order Quantity (EOQ) and the Period Order Quantity (POQ). Calculations are carried out with the help of POM and Excel software. Continued to calculate the total cost of each method and compare it with the company's system to find out the most minimum total costs. The minimum total cost is obtained by using the Period Order Quantity (POQ) method with a total cost of Rp. 706,340,610,379 and can save costs of Rp. 2,342,021.

Keywords: ***Moving Average, Single Exponensial Smoothing, EOQ, POQ***