

ABSTRAK

PT. Gramedia merupakan perusahaan yang bergerak di bidang percetakan koran, majalah, buku dan komik. Permasalahan yang terjadi di gudang PT. Gramedia adalah sering terjadi kekurangan dan kelebihan bahan baku material kertas bookpaper. Hal ini terjadi karena pemesanan kertas bookpaper kepada *supplier* hanya berdasarkan *request* material dari *user* tanpa melihat status persediaan di dalam gudang. Metode Penelitian perencanaan kebutuhan bahan baku material kertas bookpaper diawali dengan peramalan untuk kebutuhan di tahun yang akan datang. Peramalan yang digunakan yakni metode Peramalan Rata-Rata Bergerak (*Moving Average*) (2 bulan, 3 bulan, 4 bulan). Peramalan *Trend Linier*. Peramalan Penghalusan Eksponensial (*Exponential Smoothing*) ($\alpha 0,7$, $\alpha 0,8$ dan $\alpha 0,9$). Dari hasil perhitungan peramalan yang telah diuji validasi menggunakan *tracking signal*. *Trend linier* memiliki nilai *error* terkecil dan berada dalam batas kendali. Dengan mengetahui data persediaan dan data komponen biaya material kertas bookpaper maka dibandingkan beberapa metode yakni *Economic Order Quantity*, *Periode Order Quantity*, *Least Unit Cost*, dan *Least Total Cost*. Dari perbandingan didapat hasil metode *Least Total Cost* memiliki total biaya yang terkecil sebesar Rp 370,890 Dimana pemesanan dilakukan pada setiap periode atau tidak berlaku penggabungan periode.

Kata Kunci : Peramalan, MRP, *Lot Sizing*

UNIVERSITAS
MERCU BUANA

ABSTRACT

PT. Gramedia is a company engaged in printing newspapers, magazines, books and comics. Problems that occur in the warehouse of PT. Gramedia is a frequent occurrence of shortages and excess material of paper material bookpaper. This happens because ordering paper bookpaper to suppliers is only based on material requests from the user without looking at the inventory status in the warehouse. Research Methods Planning the needs of raw materials for paper material begins with forecasting for needs in the coming year. Forecasting used is the Moving Average forecasting method (2 months, 3 months, 4 months). Linear Trend Forecasting. Exponential Smoothing ($\alpha 0.7$, $\alpha 0.8$ and $\alpha 0.9$) Forecasting. From the results of forecasting calculations that have been tested validation using tracking signal. Linear trends have the smallest error value and are within the control limit. By knowing inventory data and the cost component data of paper bookpaper material, then compared several methods namely Economic Order Quantity, Order Quantity Period, Least Unit Cost, and Least Total Cost. From the comparison, the results of the Least Total Cost method have the smallest total cost of Rp. 370,890. Where the order is made in each period or does not apply the merger period.

Keywords: Forecasting, MRP, Lot Sizing



UNIVERSITAS
MERCU BUANA