ABSTRAK

PT. Gramedia merupakan perusahaan yang bergerak di bidang percetakan koran, majalah, buku dan komik. PT. Gramedia merupakan percetakan koran Kompas, warta kota, berita kota. Permasalahan yang terjadi di gudang adalah penumpukan bahan baku tinta untuk kebutuhan produksi. Banyaknya penumpukan bahan baku tinta di gudang, hal ini dikarenakan pemesanan tinta kepada supplier masih mengikuti intuisi (perkiraan). Metodologi penelitian perencanaan kebutuhan bahan baku tinta diawali dengan peramalan untuk kebutuhan di tahun yang akan datang. Peramalan yang digunakan yakni metode Single Exponential Smoothing (α = 0,1; 0,3; 0,5; 0,7; 0,9). Double exponential smoothing (α = 0,1; 0,3; 0,5; 0,7; 0,9). Melalui perbandingan nilai error didapat nilai bias terkecil dari peramalan yakni Double Exponential Smooting 0,9. Dengan mengetahui data persediaan bahan baku tinta, komponen-komponen biaya, dan Leadtime maka dibandingkan beberapa metode Lotting. Dengan membandingkan metode Lotting yakni Lot For Lot, Economic Order Quantity, Periodic Order Quantity, Least Unit Cost. Dari perbandingan didapat hasil Lot For Lot dengan biaya yang paling minimum sebesar Rp 1.816.218.888. Karena tinta Sakata memiliki satuan Pail (PL) yakni 1 PL sama dengan 20 kg maka metode Lot For Lot tidak sesuai dalam perencanaan bahan baku tinta, dimana pemesanan di dalam metode Lot For Lot dilakukan pada setiap periode dan harus dalam kelipatan satuan PL, jadi pemesanan tidak bisa dalam pecahan karena tidak ada pembelian tinta dalam bentuk eceran. Perencanaan bahan baku tinta bisa menggunakan hasil perhitungan minimum kedua yaitu metode Economic Order Quantity, dimana pemesanan tinta dilakukan sembilan kali dalam satu tahun, maka masalah yang ada dalam metode Lot For Lot dapat diminimalkan.

Kata Kunci: Peramalan, MRP, Lot Sizing

ABSTRACT

PT. Gramedia is a company which is engaged in printing newspapers, magazines, books and comics. PT. Gramedia is printing the newspaper Kompas, city news, city news. The problems that occur in the warehouse is a buildup of ink raw materials for production. A large buildup of ink raw materials in the warehouse, this is because the ink reserving to the supplier still follow intuition (estimate). The research methodology ink raw material requirements planning begins with forecasting for needs in the years to come. Ie forecasting method used Single Exponential Smoothing (α = 0.1, 0.3, 0.5, 0.7, 0.9). Double exponential smoothing (α = 0.1, 0.3, 0.5, 0.7, 0.9). Through the comparison of the value of the smallest refraction error values obtained from the Double Exponential forecasting Smooting 0.9. By knowing the inventory data ink raw materials, cost of components, and then compared several methods leadtime Lotting. By comparing the method Lotting Lot For Lot, Economic Order Quantity, Periodic Order Quantity, Least Unit Cost. From the comparison of the results obtained with the Lot Lot For most minimum fee of Rp 1,816,218,888. Because the ink Sakata has units Pail (PL) that is 1 PL is equal to 20 kg, the method is not suitable Lot Lot For planning ink raw materials, in the methods in which the reservation Lot For Lot performed at each period and must be in multiples of units of OT, so booking can not in fractions because there is no ink in the form of retail purchase. Planning ink raw materials can use the results of both the minimum calculation method Economic Order Quantity, where the ordering ink done nine times in one year, then the problem is in the method of Lot For Lot can be minimized.

Keywords: Forecasting, MRP, Lot Sizing