

ABSTRAK

Proses perencanaan produksi pada PT Cipta Oggi Furindo telah menggunakan *enterprise resources planning* (ERP). Dalam praktiknya sebagian modul ERP pada PT Cipta Oggi Furindo tidak dapat berjalan secara otomatis, seperti pada modul *material requirement planning*, *demand forecast*, *man power planning*, dan *work order* yang dikerjakan secara manual dengan excel kemudian hasilnya di input dalam ERP. Sehingga, meskipun sudah menggunakan ERP terdapat resiko kesalahan perencanaan produksi yang disebabkan oleh ketidaktepatan pemilihan metode proses perencanaan produksi. Pada PT Cipta Oggi Furindo ketidaktepatan perencanaan produksi mengakibatkan *overstock*. Berdasarkan permasalahan tersebut, maka dilakukan peramalan dan perencanaan produksi pada PT Cipta Oggi Furindo dengan metode *material requirement planning* yang diawali dengan *forecasting* menggunakan metode *moving average*, *single exponential smoothing*, dan *naive* serta metode *lotting lot for lot*, *economic order quantity*, dan *periode order quantity* untuk mengevaluasi metode yang sudah ada pada perusahaan guna memperkirakan jumlah produk yang akan diproduksi dengan biaya yang minimum. Hasil penelitian menunjukkan metode peramalan dengan galat paling kecil adalah *moving average* 4 bulan sedangkan metode *lotting* yang digunakan adalah *lot for lot* dengan total biaya sebesar Rp.15.641.060.000.. dari rekapitulasi *planned order release* yang merupakan hasil dari proses MRP, diharapkan perusahaan mampu mengoptimalkan penggunaan stok *existing* agar tidak terjadi kelebihan stok pada persediaan *finish product*.

Kata kunci: *enterprise resources planning*, *existing stock*, *forecast*, *lotting*, *material requirement planning*, *overstock*

ABSTRACT

The production planning process at PT Cipta Oggi Furindo has used enterprise resources planning (ERP). In practice, some ERP modules at PT Cipta Oggi Furindo cannot run automatically, such as the material requirement planning, demand forecast, manpower planning, and work order modules which are done manually with Excel and then the results are inputted into ERP. So, even though ERP is used, there is a risk of production planning errors caused by inaccuracy in selecting the production planning process method. At PT Cipta Oggi Furindo, inaccuracy in production planning resulted in overstock. Based on these problems, forecasting and production planning were carried out at PT Cipta Oggi Furindo using the material requirement planning method which began with forecasting using moving average method, single exponential smoothing, and naive as well as the lotting lot for lot method, economic order quantity, and order quantity period to evaluate the existing methods in the company to estimate the number of products to be produced at minimum cost. The results of the study showed that the forecasting method with the least error was the 4-month moving average while the lotting method used was lot for lot with a cost of Rp.15.641.060.000.. From the recapitulation of the planned order release which is the result of the MRP process, it is expected that the company will be able to optimize the use of existing stock so that there is no excess stock in the finished product inventory.

Keyword: enterprise resources planning, existing stock, forecast, lotting, material requirement planning, overstock