ABSTRAK

Di era globalisasi seperti ini pertumbuhan permintaan konsumen terhadap produk atau jasa, harga, ketepatan pengiriman serta ketersediaan produk di pasaran semakin tinggi. Penelitian ini bertujuan untuk menganalisis persediaan dengan menggunakan metode *Economic Order Quantity* dan melakukan perbaikan pengelolaan persediaan dengan analisis *Collaborative Planning Forecasting and Replanishment* serta analisa *Reverse Logistic* terhadap proses pengolahan barang sortir (BS) dan barang menjelang *expired* (BMED). Penelitian ini menggunakan data kuantitatif yang diperoleh dari data salah satu perusahaan retail di Jakarta dari bulan November 2017 – Oktober 2020. Penggunaaan metode *Economic Order Quantity* mempengaruhi *total Inventory cost* perusahaan sebanyak 32% jika dibandingkan dengan *total Inventory cost* perusahaan. model *collaborative planning forecasting and replenishment* dalam perencanaan bisnis antara distributor dan *Retailer*, yang dibagi menjadi 3 tahap yaitu fase perencanaan, fase pengadaan, fase *replanishment* dalam model ini *Retailer* dilibatkan dalam pelaksanaan kegiatan yang dilakukan perusahaan kaitannya dengan pengadaan barang setiap bulannya dapat mewujudkan manajemen rantai pasokan produk yang efektif dan efisien. pendekatan *Reverse Logistic* ini juga sebanding dengan analisa pengelolaan persediaan dan permintaan dengan menggunakan metode *forecasting moving average* dan *Economic Order Quantity* mengalami perbaikan sebanyak Rp. 3.086.721.080 (34%) total biaya pemusnahan setelah dilakukan analisa.

Kata Kunci: *Economic Order Quanity, Collaborative Planning Forecasting and Replanishment, Reverse Logistic, Total Inventory Cost*

ABSTRACT

In this era of globalization, the growth of consumer demand for products or services, prices, delivery accuracy and product availability on the market is getting higher. This study aims to analyze inventory using the Economic Order Quantity method and improve inventory management with Collaborative Planning Forecasting and Replanishment analysis and Reverse Logistics analysis of the processing of sorted goods (BS) and goods before expiration (BMED). This study uses quantitative data obtained from data from a retail company in Jakarta from November 2017 - October 2020. The use of the Economic Order Quantity method affects the company's total inventory cost by 32% when compared to the company's total inventory cost. collaborative planning forecasting and replenishment model in business planning between distributors and retailers, which is divided into 3 stages, namely the planning phase, procurement phase, replanishment phase. effective and efficient product. This Reverse Logistics approach is also comparable to the analysis of supply and demand management using the moving average forecasting method and the Economic Order Quantity has improved as much as Rp. 3.086.721.080 (34%) total cost of destruction after analysis.

Keywords: *Economic Order Quanity, Collaborative Planning Forecasting and Replanishment, Reverse Logistic, Total Inventory Cost*