

## **ABSTRACT**

*CV.Octagon convection company produces jackets and sweaters as the main product. The manufacture of both products often experience delays ranging from 5-7 days, due to the existing raw materials in warehouse out of stock or not available, so need to order in advance, to distributors who are in the Cigondewah area. besides the factors that cause the delay is the rising prices of raw materials in the market the company need to look another distributor so the price appropriate to adjust the price with the consumer so that consumers do not feel harmed, to avoid these things required making production planning and control of raw materials with low cost and in accordance with the ability of the company.*

*In the production planning are needed last year's demand data which then aggregated both, then further predicted to be known next year's demand using Single Moving Average method, Single Exponential Smoothing and Liniear Regression. These three methods aim to get the smallest error or error in forecasting the demand for next year, so that it can be adjusted with the ability of the company. The results of the production plan in the disaggregation to separate the two products, then converted from one product into product components, because the forecasting result is one product while the required in inventory planning is the constituent raw material. After the conversion is obtained raw material needs for next year. The next step is calculated EOI (Economic Order Interval) multi item. From this calculation, get the inventory amount, the time of the order interval and the total cost, if the total cost is not in accordance with the ability of the company then re-calculated by the method of limited inventory of working capital or investment and obtained new intervals and the amount of new inventory.*

*After the calculation is known to make the production next year with the number of jacket production as much as 14498 pieces and sweater as much as 28795 pieces cost Rp. 527,306,000 (five hundred twenty million and three hundred and six thousand) of these costs consist of salary expenses, overtime, employee expenses and storage costs. To do the production next year required the addition of labor as many as 5 people, who initially 12 to 17 people. Control of raw materials is done by ordering raw materials every 3 working days where previously as much as 7 working days this changed after doing calculations with limited methods of working capital (invetasi). The order is made to the distributor in Cigondewah and the amount ordered is adjusted to the needs of each material.*

*Keywords: CV.Octagon, Production Planning, Inventory, EOI multi item, Limited working capital inventory.*