ABSTRACT

Inventory management is one of important aspect to support success of supply chain management. Inventory need to arrange in order that there is no problem like excess stock or less stock. Excess stock will improve inventory cost and result damaged risk. If there is no stock, the company will be lost of customers and also production process can be obstacle. Regularity inventory control able to improve service level to customers and improve cost efficiency.

Vendor managed inventory (VMI) is one of inventory management system that prime cooperation between supplier and buyer. In this system, supplier has to responsible about inventory buyer, so that inventory buyer is always controled by supplier. The other way, buyer have to give initial data which needed by supplier. This initial data can be formed production capacity or customers demand buyer. But, many company still doubt to implement this system because there are pro and contra about profit that will be received by supplier and buyer.

In this research will be evaluated about profit that will be resulted by this system. How much this system will be change the profit? And then new price will be determined depend on its profit. Using ‘economic order quantity (EOQ)’ system to compare before VMI implemented. From data processing, the result showed supplier’s decrease profit about 3.19 % and 2.28 %. But buyer got increased profit about 0.11 % and 0.6 % each for buyer 1 and buyer 2. Decreased profit in supplier is used as a basic to determine new price under VMI system so that resulted new price for 8 times send with optimal capacity is Rp. 2136.34 million.

Key Word: Vendor Managed Inventory (VMI), Supplier, Buyer, Economic Order Quantity (EOQ), Demand, Production capacity, Price, Profit.