ABSTRACT

In this era of increasingly tight business competition that every company needs to further improve competitiveness. Some important elements in enhancing the competitiveness of companies is to improve the quality of finished products, reduce production costs and other support costs such as inventory cost.

Inventory is one of the main supporters of the production process. The lack of inventory control can cause cessation of the production process. On the other hand, the more inventory resulted in higher inventory costs. Although the inventory is always there in an industry handling less serious, but often are not aware that the company has spent a lot of cost for inventory control.

As a producer of resins, PT. XYZ has hundreds of types of products and raw materials. This wide variety of raw materials and finished goods are making arrangements to be very important.

In this research analysis on the efficiency of inventory at PT. XYZ currently using EOQ, EOQ Backorder, and EPQ. From these calculations and then compare the cost of inventory, inventory turnover rate, and throughput time with the actual conditions in 2009 at PT. XYZ.

This study uses quantitative and qualitative methods. Quantitative methods used to identify data associated with inventory positions in companies ranging from raw materials warehouse to warehouse finished goods. The data is taken from the secondary data extracted from the ERP.

Qualitative methods are used to identify data that does not exist in the ERP and the background of the emergence of the numbers in the ERP. The data were collected using unstructured interviews of employees who are directly involved with inventory management, ie managers Production Planning and Inventory Control (PPIC) and the Accounting manager.

The survey results revealed that the cost of raw material inventories more efficient 66.09% with EOQ method and 51.26 with EOQ backorder method. For finished goods, inventory costs become more efficient 63.2%, by EOQ, 47.0% with EOQ backorder, and with EPQ more efficient 47.5%.

Inventory turnover rate for raw materials faster 5:38 and 2.69 times. faster 4.84, 2.42 and 2.31 times for finished goods. Throughput time becomes faster 6.15 and 3.08 times for Raw materials, while for finished goods faster *6.58, 3.29, and 3.02* consecutive with EOQ, EOQ backorder and EPQ methods.

Keywords: *Supply chain management, EOQ, EPQ, EOQ backorder, inventory turnover rate, throughput time, inventory*