

## ABSTRACT

A pharmaceutical companies, PT “X”, that producing a wide variety of medicines, have stock accumulation and backorder problems. This is caused by the implementing of current production planning. This research aims to improve the current production planning by using a framework of hierarchical production planning consisting of three phases: identification and partition products of MTS and MTO strategic phase; production planning for MTS products phase, including *forecasting*, master production scheduling (MPS) with aggregation and disaggregation planning and MPS validation with rough-cut capacity planning; and production planning for MTO products phase. The computational result shows that, there are some reducing for the total production cost of 9%, for the level of safety stock of 49% and for the order fulfillment lead time of 53% compare with the current system. This is finding indicate that the proposal hierarchical can improve the company’s performances shown by the cost saving and customer satisfaction.

Keyword: Hirarchical Production Planning (HPP), Combined MTS-MTO environments, Aggregat Planning, Disagreggat Planning.