

## ABSTRACT

*PT. IPMS is a company which runs in manufacturing with some production type, one of them is production of plastic based products. The production type of the plastic unit of PT. IPMS is “make to order” based. The type of production that are “make-to order” based is not produce the product massively, but only produce according to consumer demand and specification only.*

*For “make to order” based companies, determining the completion time of production is a very important part in the planning stages of production. PT. IPMS has not had a good production planning up until recently. These problems can be seen in the year 2010 where three orders of thirty two orders received by PT. IPMS were late in the completion of orders.*

*In addition, the process of calculating their cost of production is still done based on intuition. The impact is the selling price of products offered by PT. IPMS is often not competitive so that PT.IPMS couldn't win the tender for several times. In 2011, PT. IPMS participated in eight tenders but only succeeded to get three tenders out of eight.*

*The purpose of this research is to design and build a decision support system in accordance with the conditions of the company to help the company determining the completion time of production and calculate the production cost that is integrated with production documentation system.*

*By using this proposed system, the company can determine the time of orders completion and calculate the cost of production quickly and accurately so as to improve the existing system.*

*Keyword : decision support system, order completion time, cost of production, make to order*