## **ABSTRACT**

PT Putera Mulya Terang Indah is a manufacturing company that is responsible forthe processing of textile yarn into fabric with different types of yarn, raw material lot (thickness of fabric), the amount of raw materials as the basis of planning to produce a fabric based on consumer demand. But the current conditions, the process of production is still done manually, namely in the form of via telephone, paper and mc.excel, in other words the transfer of data and information that do not yet fully integrated with each other between the related section or in the section of the productionitself. This led to some problems arising in the implementation of production planning including the buildup of document job orders, planning schedules not planned and missing data production needs from the PPC does not match with the data demand of production on the part of production. The existence of these problems resulted in a production loss of data and the time required to meet the production targets cannot be met on schedule that has been planned.

Thus do the implementation of an information technology ERP i.e. Odoo can help problems occurred in a part of the production of PT Putera Mulya Terang Indah. The methods used in this research is a method of Iterative Waterfall, where this method for the design of a software system with a relatively short time and a high level of success.

The results of this research are systems manufacturing based Odoo which has beentailored to the needs of the production of PT Putera Mulya Terang Indah, with this can help resolve problems at the production and facilitate the implementation of theactivities of production.

Keyword: ERP, Odoo, module manufacturing, Iterative waterfall