DESIGN CUSTOMIZATION OF MANUFACTURING INFORMATION SYSTEM ON IMPLEMENTATION OF POWERMAX
(CASE STUDY PT. ALSTOM POWER ENERGY SYSTEM INDONESIA)

By: Pratama Wicaksana Budiarta
Student Identity Number: 9107201306
Supervisor: Prof. Drs. Nur Iriawan, M.kom, PhD.

ABSTRACT

Manufacturing globalization encourage PT. ALSTOM Power ESI to manage information precisely, until required information belonging to each side who having an interest is satiable with fast and appropriate. The Development of information technology present straight/direct blossom out can automate the process information organizer start from retrieve information, store, and update every moment so an employee can find up to date information and execute analysis simpler. In manufacturing information system, not just covered production process, but all implicate process start from material selection, quality/product type selection, scheduling to trace progress operation/activity on a product.

PowerMax vision is to be a global business driven program to harmonize, simplify and implementation process on a global information system. This new system will increase information availability, consistency, transparency and reliability that allow us all to work together more effectively. It is expected for PowerMax to become a better information system tool for the company. Provided that we do the implementation correctly, it will allow better sharing of information and enables us to perform activities more easily, safely and efficiently. For that purpose it is need to develop manufacturing information system design at PT. ALSTOM Power ESI which can be implemented in PowerMax system.

Design costumisation analysis of manufacturing information system in this research is using structural analysis start from creating data flow diagram (DFD) then entity relationship diagram (ERD) and user interface sketch. The result on this research is an integrated information flow on production planning module especially on MRP, capacity planning and production scheduling which previously proceed in pararely and using different kind of software. Beside, the result of this research also able to eliminating utilization of qualitative forecasting method which using manual adjustment for the schedule estimating process and replace with forecasting method using line time which utilize history time data as schedule estimating.

Key Words: PowerMax, Manufacturing Information System, Data Flow Diagram, Entity Relationship Diagram dan User Interface.