



## **A COMPARISON STUDY BETWEEN ORACLE R12 AND MANUFACTURING PLANNING AND CONTROL THEORY FOR MRP IMPLEMENTATION**

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### **ABSTRACT**

*ERP is the integrating all businesses function of financial and manufacturing module which has Material Requirement Planning is the backbone to support module of manufacturing in ERP which runs on single database in a client-server environment thus can manage centralize data in order to record, monitor and report for every activity in organization at single point for real-time access so ERP is not concern only manufacturing anymore but embrace all business function. One of the most important modules in ERP system is production planning which apply the manufacturing planning and control theories such as master production schedule (MPS) and material requirement planning (MRP). However, implementing MRP/MRP II in ERP system often cited as failure in many places due to many reason such as different workflow in actual environment and ERP environment, inflexibility of ERP software in accommodating frequently changes demand from customer. Based on previous research, it identified one of the major problems in failing production planning module in ERP system as the workflow difference between theory and ERP system (Open source ERP). The conclusion was that the information presented in ERP system is totally different than general table format of MPS & MRP related theories. The information presented in ERP system lack of critical information that help production planner to make a quick and better decision such as Is overtime needed to complete the job on time? or Should produce certain product to stock for future use etc. User can find out the information but requires access many screens with note taking.*

*This research extended the previous research by conducting similar research on leading ERP package, Oracle R12 with MPS & MRP related theories. Unlike, open source ERP system, the results show that in Oracle R12, there are information table for production planner to use like MRP table. Even though Oracle R12 tables are differences (more information) than MRP/MPS table in theories, at least production planner can immediately make a decision. However, the problems still be found in Training material on MRP & MPS in Oracle R12. The training materials were not followed the theoretical workflow. As a result, the user has lack of a depth understanding in information presented in Oracle R12 leading to slower decision making process than it should be.*