

ABSTRACT

Angel Konveksi is one of the companies engaged in manufacturing companies where the resulting product is a T-shirt. The Company has not made a computerized inventory record and has not complied with the financial accounting standard especially when recording material orders. This company often occurs shortage or unavailability of raw materials at the time required will certainly result in cessation of production process, which can result in not fulfilled customer orders. To solve the above problem, then make a web-based application using Material Requirements Planning (MRP) with the level of ordering erratic / dynamic order. Material Requirements Planning For Procurement Dynamic Order is a technique / method for the procurement of raw materials with the level of ordering of products that are not erratic. The output of the MRP is information that can be used to perform the planning and control of raw materials. The existence of the reservation plan, then the material needs at the optimum level will be known. In the preparation of MRP there are several components, namely production scheduling (MPS), preparation of material list (BOM), inventory on hand (IOH) and lead time (lead time). This application has the functionality to calculate the level of order needs, calculate raw material requirements, determine the procurement of materials and find out the number of reservations, know the description of performance and accounting records in the form of journals and ledgers. Software development uses an object-oriented model consisting of Rich Picture, BPMN, Unified Modeling Language (UML), Entity Relationship Diagram (ERD), and interface description using Mockup Balsamiq. Implementation of this application is made based on the web using the programming language Code Igniter (CI) and MySQL database. Testing is done by Blackbox Testing method of application functionality and the result of application testing is in accordance with functionality in the form.

Keywords: Material Requirement Planning (MRP), Master Production Schedule (MPS), Rich Picture, Unified Modelling Language (UML), Code Igniter.