

**DESIGN OF MATERIAL FULFILLMENT SYSTEM
IN THE MINIBUS PRODUCTION PROCESS AT THE
WORKSTATION OF THE BODY SHOP EQUIPMENT
DEPARTMENT OF PT X**

John Nicholas Christian Gunawan, Yuswono Hadi, Novenda Kartika

Putrianto

Universitas Ma Chung

Abstracts

The equipment department is the object of this research. The equipment department has the task of installing the interior and exterior of one of them is a minibus with type B. In this equipment department, there are problems that occur, including a delay of approximately 12 hours in the production process, a production process that is delayed from the target for 3-4 days to 5-6 days, there is no SOP in the material fulfillment process, and components ordered for production arrive not as needed. With the problems that occur, it is necessary to design a material fulfillment system. The problems that occur will be resolved with the help of analysis from the System Development Life Cycle (SDLC). The results of the SDLC analysis show that to solve the problems that occur, the grouping of components into kitting materials will be carried out, making system programs, improving system flow, and making SOP. The results obtained have been approved and implemented in the existing production process in the PT.X equipment department. Based on the results of the implementation that has been carried out, it is obtained that the components that have been grouped produce a total of 35 kitting material packages, the system program that has been made can be operated in less than 10 minutes, the new system flow is able to minimize delays in component delivery to 1-2 working hours, the production carried out is on target, there are no component delivery errors, and the SOP has been implemented and can help all parties involved in the production process. This must always be considered so as not to interfere with the course of production and can match the targets of the company.

Keywords: Kitting Material, Equipment Department, System Development Life Cycle