ABSTRACT

PT. XYZ is a manufacturing company for one of famous car brands in Indonesia. There are 5 stages of production, Development Stage, Preparation Stage, Trial Stage, Pilot Production, and Mass Production. Pilot Production is a stage of manufacturing sample cars as a trial for actual production on the production line. Pilot Production aims to discover defects or mismatch (non-conformance) part during manufacturing sample cars. Then the problem is documented in a control sheet (monren) and identified as a evaluation for the next stage. In one project there are more than one problem that were found in Pilot Production. In result, there are more than one control sheet. So far, coordinations which were done by the involved parties were still dependent on physical control sheet (hardcopy) and manual application based on Microsoft Office. The distance between involved departments were far enough, so it took a long time during the process of moving documents. Hence, there should be a business process improvement to solve the issue.

To get the overall view and weaknesses of existing business processes, then the mapping of business processes supported by collection of data needed. Then, problems and needs are identified to design proposed process scenario. Proposed business process has fewer process which is 17 processes with 2516 minutes of cycle time, whereas the existing business process has 25 processes with 3047,5 minutes of cycle time. Proposed business process generates a web-based Problem and Counter-Measure Management System (PCMS) information system. PCMS information system was designed with the goal of fully supporting proposed business process in this research.

PCMS information system is designed to be able to document any problems that emerge at pilot production stage. By using PCMS, the physical document can be replaced with digital documents, so that the transfer of documents can be done in real time. PCMS information system can also automatically provide the final report based on data stored in the system. Currently PT. XYZ already has an extranet network, so that the implementation of PCMS information system is feasible.

Keywords : Monren, Pilot Production, Problem Identification, Information System