ABSTRACT

Maintenance Department at Indonesian Aerospace Inc. is one of department that have task to maintain machines. In the existing condition, Maintenance Department still have information system that help the operational management, as known as CMMS. But using of CMMS is still not optimum and has limitation in managing knowledge. The purpose of this research is design Knowledge Management System Maintenance Department of Indonesian Aerospace Inc.

Designing the KMS focus on service and repair shop, engineering and general. The design is using waterfall method and designed to be web-based system by PHP CodeIgniter *framework. The stages in waterfall method are requirements, analysis, design, coding and testing. The choosing of framework can make development process will be easier. Design of the KMS is considered the aspect of KM Triad, that is the success factor of KMS implementation.*

The result of KMS has functionality to complete KM cycle, which are creation, storage, retrieval and application . KMS of Maintenance Department overall have some modules. In this research focus on designing service and repair shop module, engineering module and general module. The testing result based on functionality testing and user acceptance test showed that the function has run well and complete the design, reliability, responsiveness and trust apects from user side.

KMS of Maintenance Department has designed based on KM cycle. The system should be developed, as future research. Completing features as Maintenance Department needed and integration with others department's systems.

Keywords: *Knowledge Management System, KM Cycle, Waterfall*