

ABSTRACT

Telkom Institute of Technology (IT Telkom) has been certified ISO 9001:2008 on 2010 about Quality Management System (QMS) which required an organization to set, document, implement, and maintain quality management system and continuously improving effectiveness based on international requirement standard. At unit support in students' affair department still has difficulties to process student data related to competitions into information that will be used as knowledge for the institution in defining and making decisions. This division also finds it hard to find out the information of students' experiences that either participate or win the competitions. It is important to improve students' competency and to reach students' affair department's quality objectives. To support that, a system that is able to manage data and knowledge related to competitions in this division needed which is named as Students Affair Knowledge Management System.

This system is developed using iterative and incremental method. In iterative and incremental method, Students Affair KMS will pass through business modeling phase, requirement, analysis and design, implementation, and testing. This application is using Java Enterprise Edition technology which is able to support multitier architecture. Multitier architecture can support server load distribution process in order to make server less works if there were lots of requests from client. In addition developing KMS Student Affair also use the KM Life Cycle useful to facilitate data storage and give the information that will be processed to produce knowledge.

The result of this research is a Knowledge Management System which has functionalities to support management related to student's activity transcript and competitions with some features such as student's activity transcript management, PKM Proposal Management, knowledge sharing management, comparison chart, and discussion forum to support the transformation of information into knowledge. One of its features is to manage student's activity transcript data. Input, data modifications, and archive storage of students' competitions in order to support knowledge transfer process in the form of knowledge of students who has ever participated and won competitions for the other students to help them to increase their knowledge about the competitions events and for student's affair department to increase their knowledge to advise the students better.

Keywords: KM Life Cycle, KMS, Knowledge Sharing, Java Enterprise Edition, Multitier, Activity Transcript Management, Competition