

Design and Implementation a Management Information System Extracurricular WebBased (Case Study: SMAN 1 Sampang)

Achmad Hamdan*, I Made Irawan, M. Zainal Arifin

Univertas Negeri Malang

Jl. Semarang No.5, Malang 65145, Indonesia

** E-mail: achmad.hamdan.ft@um.ac.id*

Abstract

This research aims to design and implement a Management Information System Extracurricular Web-Based in SMA Negeri 1 Sampang to be able to further improve the performance of the school in extracurricular management. SMA Negeri 1 Sampang is a leading public school in the town of Sampang. However extracurricular school management system is still not supported by good information technology facilities. And so we need an information system as an efficiency improvement of school performance in extracurricular management. This research using research design development. The this development goal is to develop a extracurricular management information system web-based as a means to improve the performance of the school in order to support the extracurricular management skills to further develop the student maximum and can also support the academic achievement of students. This development using Waterfall model. The conclusion of this research is that the extracurricular management information system is declared to be feasible and valid to be used because the percentage generated is quite high, namely the average usability aspect of 89.54% and the functionality aspect of 99.99%.

Keyword: Information System, Management, Extracurricular

I. Introduction

INFORMATION system is a formal set of procedures which data grouped, processed be information, and distributed to users (Kadir, 2003: 92). Nowadays information technology is developing very rapidly, almost all aspects of the activity using information technology as supporting activities, such as in economic, social culture, education, health, and etc.

The education sector is one that is affected by technological development, but not all systems in education sector use information technology, one of which is in the extracurricular system. Extracurricular activities which is important to note, because it suits the purpose existing national

education in Law No. 20 2003 concerning System National Education that for the development of the potential of students to become a human of faith and be devoted to the almighty God, noble character, healthy, knowledgeable, capable, creative, independent, and become a citizen democratic and responsible. To realize this, then required a good education.

Good education not only done with regular lessons, but also necessary any additional activities that are useful to give skills and also support on school lessons. SMAN 1 Sampang is favorite school in Sampang city. But, according to field observations, systems extracurricular management in this school still not supported with information technology facilities the good one. Should be extracurricular activities can be more get attention because important as one supporting academic achievement of students. Student feels difficult to getting information overall activity extracurricular contained in school because of the lack of information and communication media. Besides students who have problems, extracurricular coaches also have problems that is difficult to evaluate extracurricular activities and reporting the activities.

To solve this problem, then create management information system extracurricular. The definition of management information system is network processing procedure data developed in a system (integrated) with the intention provide information (that is internal and external) to management, as taking decision. This management information system extracurricular is expected to be able to support student skills for more develop to the maximum and achieving efficiency improvement in school performance extracurricular management.

II. Method

The development of Management Information System Extracurricular (SIME) is using waterfall model. There are 6 phases of the waterfall model: 1) Requirements Analysis, which done by observation to school. 2) System and software design, consist of designing Data Flow Diagrams, Entity Relationship Diagrams and System interface design. 3) Implementation. 4) Integration and testing system, such using blackbox-testing. 5) Deployment of system. 6) Operation and Maintenance. Waterfall model offer making software real more (Jogiyanto, 2005:58).

SIME products are tested in several stages: 1) Tested by professional people (web/software engineer), 2) Limited testing which is conducted by administrator, extracurricular coaches, and students. Types of data in this development using quantitative data and qualitative. Data collection was carried out using a questionnaire. The questionnaire used was closed questionnaire that is the question that expects a short answer by choosing one of the alternative answers to each question is available (Sugiyono, 2009:143). Questionnaire answers use Likert numbers with four choice categories.

Data analysis is used to give meaning the data that has been obtained from respondents. Quantitative data obtained from the results testing validity and reliability questionnaire instrument with using the product moment formula (Pearson correlation). Usability questionnaire results data and functionality from professional people tested and System user test questionnaire will also be analyzed using descriptive analysis techniques that are assessment qualification criteria adapted from Arikunto (2006).

III. Result and Discuccion

SIME software is an information system web based that handles management in the process of activities accessible extracurricular through the school intranet network. The concept of the SIME interface design it uses a blend of colors white, light blue and sky blue. The concept of the SIME interface design it uses a blend of colors white, light blue and sky blue. These colors were chosen because the resulting blend will be gives the impression of a color.

User login page aims to divide users in system access rights. Access rights administrator can do some functionality, including is change the password, edit the data students, edit extracurricular data, edit extracurricular coaches and reports. The access rights of extracurricular coaches can do several things functionality, including changing the password, processing extracurricular data and activity reports. Student access rights can perform several functionalities, including looking at information from all extracurricular activities at school, changing passwords, looking at the list of extracurricular values being followed, registering as an extracurricular member, sending licensing data and sending comments (if the student is already registered as a member extracurricular).

Validation results by professional people (web/software engineer) on aspects of usability and functionality system, the system gets 82.25% and 100%. Test results by administrator on the usability aspect and system functionality, systems gets 90.38% and 93.4%. The results of testing by 5 extracurricular coaches respondents aspects of usability and system functionality, systems gets 90.77% and 100%. The results of testing by students in two class with each class totaling 15 respondents on the aspects of system usability and functionality, the system gets 87.88% and 100% (X IPA-3), 92.24% and 100% (XII IPA-1). And the results of trials conducted by 30 student respondents on aspects of system usability and functionality, the system gets 89.7% and 100%. This figure on the qualitative system test results according to Arikunto (2006) can already declared valid.

IV. Conclusion

Based on the implementation and testing of extracurricular management information systems, it can be concluded that:

1. The system can display information to students about all extracurricular activities at school, such as activity schedule information, member lists, grades, news or announcements, licensing, file that can be downloaded and comment form.
2. The system can handle extracurricular member registration, data processing of student grades and student licensing data.
3. Based on testing that has been done, information systems extracurricular management gets a percentage for the score average in the aspect of usability of 89.54% and average 99.99% functionality. From these data it can be concluded that the extracurricular management information system can be declared feasible and valid.

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