

Implementation of Students' Information System to Improve Discipline and Database of The Students

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Abstract— This research revealed the strategy of implementing the student information systems by the Management department student association to discipline the students in participating student activities. This study also revealed the database model expected by students and also Management Department, so that it can be used not only for the benefit of the Management department student association but also for the accreditation of the Management Department in 2021. The results of the study found that various strategies that were carried out in the application of student information systems had succeeded in improving the discipline of management students in participating student activities. This could be seen from the timeliness of students' attendance before the activity started and the achievement of the target number of participants for each activity. The results also found that, the database model desired by the students and management majors, which was reflected in the student information system service, were student profiles containing student biographies, management lecturer profiles, lecture schedules for each semester, student activities that had been carried out and will be implemented, as well as the achievements of management students both academic and non-academic achievements.

Keywords—*database; students; system information.*

I. INTRODUCTION

Management department student association is one of the organizations in Ganesha University of Education which organizes various student activities. In carrying out student activities, this association often faces some obstacles. These obstacles include the high costs of activities, lack of students' discipline, low student involvement, and lack of responsiveness of management students in attending the student activities held. This cases are not separated from the role of Management department student association which

is less competent to present student activities that invite students to participate in these activities

The problem that is mostly faced by the Management department student association in the implementation of activities in these various fields is that, the students are less interested in participating the activities especially in terms of attendance during activities. Most of the management students are willing to take part in student activities if they get a certificate or certificate that is collected for the purposes of scholarship administration or if it is required by the department or lecturer for the course. The indiscipline behavior are also reflected when the students come late when activities begun, or just came when activities will end. This is a challenge for the Management department student association in creating work programs that can raise students' awareness in participating the student activities

Another problem is the incomplete information owned by the Management department student association to support student needs and the need for management department. The deficiency of an information system as one of the communication media between the Management department student association and students of management department causes many complaints. The incomplete data has become one of the obstacles in making the information system needed. So that the information system as a data center for the needs of students and management department is needed to support student activities and management department.

In 2018 the Management department student association has succeeded in creating an online-based student information system that aims at meeting the needs of students and management department. One of the features in this system is the online student attendance system in

participating activities. With this online information system, every student who follows the activities completes the online attendance activity by using given identity card. It is to avoid cheating that has been complained. Every student who follows the activity must attend on time. Students who arrive late, or when the activity takes place cannot participate; they do not get a certificate. This information system is also designed to store up the database needed to provide information for students and lecturers. The information displayed includes student biographies, lectures biographies, student achievement, student activities, and lectures' schedules in every semester. This database is expected to be useful for management students, and support accreditation in the management department in 2021. In the implementation of this system, it must be supported by students and management so that the results are in line with the objectives. Thus, to achieve these goals, it is necessary to follow up both suggestions and criticisms from students and also administrators of the Management department student association to make this information system more perfect.

The purpose of this study is finding a strategy for the implementation of student information systems to increase the discipline of students in attending the activities. In addition, this study also aims at finding a database model that is expected to provide information needed by students and management department

II. LITERATURE REVIEW

A. Student Organization

Student organization also serves as a forum for the development of student extracurricular activities in universities that include the development of students' logical reasoning, knowledge, interests, and talents (Sudarman, 2004). It is also confirmed by the Indonesian Ministry of Education and Culture Regulation. No. 155 / U / 1998 about General Guidelines for Student Organizations in Higher Education, that intra-university student organizations are vehicles and means of self-development towards a wide perception and improvement of Scholarly and personality integrity to achieve higher education goals.

According to Sukirman (2004), student organizations are non-compulsory activities or important choices followed by each student during their studies to complete the whole learning outcomes. The choice of extracurricular activities

must be in accordance with the interests and talents of students, because these activities are a complementary means of developing personal abilities as prospective intellectuals in the future community.

B. Information System

According to Jogiyanto (2005), an information system is a system in an organization that meets daily transaction processing needs, supports operations, managerial and strategic activities of an organization, and provides certain external parties with the required reports. So it can be concluded that, the information system is a tool to help nature provide information for recipients and to assist in decision making for management in the company's daily operations and appropriate information for outside parties. According to Moeljodihardjo (Sutabri, 2005), management information system is a method for producing on time information on how management knows about the environment outside the organization and operations within the organization, with the aim of supporting the decision making process and improving the planning and supervision process. According to O'Brien (2003), an information system can be an ordered combination of people, hardware, software, communication networks and data sources that collect, change and publish the information within an organization

C. Discipline

Discipline is management action to enforce organization standards (Davis, 2010). Siagian (2009) said discipline has two meanings. The first meaning, involves learning or constructing behavior by applying rewards or penalties. The second meaning is even narrower, that is, this discipline is only related to punitive action against the outlaw. The main purpose of a disciplinary attitude is to direct the child so that they are able to control themselves. In addition, the children can carry out directed activities in accordance with applicable regulations (Justine, 2006). Increased discipline can be done by giving motivation or making a system. Making information systems to control organizational members is considered more effective than providing motivation. By the implementation of information systems, it is easier to conduct disciplinary evaluations to ease giving awards and penalties.

D. Database

According to Connolly and Begg (2010: 65), the database is a collection of scattered data that is logically related, and the explanation of this data is designed to meet the information needs of an organization. According to Inmon (2005), a database is a collection of interconnected data stored (usually with controlled and limited redundancies) based on the scheme. A database can serve single or multiple applications.

According to Gottschalk and Saether (2010) databases are organized data sets to efficiently support multiple applications by centralizing data and controlling redundant data. According to Atzeni (2003) the database is a set of data that is used to represent the information desired and implemented into the system. The main purpose of managing data in a database is we can get the data we are looking for easily and quickly.

The utilization of databases is done to fulfill a number of purposes such as: speed and ease, efficiency of storage space, accuracy, availability, completeness, security, and togetherness of usage (share-ability). In its use, the database has several benefits; reducing errors caused by human factors, mechanical tasks that are better carried out by machines, computers can take and change data faster than humans, accurate and up-to-date information is always available at all times and saves space because there is no need to provide very large paper file storage rooms.

III. RESEARCH METHODS

Research design is a framework used to carry out research (Malhotra, 2007). This recent study uses a descriptive research design. This research would explore more information about how the information system implementation strategy in improving student discipline and database models desired by students of management department. The subject of this study was students in management department and administrators of Management department student association for the period 2018 - 2019. Data collection methods were carried out by socializing the system to management department students regarding to the information system used. After socialization, representatives of students would be invited to conduct Focus Group Discussion in order to obtain input regarding to the system that is implemented. After obtaining the results of the Focus Group Discussion from management students, then it would be continued with Focus Group Discussion with the committee of management department student, so that they could complete the student

information system in accordance with the wishes of management students.

IV. RESULTS AND DISCUSSION

The results showed that the application of information systems that had been carried out by the student association majoring in management were providing briefings to all management students associations who would act as marketing information agents. The application of this information system was also carried out by socializing continuously to management students both individually and groups. Giving a management students member card was also done to make them easier to take part in every activity. The application of this information system was also carried out through social media.

The application of this information system is considered to be quite effective in increasing student discipline in following activities. It could be seen that there was an increasing number of student discipline on average by 68% for every activity. Students who were applied before this system were often late in the event, but after the system was implemented, students arrived on time. This increasing number of discipline could not be separated from the rules applied in this information system. Students who arrived late during the activity could not fill the presence list, so as consequence, they did not get a certificate. When taking the certificate, the students should also show their identity cards, so that students had to follow until the end of the activity and were not allowed to take certificate by represented.

The results were also found that the database became a particular concern to be managed properly. Database management must be continuously improved in order to provide optimal services to management students. The database reflected in the service features in the information system is expected not only to increase student discipline in participating the activities, but also to provide other useful information. The information that were expected to exist in the information system included information of the data from student and lecturers of management department, information on the achievements on both academic and non-academic of management students, and also information of lecture schedules. In its improvement, this information system database has been developed in such a way that it could present information as expected, such as a database of student biographies, lecturers' biographies, student management achievement data, and lecture schedules. Moreover, this system also provided

information on the academic calendar that contained lecture time, semester exam time, thesis examination time, semester day-off time, payment time and the time to fill out the study plan. Database development was not only presents information to students, but also an existing database update. This database update aimed at updating the existing data so that it could provide real information.

The application of this information system is expected to continue to be functioned in the future by Management department student association in the next period. The existence of this information system has been able to improve the discipline of management students in participating the activities even though it is not yet perfect. The input of using the fingerprint absent system in the implementation of activities needs to be prioritized. This aims at avoiding students leaving their identity cards when doing attendance activities. Supervision of the use of this system must also be considered. The selection of members in charge of managing this information system must be people who are honest, have integrity, and are firm in carrying out their tasks so that the purpose of making this system meets the objectives.

The management of database reflected in the information presented was quite good. The availability of various information needed by management students was fulfilled. The accessibility in managing databases needed attention. The management that was easily carried out by the manager of the next period would have an impact on the sustainability of this information system in the future. The provision of information services must continue to be developed in the future to be synchronized with the needs of students. The latest information services must be continued to make the students feel comfortable to use this information system, so that the continuity of this information system hopefully survive in the future.

Based on the results of the research conducted, it can be seen that some management students who do not yet know the function and usefulness of this information system need to get socialization from the management of the department of student association. Continuous communication needs to be built so that every work program carried out can be understood well by all management students. Improvement of communication patterns management department student association needs to be improved again so that understanding of the importance of this information system can be accepted and understood by management students.

Management department student association needs to establish good communication not only with all management students, but also with the lecturers and managers of the management department. This is important to do, as one of the leading product promotion agents owned by the management student association. The participation of management lecturers in socializing this information system as a form of tangible support will strengthen the existence of this information system in the eyes of management students.

Various inputs to the improvement of information systems obtained from management students must be a priority for managers of the department of management. Improvements in terms of features and services in this system are needed so that management students are satisfied in using this information system. Management students as consumers of this system will continue to support and use this system if the services provided by this system are in line with their expectations.

The desired success of the application of this information system is one of them is the discipline of students in participating in student activities. The application of this information system has had an impact on the increasing discipline of management students following the activities held by the management student association. This can be seen from the target participants of activities that are always fulfilled. Also seen management students arrived on time before the event began. This can not be separated from the sanctions given to students who arrive late or come at the end of the activity, where students who arrive late or at the end of the event cannot register or attend attendance which results in not recording their names in the data of students who take part certificate or charter of activity. The sanction causes students who will take part in student activities must arrive on time when registration or attendance is conducted. This means that the information system applied has firmly imposed sanctions on students who are not disciplined. And this has an impact on the implementation of student activities held by the Management Student Association in accordance with expectations.

The Management department student association continuously also makes improvements to the database model desired by its users (management students). It is very necessary to improve the database model on an ongoing basis in order to create user satisfaction. This is very important because every information system must be continuously developed in accordance with the times and in accordance with the wishes of its

users. The features that are deemed necessary to be added or developed in order to always get attention for the information system manager. Improving service features from the database model used will create a competitive advantage of the products produced. This will improve user satisfaction, which in turn will create the loyalty of users of this information system service.

V. CONCLUSION

Based on the results of the study and the previous discussion, it could be concluded that

1. The application of the information system applied by the student association in the management department had been able to increase the discipline of management students in participating activities. This could be seen from the increasing number of students in participating activities. The strict application of information system caused management students to follow the regulation. Violation of the regulation could make the students got punishment, for example the absence of students attendance caused the students could not receive the certificate. Although there were still some weaknesses in the application of this system, Management department student association was committed to continuously improving both the application and the equipment used, such as the use of fingerprint-attendance in the future.
2. The database reflected in the information provided by this information system was sufficient to meet the needs of management students. In its development, this information system database had been developed in such a way that it could present information as expected. In this system, database of students' and management lecturers' biographies, management students' achievement data, and lecture schedules were available. Moreover, information on the academic calendar that contained lecture time, semester exam time, thesis examination time, semester holiday time, payment time and the time to fill out the study plan were also available in this information system.

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