

IMPACT OF THE USE ACADEMIC INFORMATION SYSTEMS TO IMPROVE STUDENT SATISFACTION OF ACADEMIC ADMINISTRATION SERVICES IN UNIVERSITAS ANDALAS PADANG

By: ¹Yindrizal; ²Sri Suwitri; ³Nufransa Wira Sakti; ⁴Hartuti Purnaweni

¹Doctorate Program of Public Administration, Department of Public Administration, Faculty of Social Science and Political Science, Diponegoro University, Semarang, Indonesia

²Department of Management, Faculty of Economic, Universitas Andalas, Padang, Indonesia

³Ministry Finance of Indonesia Republic

⁴Doctorate Program of Environmental Science, School of Postgraduate, Diponegoro University, Semarang, Indonesia

Abstract

The development of Information Technology handled positively by Andalas University, namely by establishing an Academic Information System (SIA) to improve data quality, information quality and service quality. The Academic Information System is a benefit for Andalas University in providing academic administration services to students. Using the Academic Information System can reduce interactions between students and academic administration staff, so that services are more effective and efficient. This is in accordance with student expectations, but not all are in line with expectations, because students are required to re-register manually in each study program. Another problem is still inaccurate information presented by the Academic Information System and not yet maximized socialization. There is no measurement of academic information system performance carried out in a rational manner, so that cannot identify causes.

Keywords: *Impact of System Usage, Academic Information System, Student Satisfaction*

I. INTRODUCTION

Before the existence of information technology, universities managed management of academic administrative data manually. Academic administration management is an activity with a high routine factor, so it is prone to errors if not assisted by tools. In the era of information technology, universities, especially Andalas University, utilize information technology by developing it into a campus Academic Information System (SIA). The benefits of the Academic Information System are to improve the quality of academic administration services.

Andalas University desperately needs the presence of Information Technology in the form of an Academic Information System (SIA). The use of academic information systems can overcome the obstacles faced so that data and information quickly reaches the user. Another benefit of using the Academic Information System (SIA), universities can improve the efficiency and effectiveness of management of academic administration, and can improve the quality of academic administration services to stakeholders, especially students and can improve the competitiveness of universities.

Kroenke in Kadir (2008) said that the use of an Academic Information System (SIA) can provide added value to the decision-making and problem-solving processes and have competitive advantages that greatly help business activities and universities. Students as end users can benefit from the use of academic information systems, which can access academic information in a relatively short time. The results of research conducted by Firma S. B, Muhammad U.S., Ovide D.W.A., (2016) said that academic information systems needed in universities, because it can facilitate documentation and improve performance.

Universities realize the importance of student satisfaction, because competition is increasingly competitive and dynamic (Altbach, 2006; Arambewela and Hall, 2009). By paying attention to the satisfaction of users, Higher Education can meet the needs of students by developing systems that can process data effectively (O'Neill, 2003). For this reason, the University reforms the academic administration services using the Academic Information System (SIA), so that it can improve data quality, information quality and service quality.

This paper focuses on Impact the Use of Academic Information Systems on Student Satisfaction in Andalas University, Padang, because SIA is a very important instrument to meet the needs of students in academic administration services. Quality services in the field of education have become quite interesting topics for many researchers (Alves & Raposo, 2010;

Arambewela & Hall, 2009; Elliott & Shin, 2002; Mulalic, 2012; Oldfield & Baron, 2000; Usman, 2010). In the education sector, especially universities, service quality is a fundamental aspect of educational excellence (Dyson et al., 1996).

II. LITERATURE REVIEW

Supporting infrastructure for the use of academic information systems (SIA) The Andalas University is sufficient, where supporting infrastructure such as networks, servers and other supporting devices needed such as (a) hardware, (b) software (c) and (c) users (barware). The supporting factors owned by Andalas University, which is managed by the Computer Information Technology Development Institute (LPTIK), which is assisted by Information and Communication Technologies (ICT) of each faculty that has human resources with expertise in the field of information technology.

Academic information systems are a very important part, because the increasingly complex tasks of higher education management, the influence of globalization and the need for fast and precise academic data services and competition among universities in the service sector. Academic information systems are used for processing academic data, such as student grades, class schedules, student academic registration, attendance list, student academic status, and others. On the other hand, the use of academic information systems is also to provide quality services to students so that satisfaction is created. Service qualifications in higher education are topics that attract the attention of many researchers and attract many researchers (Alves & Raposo, 2010; Arambewela & Hall, 2009; Elliott & Shin, 2002; Mulalic, 2012; Oldfield & Baron, 2000; Usman, 2010) . In accordance with the opinion of Zammuto et al. (1996) which defines that, the perception of quality shows the superiority of a product or service.

One of the factors that determine user satisfaction is the ease of obtaining information (Oliva, Richard & Ian, 1992). Whereas Parasuraman et al. (1986) said that the level of satisfaction can be measured by what customers feel with customer expectations. The best-known model of the success of information systems is the model developed by DeLone and McLean (1992), where this model is widely used by researchers to measure the success of information systems. Realizing the importance of information technology, a number of researchers have tested the impact of the use of information technology. Namely the extent to which the use of information technology can improve efficiency and effectiveness in improving service quality (Agourram,

2009; Alves, 2010; Aziz, 2003; Chang et al. , 2003; Goodhue and Thompson, 1995; Madapusi and Ortiz, 2009; Molanazari and Abdolkarimi, 2010; Torkzadeh et al., 2005).

Other research conducted by Negash et. al., (2003) in WEB-based support system research on WEB user satisfaction, said that system quality has an effect on user satisfaction. Whereas Anindita et. al., (2003) in the study of factors that influence the level of satisfaction of EDI users, stating that system reliability affects user satisfaction. Another opinion expressed by Nurniah (2005) says that the relationship between service quality and user satisfaction has a significant relationship. Thus, the better the information produced by information systems, the higher the level of user satisfaction so that it can provide effective and efficient services.

III. RESEARCH METHOD

This research is a qualitative research with descriptive format, namely by observing to get a pattern of relationships between concepts that have not been previously determined. The research subjects were Andalas University students who had attended education for at least 1 (one) year with 75 informants, while the object of research was the quality of human resources managing the academic information system of Andalas University in this case the manager of Information and Communications Technology (ICT) Faculty. Data obtained from interviews with students as users of academic information systems with Nonprobability Sampling techniques, sampling using a purposive technique.

IV. RESULT AND DISCUSSION

The development of information technology can help overcome the obstacles faced by universities in managing academic administration, namely by making an application of academic information systems. By using the application of academic information systems, it expected to be the right solution to the problem of academic administration. The use of academic information systems expected to provide an alternative in improving the quality of academic administration services at Andalas University, so that students get services that meet their expectations and Andalas University can compete with other universities.

Academic information systems provide information accuracy, speed of information, and complete information that is integrated so that the creation of effective and efficient services.

The use of academic information systems has an impact on the quality of academic administrative services that students receive, such as filling out Study Plan Cards (KRS). The following are the opinions of informants about the impact of using SIA, as follows; namely a 2012 Faculty of Animal Sciences student informant, said that:

"The Academic Information System (SIA) can help fill out Study Plan Cards (KRS), View Study Result Cards (KHS) and select class schedules, so students do not need to come to campus. The Computer Information Technology Development Institute (LPTIK) assisted by Information and Communication Technologies (ICT) of each faculty carries out the socialization of academic information systems. Problems faced by students, academic information systems often convey inaccurate information, such as displaying lecture schedules that are not yet in line with student expectations, "(interview, 9 June 2016);

Based the opinions conveyed by the informants (students) above, with the use of academic information systems students greatly assisted in carrying out academic administrative registration activities, but still complain about the quality of information conveyed by academic information systems. Students are quite satisfied with the performance of the Computer Information Technology Development Institute (LPTIK) and faculties that have socialized the use of academic information systems.

The opinions of informants (students) above also reinforced by the opinion of the 2014 faculty of economics informants, saying that:

"The Academic Information System (AIS) can help students' academic administration activities because SIA provides information that fits the needs of students, but there is still information that SIA presents is less accurate, such as information on class schedules." (Interview, August 2, 2016);

Informants (students) of the Faculty of Agriculture class 2010, stating that, also conveyed the same opinion:

"The existence of an Academic Information System can help student academic administration activities, because the academic information system presents information that fits the needs of students, courses offere, student data, Study Plan Cards (KRS), Study Results Cards (KHS), transcripts Value and Stop Temporary Study (BSS). But there is still information that is not in accordance with student expectations, such as class

schedules and the obligation of students to re-register with the study program even though they have registered online as well as exam cards that are still made manually "(interview, 8 August 2016);

The 2013 MIPA Faculty student informant, who said that, stated another statement:

"By using an academic information system can help student activities, because the system provides information on courses, class schedules, registration and other announcements. Students complained about the inaccuracy of information conveyed in academic information systems, because there was a difference between paying tuition and filling out study plan cards. The use of academic information systems is studied by students automatically or help from their seniors, this occurs because the management does not provide a manual book and does not conduct socialization to students "(interview, 15 August 2016);

The use of academic information systems is in accordance with the development of information technology and the wishes of students, because information can be presented in a relatively short time, so it can support the activities of student academic administration. Based on the results of interviews with students as users, the following summarizes the opinions expressed by students, namely. (a) socialization has been carried out at the time of the campus introduction program for new students, (b) socialization has never been done by the manager to students, and (c) don't less accurate information delivered through academic information systems, and (d) unavailability of manuals (manual books) as guidelines for the operation of academic information systems.

Satisfaction is a person's feelings by comparing performance with expectations (Tjiptono, 2000). Service has the potential to meet expectations or not in accordance with user expectations, because service can be considered satisfying the user if has quality. Assessment of quality can be measured by perceived service with the expected service, meaning satisfaction can be achieved between the expectations and what is obtained. Nowadays universities are trying to improve their satisfaction in facing global competition.

In this case, Andalas University has addressed the demands of the community to face competition in the globalization era by using academic information systems to support the competitiveness of graduates produced. The use of academic information systems requires a balance between supporting infrastructure and management resources, so that there is no inequality. This means that academic information systems are blend of human resources with information technology to process, store and retrieve data to support decision-making (Rochaety et al., 2008).

For the leaders of the information produced can facilitate the decision-making process by management (planning, mobilizing, organizing, and controlling) universities, because accurate information can improve the performance of universities like the performance of business institutions. This is inseparable from the dual orientation of higher education institutions in Indonesia, namely social orientation and business orientation. Social oriented education aims to improve the intelligence of the nation, while the business orientation is to have sufficient funds to maintain its existence and operations. Academic information systems also benefit the community, which is one of the sub-systems and control society in the operational processes of universities that provide services (quality of service) education, so that they can be justified.

Building an academic information system expect to be able to facilitate students, lecturers, and education staff (academics) in obtaining fast and accurate information. Academic information system is a gateway in delivering academic administration information to an effective and efficient tertiary academic community. With academic information systems can improve service quality, so that reation of good governance of higher education (good university governance) with the realization of aspects of transparency, accountability, leadership, commitment and so forth. Academic information provided by academic information systems used to meet the needs students, lecturers and faculty, such as study cards, class schedules, attendance lists and academic transcripts (Nugroho 2008).

The use of academic information systems has a positive impact on universities, especially Andalas University, because it can improve the quality service to students as users, so that services become simple, effective and efficient. Simplification of communication is between users and managers through academic information systems to achieve user satisfaction. This is in accordance with the results of a study from Idaver Sherifi (2015), saying that the use of

information systems can help universities improve service quality and quality of education proportionally and in accordance with user expectations.

The process of processing academic data at Andalas University already uses academic information systems, to facilitate academic administration. The use of academic information systems can reduce the direct interaction of the academic administration section with students, where students do not need to come to campus to fill Study Plan Cards (KRS) because academic staff can monitor academic administration activities through the system. The benefits obtained by using the Academic Information System include:

1. Avoidance of mistakes in taking courses by students,
2. The KRS is anticipated by the system, such as taking courses that have prerequisites, but students have not taken the prerequisite courses, the system automatically rejects,
3. Avoid clashing schedules, the system will reject the schedule,
4. Can anticipate the number of students in each class, if the maximum capacity of the system will refuse,
5. Payment of tuition and filling in KRS can be arranged, so that data on tuition payments and KRS filling are easily monitored by academic staff,
6. Can see enthusiasts of each subject, whether the subject can be run or not (Source: Information Technology Faculty lecturer interview, 29 August 2016)

The effectiveness of the use of academic information systems is inseparable from the socialization factors carried by managers to prospective users. Socialization is very helpful for students in the operation of academic information systems, besides that it is also necessary to provide a manual book or at least a simple guide that can be guided by students. Another factor that determines the success of the use of academic information systems is the ability of human resources to manage them.

Based on the opinions expressed by the students, the socialization carried out by the academic information system manager felt to be less than optimal, so that students were also unable to operate the academic information system to the fullest. The lack of socialization of academic information systems can be seen from the opinions conveyed by informants (students), namely 75 informants from 5 of the oldest faculties at Andalas University located on Limau Manis campus, 47% said there was no socialization and 53% said there was socialization. Other

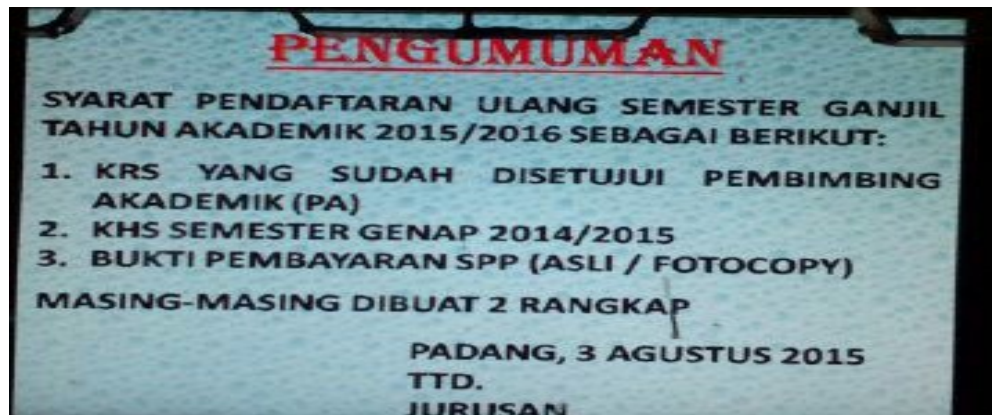
opinions also conveyed by students that they had never given a guidebook (manual book) or a guide summary to operate an academic information system. This student complaint was justified by the academic information system manager, who said that it did not provide a manual book but the guide could be downloaded in the academic information system, but students did not know it.

Thus, it is necessary to evaluate the method of socialization, so that socialization can be absorbed maximally by students. Socialization is very important, because it can provide an understanding of the functions in operating the academic information system of Andalas University. The Andalas University academic information system manager in conducting socialization should provide a manual book or minimum summary of the manual book operating procedures for academic information systems to students; so that it can help students understand the operation of academic information systems.

Students also complained about the lack of accurate information on the schedule of payment of tuition by registration (filling out the study plan card) and the less up-to-date class schedule. The complaint was confirmed by the faculty of Information and Communications Technology (ICT) faculty, that there was a distance between tuition payments (SPP) and filling out study plan cards, usually reaching 2 or 3 days (interview, ICT staff of the Faculty of Animal Husbandry, 22 August 2016). This should not happen, because by using an information system after paying for tuition, students can fill out the study plan card (KRS). To overcome this need to improve communication between managers of academic information systems with the bank and improve communication level management of the academic information system itself.

Besides this, students also complained about the manual processes carried out by faculties such as re-registering with majors and making exam cards. This should not need to happen, because by using the academic information system all student data is stored in the system, which can be retrieved at any time.

Picture 1 Announcement of Requirements for Student Re-Registration



Thus, the use of academic information systems at Andalas University has not fully functioned as complete system. With the existence of academic information system, not all academic administrative problems that students complain about need occur. Based on these conditions, which means the function of the academic information system at Andalas University has not fully been able to meet student expectations, so that student satisfaction has not yet materialized.

The investment used is quite large, it should be accompanied by measurement of the implementation the use of academic information system. One way to measure the performance of academic information systems by using end user satisfaction, this is the best way to communicate the use of academic information systems that have used. These measurements can made easily and compared at any time, so it is also necessary to conduct regular surveys to measure end user satisfaction on the problems contained the system.

V. CONCLUSION AND SUGGESTION

This study analyzes the impact of the use of academic information systems on student satisfaction at Andalas University. In general, researchers found students were less satisfied with the performance of academic information systems. Research findings can help Andalas University to improve the quality of academic information systems, such as;

1. Not yet maximizing the socialization academic information systems,
2. Lack of accurate information is on academic information systems.
3. The absence of a summary in manual book of academic information systems

4. Not optimal use of academic information systems in the Faculty so that they are still re-registering manually

For improvement of the Academic Information System, it suggests as follows;

1. Evaluate the method socializing the academic information system, so that socialization can run in accordance with student expectations,
2. Evaluating information from the academic information system is running, so that information received by students is accurate.
3. Provide a summary of the manual book the academic information system.
4. Optimizing the use academic information systems

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