# The Effectiveness of the Use of Academic Information Systems

Nasaruddin H<sup>1</sup>, Shofian<sup>2,</sup> Haedar Akib<sup>3</sup>, Risma Niswaty<sup>4</sup>

<sup>1</sup>STISIP 17-8-1945 Makassar, <sup>2</sup>Universitas Negeri Makassar E-mail: <u>nazhar111281@gmail.com</u>

#### ABSTRACT

Use information technology is used as a means that can facilitate a person or an agency in carrying out their work effectively and efficiently. This research is a qualitative descriptive study that aims to determine how effective the use of academic information systems is in the Office Administration Education Study Program, Faculty of Social Sciences, Universitas Negeri Makassar. The informants of this research are all parties who are directly involved in the use of academic information systems, namely students, study program operators, lecturers, and SIA managers at the UNM ICT Center. Data collection techniques used are observation, interviews, and documentation. The results of data analysis are presented in the form of a description that describes the procedures, constraints, and solutions in the use of the Academic Information System. The results showed that the effectiveness of the use of academic information systems in the Office Administration Education Study Program, Faculty of Social Sciences, Universitas Negeri Makassarwas classified as quite effective in terms of information quality indicators, namely accurate, timely, and relevant.

Keywords: students, information, systems

#### **INTRODUCTION**

People's lives in the 4.0 era or known as the industrial revolution era, almost entirely use technology (Feller et al., 2020; Jordan, 2014; Kotabe & Mandviwalla, 2005), both in carrying out daily routines, as well as in the scope of office work (Baglieri et al., 2018; McElroy et al., 2007; Sadowski, 2015). Of course in this case the use of information technology is very helpful for a person or an agency in doing a job effectively and efficiently. In terms of the development of information technology, the public it very easy to obtain information in all fields, both information originating within the country and from abroad. In addition, this information technology plays an important role in terms of communication. The provision of an internet network and several features of information providers in the form of websites and applications have certain functions in helping someone to carry out their work. An example is the use of e-mail to send letters or other electronic documents within reach between cities, provinces, or even countries in such a short time.

According to Rhamdani (2018a) in his book management information systems suggests that information technology is a technology used to process data, including processing, obtaining, compiling, storing, and manipulating data in various ways to produce quality information, namely information that is relevant, accurate, and timely. used for personal, business, and government purposes.

Information is one of the most important things that is an organization or company (Feller et al., 2020; Kotabe & Mandviwalla, 2005; Wiesmeth, 2021). One of the factors that advance an organization or company is how it builds its image to the general public and carries out daily activities using information system technology properly. In this case, the information obtained

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has a major impact in making decisions or actions and determining the direction of policies taken by organizational leaders. Therefore, good information management must be carried out properly for the smooth running of the organization's activities. A concrete example is when a student wants to continue his studies to college, of course, he first looks for information about the college he wants.

Currently, information systems are used in all fields, including education (Albina & Sumagaysay, 2020; Asongu et al., 2019; Szymkowiak et al., 2021). In this field, information systems are usually used to assist school or college activities related to the provision of information, such as college profile information, registration, and admission information for students or new students, academic services, student activity services, and services for teachers, lecturers. or employees.

Universitas Negeri Makassaras one of the universities in Makassar, South Sulawesi certainly uses information systems in carrying out its duties as an educational unit. In terms of providing academic services to all students, Universitas Negeri Makassaruses the Academic Information System to make it easier for students to get academic services, even though the student concerned is not in the campus area, but still gets academic services from lecturers through the information system. this. This information system is web-based which can be accessed at any time.

In the Universitas Negeri MakassarAcademic Information System, several features greatly facilitate students. Some of the features available include features for programming courses, checking course schedules, attendance, checking course grades, transcripts, and features that provide communication between students and lecturers. In its use, each study program within the Makassar State University, especially the Office Administration Education study program, Faculty of Social Sciences, is expected to be able to use all the subsystems and subsystems that have been provided to the maximum according to their respective work areas.

## METHOD

The approach used in this study is a qualitative descriptive approach with qualitative research types. Sugiyono (2018) in his book on educational research, methodology states that "qualitative research methods are methods based on the philosophy of postpositivism, used to examine the condition of natural objects, (as opposed to experiments) where the researcher is the key instrument, sampling is done purposively and snowballs sampling. collection by triangulation (combined), data analysis is inductive/qualitative, and qualitative research results emphasize meaning rather than generalization.

The informants in this study were students, study program operators, lecturers, as well as from the management of the ICT Center UNM. Informants were randomly selected to meet the data requirements needed. The techniques used in this research are observation, interviews, and documentation. The validity test of the data can be done, namely the credibility test or trust test on the research data presented by the researcher so that the research results do not give any doubt as to the result of scientific writing. To test the validity of the data, it can be done by using the extended observation method, triangulation, and member check. Data collection techniques, namely observation, interviews, and documentation. Data analysis techniques, namely data reduction, data presentation, and conclusions.

## **RESULT AND DISCUSSION**

The data presented below are data from research results collected in the field using observation, interviews, and documentation methods with 11 informants who were directly involved in the use of the Academic Information System (SIA) at the Office Administration Education Study Program, Faculty of Social Sciences, Makassar State University.

## Accurate

A good information system is an information system that provides convenience for its users in the process of using it. An accurate information system must of course be required to provide maximum results, namely in the form of information that is accurate, clear, and free from errors in its publication. Therefore, data sources and how to manage them must be considered or done carefully in publishing information.

First, some of the features that exist in the Academic Information System (AIS) have not been used properly. Such as attendance subsystem, course schedule, guardianship, and student activities. This is due to the lack of user knowledge about the subsystem, the input process is quite complicated, and the use of other more effective applications such as WhatsApp.

Second, data input errors often occur, such as typing errors. This is because the inputted data is quite large and complicated. However, this is not a big problem because the data that has been inputted and stored can still be edited by taking several procedures. For students who make errors in input, the students concerned must first appear to their respective academic supervisors. After obtaining approval, students face the operator of the study program. Meanwhile, for lecturers who make input errors, they must take the administrative route, namely the Office Administration Education study program in writing to the leadership of the Faculty of Social Sciences. After obtaining approval, the faculty will make an application letter to the vice-chancellor I for academics at the Universitas Negeri Makassarto to reopen the Academic Information System (SIA) portal. Data errors that occur, of course, are the responsibility of the parties doing the input.

# **On-time**

The basis for making a decision is information. So the information released must be timely. If it is even a little late, it will be fatal to the survival of a person or an institution. Information released late will no longer be useful even if the information has a high level of accuracy. Currently, the latest information technology is needed to be able to send or publish information quickly.

From the results of the data presentation, it is found that the use of the Academic Information System (SIA) in the Office Administration Education Study Program, Faculty of Social Sciences, Universitas Negeri Makassar has an input period that has been determined in an academic calendar made by the Vice-Chancellor I for Academic Affairs at the Makassar State University. It is very important to note that there is no delay in the publication of information.

Inputs made by students, operators, and lecturers of the Office Administration Education study program are by the academic calendar that has been previously determined. If there is a delay in inputting, it must go through the reporting mechanism that has been determined. The mechanism adopted is the same as the mechanism mentioned in the discussion of the previous indicator, namely the mechanism for reporting errors in inputting. The sanctions given are only in the form of an oral warning from the head of the study program or the head of the faculty.

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So far, the Academic Information System (SIA) can be accessed at any time. However, in accessing it, errors often occur. This is due to a bad internet network and many users accessing the system at the same time. Until now, UNM's ICT Center does not yet have a system that can measure the maximum limit of users who can access the Academic Information System (SIA) at the same time.

# Relevant

A good information system is an information system that can meet the information needs of its users. Relevant information can be seen in how far it can answer the questions or needs of its users. That is, that the information fits the needs of the user. The use of information is generally based on a person's field or occupation. For example, to give a dose of medicine to a patient, a pharmacist would need a diagnosis from a doctor. This information will certainly not be useful for the cleaning service or security guard at the hospital.

In information services on campus, of course, students need information related to all matters relating to them during their lectures. The academic information system provided usually contains everything that makes it easier for the students concerned to get academic services while in college.

The findings in the field show that the information produced by the Academic Information System (SIA) at the Office Administration Education Study Program, Faculty of Social Sciences, Universitas Negeri Makassar is correct but has not been able to optimally meet the needs of its users, which in this case are the students concerned. So far, the information generated is only in the form of a list of grades for each semester. Meanwhile, other information such as course schedules and attendance is rarely published. This is due to several features that have not been used properly by the Office Administration Education study program.

A good information system is an information system that provides convenience to its users in accessing information. In this case, Universitas Negeri Makassaris expected to be able to provide easy, clear, and accurate information system service units to students, especially online academic services which greatly provide convenience within the scope of Office Administration Education of the Faculty of Social Sciences.

To improve academic services to students, the UNM ICT Center will update the system performance of the Academic Information System (SIA). Where the system will be divided into several systems, such as student information systems, personnel information systems, curriculum information systems, and others. Interrelated systems will be connected. However, for now, the UNM ICT Center is only following developments such as student needs, such as an online registration information system to facilitate the input process.

## Discussion

#### Accurate

The information system is one of the tools that make it easier for someone or an agency to carry out their work which is generally related to the provision, management, and publication of information. In the field of education, information systems are usually used by schools or colleges in providing information services to students and students. In higher education units, information systems are used to provide services to both students, lecturers, employees, and even the public or prospective students who want to continue their studies to tertiary institutions, such as academic services, information services for new student admissions, staffing services, and other related services. with all college activities.

Zunaidi et al. (2011) argues that "accuracy means that the information produced or required must be free from errors and not bias or mislead users. The more accurate the information provided or needed, the more useful it is for all users of the information, especially for decision-makers. This is relevant to the results of this study. The use of the Academic Information System (SIA) in the Office Administration Education Study Program, Faculty of Social Sciences, Universitas Negeri Makassar is accurate, but there are still some obstacles in its use.

In terms of academic services, it is expected that universities can provide academic information services to students according to their needs. A good academic information system is expected to be able to provide services in the form of new student registration, registration of old students, academic administration, graduates or alumni, and curriculum development.

A good information system is an information system that can be used easily by its users and produces accurate information. This means that the resulting information is correct, clear, and free from errors both in terms of inputting and in terms of the processing process. The findings in the field, it was found that the use of the Academic Information System (SIA) in the Office Administration Education Study Program, Faculty of Social Sciences, Universitas Negeri Makassarstill had several obstacles. First, errors in data input because the inputted data is quite a lot with a certain classification. Second, some of the available subsystems have not been used optimally, such as the subsystem for publishing class schedules, attendance, guardianship, and student activities. This is due to user ignorance about the function of the subsystem and the input is quite complicated.

# **On-time**

The basis for making a decision is information. So the information released must be timely. If it is even a little late, it will be fatal to the survival of a person or an institution. Information released late will no longer be useful even if the information has a high level of accuracy. Currently, the latest information technology is needed to be able to send or publish information quickly.

One of the effective characteristics of a good information system is the provision of timely information. Sutabri in (Rhamdani, 2018) argues that "one of the properties of the value of good information is timeliness, that is, information is available when it is needed. Usually, in an agency, a period for the publication of information is set. This is taken so that all agency activities do not occur obstacles due to the function of the information itself, namely as material for taking further action. This statement is in line with the results of research in the field. To prevent delays in publishing information, the Universitas Negeri MakassarManagement provides a time limit for inputting data into the Academic Information System (SIA), namely in the form of an academic calendar created by the Vice-Chancellor I for Academic Affairs at Makassar State University.

A good information system can be demonstrated by easy access to it anywhere and anytime. The Academic Information System (SIA) at Universitas Negeri Makassarcan be accessed at any time. However, in the process of accessing it, errors often occur. This is due to poor network connection and many users accessing the system at the same time. Until now, the UNM ICT Center does not have a system that can calculate the maximum number of users who can access the Academic Information System (SIA) simultaneously.

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## Relevant

A good information system is an information system that can meet the information needs of its users. Relevant information can be seen in how far it can answer the questions or needs of its users. That is, that the information fits the needs of the user. Sutabri (2014) argues that quality information has benefits for its users.

In achieving office or organizational goals, various tools or support are needed to complete them (Niswaty et al., 2020). One of them is by providing relevant information, namely information that can answer any problems and provide a basis for taking future actions(Hasyim et al., 2021; Radhiyani, 2018; Syarifuddin et al., 2021). Therefore, it is very important to pay attention to the provision of relevant information, both in terms of input, processing, and terms publication. The information provided takes various forms, depending on which field will use it. For example, in the field of personnel, the information that is usually needed is personal data of personnel, employee attendance list, list of employees who are often late, and so on.

In academic services, of course, the information needed by students is information relating to all academic administration during the lecture process. For example registration services, course programs every semester, course schedules, attendance, student activities, course values, to the process of completing the final project of the student concerned.

Based on the results of the research that has been done, it is found that the information provided by the Academic Information System in the Office Administration Education Study Program, Faculty of Social Sciences, Universitas Negeri Makassar is relevant, but has not been able to meet the information needed by students. This is because some of the existing subsystems in the Academic Information System have not been used optimally. For example, publishing course schedules is usually done by distributing soft files to class groups, so the existing course schedule subsystem is rarely used.

#### CONCLUSION

Based on the results of research on the effectiveness of the use of Academic Information Systems (SIA) in the Office Administration Education Study Program, Faculty of Social Sciences, Makassar State University, it can be categorized as quite effective, this can be seen from the results of each indicator, namely accurate, timely and relevant. From the three indicators, it can be seen that the use of the Academic Information System (SIA) in the Office Administration Education Study Program, Faculty of Social Sciences, Universitas Negeri Makassar is good but has not been used optimally and there are still some obstacles in the process of using it.

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