

Academic Information System Management To Improve Service Quality To Students During The Covid-19 Pandemic at Universities In Jambi Province

Sepryhatin Dioputra^{1*}, Didin Wahidin², Yosal Iriantara³, Waska Warta⁴

1,2,3,4 Nusantara Islamic University, West Java Indonesia

* Corresponding author:

E-mail: seprihatindioputra@rocketmail.com

Abstract.

Universities that have good academic service management quality standards are the goal in every university's efforts. In Jambi Province in particular, good management applied to a university is one of the important factors to improve the quality of service both for students, the community or for the university itself. Not a few universities whose academic service quality still does not meet the satisfaction threshold in the assessment, one of which is offline-based services that will usually hinder the delivery of existing information. UNAMA colleges (Universitas Stikom Dinamika Bangsa) and IAI Tebo in Jambi Province are universities where each delivery of academic information focuses on the use of computers and technology, both of these universities have implemented academic information system management, but each of these universities has advantages and disadvantages in the information system that is run, so a study is needed to be able to combine each of the advantages and disadvantages found in the two universities. By applying qualitative methods, it is hoped that it will provide useful research results, the focus of this research is directed at (1). Planning, (2). Implementation, (3). Evaluation (4). Solutions or follow-ups in improving the quality of academic services at universities using Deming's cycle management theory. On This study uses a descriptive method with a qualitative approach and data collection by conducting observations, interviews, and documentation studies. so from the results of this study can conclude a more complete management information system that can be applied to other universities, especially those that are still offline.

Keywords: Higher Education, Management and Academic Service Information System

I. INTRODUCTION

In the Globalization Era of the Industrial Revolution 4.0 today, technological progress is growing rapidly, especially in the field of computers and information systems. In the face of global competition and to meet the need for information, universities really need a good information system, to get quality information. Information is needed for management as a source of accurate decision making. The existence of science and technology that is increasingly advanced today will help a system run and its development. A well-developed and smooth system will produce information effectively and efficiently, thus supporting progress and supporting existing activities. Information is the basis in decision making, if the decision is late, it can be fatal for the organization. Nowadays the high value of information is due to the speed with which the information is obtained, so that the latest technologies are needed to obtain, process and convey it. The information needed includes data processing information obtained from data processing reports at an agency or organization. The data processing in question includes storing, placing and searching for data related to the operational implementation of the organization or agency. In general, systematic integrated data processing has been implemented by several agencies, one of which is the UNAMA College and IAI Tebo Jambi Province whose academic information system management covers various aspects of data needs, ranging from primary, secondary and primary data acquisition. development indicators are compiled and computerized to provide analytical support or useful input for determining the direction of development and service.

However, there are still advantages and disadvantages that are indicators of the less than optimal implementation of the existing information system management. In addition, problems that often arise from manual data management are ineffective and inefficient archiving, report data that are not in accordance with actual, and delays in delivering academic service information. With a study on the two universities, it is hoped that it will be able to convert any shortcomings and advantages of existing information system procedures so that it can produce a more complete academic information system management, as according to Amir (2016; 287) [1], in the context of developing its institutions to face increasingly fierce competition, every university must have a strong and reliable management information system. This process is certainly

supported by applying the right method, so that the qualitative method feels right to be able to solve the cases that occurred in the study. One of the management models that can be applied to the Institute of Islamic Religion (IAI) Tebo Regency and UNAMA University Jambi Province in managing information systems is the PDCA (Plan, Do, Check, Action) management model which will result in continuous improvement or kaizen. quality as seen in the Deming Cycle [2]. Where the improvement model will run continuously which is developed on four main components sequentially' Prasojo (2011) [3]. The Deming cycle is a continuous improvement model developed by W.Edward Deming which consists of four main components in sequence. Thus, the process of managing information systems at universities can be started by planning what needs are needed to complete the needs of information systems in order to improve the quality of student services, conducting trials of developing information system services that can be compared with various existing information systems. , identify errors or deficiencies in the development of information systems, The Academic Management Information System (SIM Academic) is specifically designed to meet the needs of universities that want computerized education services to improve performance, service quality, competitiveness and the quality of human resources produced by Sevima, (2020) [4].

In addition to discussing academic information systems, in this study the researcher also tries to explain the relationship between information systems and service quality, where a good information system will of course produce good service quality. Academic Service Quality itself is the process of meeting the needs of students or students in educational services in an educational institution, from what is expected and received, the quality of service must always be improved in order to meet the needs of customers, both students and students. Based on the background of the problem above, in general this study aims to develop a model of academic information system based on meeting the quality of information system services. In particular, the research aims to: (1) develop an information system management model based on academic information system management to improve the quality of academic services at tertiary institutions, and (2) determine the empirical validity of information system management on the modification of management information systems to improve the quality of academic services, and describe the principles of management theory, including: (1). Planning, (2). Implementation, (3). Evaluation (4). Solutions or follow-ups in improving the quality of academic services at universities.

II. METHODS

This type of research method is descriptive with a naturalistic qualitative approach. Through this study the author will try to describe and analyze the implementation of academic information system management in improving the quality of higher education services. In line with this method, the following steps were taken: (1) selecting and determining the research location, (2) communicating with the object to be selected, both formally and informally, (3) identifying informants, (4) recording everything that occurred at the research location based on the facts of the document data, observations and interviews were carried out. For recording, the researcher will write down the facts at the location during the research. To produce certain products, research that is needs analysis is used and to test the effectiveness of these products so that they can function in the wider community, research is needed to test the effectiveness of these products, Sugiyono (2011: 297) [5].

III. RESULTS AND DISCUSSION

Academic Information System Management To Improve Service Quality To Students During the Covid-19 Pandemic At Universities in Jambi Province, specifically at UNAMA and IAI Tebo, it is necessary to develop an information system management model based on academic information system management. It is also necessary to have empirical validity of information system management on the modification of information system management to improve the quality of academic services. Academic information system management to improve the quality of this service is also inseparable from the principles and management functions that must be carried out systematically. which can be explained as follows:

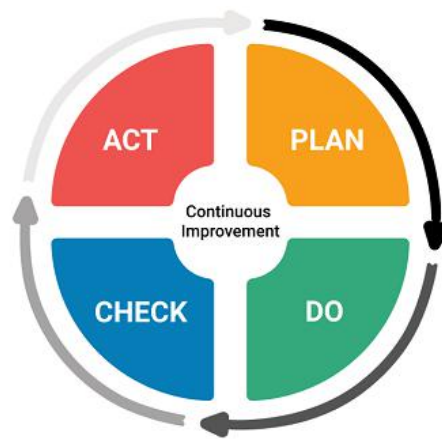


Fig 1.Plan, Do, Check, Act (PDCA) in developing a management model for higher education academic information systems.

Planning (Plan) In planning the management of academic information systems, one must be able to understand and describe the form of service or information needs that will be conveyed to students, the community, and lecturers. Then the description of the identification results is used as a follow-up to the solution to the problem. In planning the management of academic information systems, it is divided into three stages, namely, screening based on the emergence of several academic information system problems that are felt by lecturers and those closest to students (parents and families), then a referral or transfer stage is carried out if the problem cannot be handled by admin/lecturers. assignment to expert/professional programmers (application development developers and so on). However, if the admin/lecturer feels able to handle it, there is no need to make a referral. Identification is an initial activity planning that precedes the process of running the information system. Identification is the activity of marking or recognizing something, which is defined as a screening process or the process of finding cases in the field.

Identification here, can also be referred to as the process of early detection of problematic academic information system management, which has failed or is missing information. Identifying a problem means identifying a condition or something that feels deviant. Problems in the management of academic information systems are obtained from student complaints, their families, lecturers' complaints when accessing information, or can be obtained from experiences in the field. Planning according to Robbins (1984) [6]: 'planning is the process of determining goals and determining the best way to achieve goals'. in Syafaruddin (2019: 72) Koontz and O'Donnel (2017: 92) [7] said: 'Planning is the function of a manager which involves the selection from alternatives objectives, policies, procedures, and programs'. Planning is the function of managers to select goals, policies, procedures, programs from various alternatives. The first stage of the PDCA model is to identify the problem to plan the steps that need to be taken in finding a solution. This is adapted to the size of the project whether large or small, complex or simple. Usually this stage contains small steps that need to be taken to make proper planning to anticipate the possibility of failure.

Implementation (Do) management of academic information systems, SIM ACADEMIC (Academic Management Information System) is an Academic Information System that was built to provide convenience to users in online campus academic administration activities, such as the New Student Admission (PMB) process, making class schedules, filling out Study Plan Cards (KRS), filling in grades, guardianship, data management for lecturers & students. This system can also function as a support for data analysis in determining campus decisions. Academic SIM is the right solution for universities, because this system is usually already integrated with several modules, including:

1. New Student Admission (PMB)
2. Academic Finance
3. Host to Host
4. Academic Administration System
5. PDDIKTI Integrator

Academic information system management in its implementation is an activity or process in identifying and processing data, conveying data and evidence which then responds to these facts with a certain size or parameter based on certain goals. To get the facts, data, and evidence, a method/measurement tool is needed. Information system management activities are carried out by one university and another. In the implementation of information system management, referring to the Do theory in the “Daming Cycle. In the PDCA cycle the “Do” is to implement: “Develop and test potential solutions. The Do stage is the stage of implementing or carrying out everything that has been planned at the Plan stage including carrying out the process, At the Do stage in the management of academic information systems according to McLoughlin, James and Lewis, Rena B in Yuwono (2013: 23) [8] are: 'In the process of implementing an academic information system, it must go through a screening, referral, and classification planning process. can be done', the steps for implementing an academic information system will be described in the chart below:

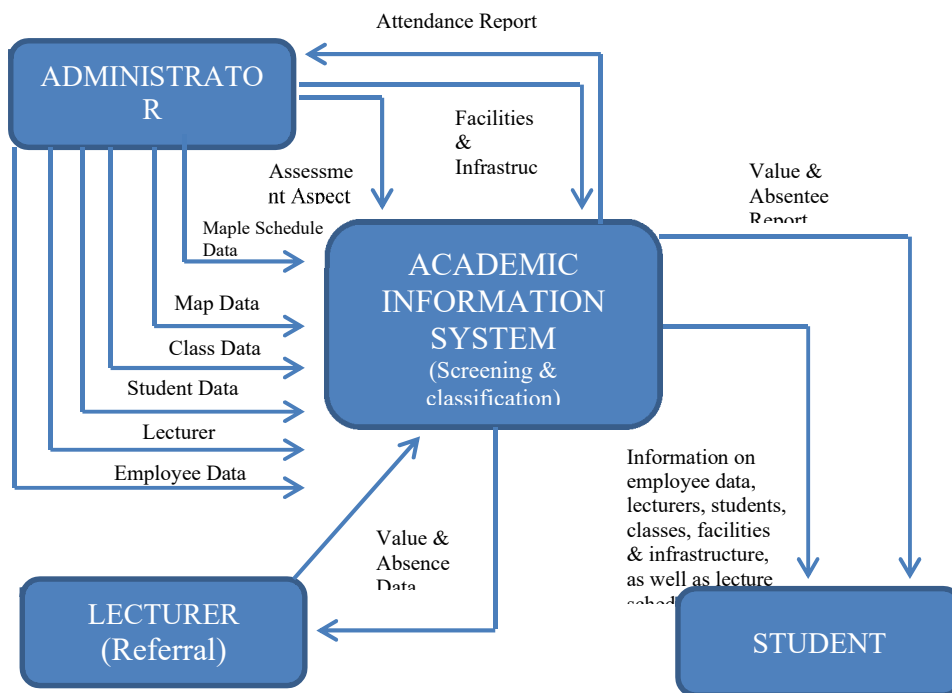


Fig 2. Implementation of Academic Information System

Evaluation (Check) In the management of academic information systems, at this evaluation stage, researchers must determine what areas will be evaluated. The evaluation of information systems for improving academic services is carried out at the Academic and Student Administration Bureau (BAAK) with a focus on the academic service process. Where the academic service process in the Academic Administration bureau has the task of providing technical and administrative services in the academic field within the university environment, the Academic Administration Bureau uses several auxiliary applications. IT internal parties build supporting applications. Until now, the implementation of the application has not been evaluated to ensure alignment with the objectives of IT academic information system management. The process of data analysis occurs simultaneously or rotating, which means that in the data analysis process starting from data collection to data analysis itself, the data analysis process can be described as follows: According to Miles and Huberman stated that 'qualitative data analysis uses words that are always arranged in an expanded or described text. When giving meaning to the data collected, the data is analyzed and interpreted' in Ghoni and Al Manshur (2014: 306) [9]. Evaluation in information systems is a systematic and continuous process in collecting, interpreting, narrating, and presenting various information about a program that can be used as a basis for decision making, policy formulation and program development in the next step.

Follow-up (Act) In the act stage process, which is the stage to take the necessary actions on the results of the check stage, by following up or implementing a comprehensively improved solution, there are two types of actions that must be taken based on the results achieved, including: "(1) Corrective Action,

namely in the form of action solutions to problems encountered in achieving the Target. The corrective action must be taken if the results do not meet the achievement targets. (2) Standardization Action, which is an action to standardize the best way or practice of action that has been taken. This standardization action is carried out if the target results are achieved according to what has been set. Based on the process flow of planning, implementation, up to the time of evaluation, follow-up to the development of academic information systems at universities can be implemented from the information system governance process where information technology at universities will be empowered if accompanied by policies that can improve the operationalization of roles and functions. that information technology. Coherence of technology, work units, human resources, and regulations should be carried out consistently.

IV. CONCLUSION

By analyzing each previous section, it can be concluded that the system that has been running at UNAMA and IAI Tebo universities so far has been carried out manually with the help of computer technology. However, the system has been able to provide academic information, both for the benefit of education management, as well as for customer satisfaction. The drawback is in terms of the speed of the process of providing valid data and information. The effectiveness of the implementation of the Academic SIM using the Academic Information System (SIKAD) as a whole is 83.21% of the expected criteria. Meanwhile, based on the dimensions of the effectiveness of the information system, the results are: system quality of 86.67%, information quality of 83.00%, and service quality of 76.67%.

With the implication that is obtained as a future agenda from this finding is that the research can be carried out in different places with a wider object. For further research, it should be carried out in all public sector agencies. Further research can also expand the model developed in this study to determine the effect of the use of information systems on individual performance, for example by including user satisfaction variables. In addition, academics and researchers need to prove the Theory Reasoned Action, Technology Acceptance Model, Task Technology Fit and the Technology to Performance Chain Model in the public sector.

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REFERENCES

- [1] Amir, MF 2016. Higher Education Performance Management. ISBN: 978-602-318-162-9. Jakarta: Media Discourse Partners. 388 pp.
- [2] Benneyan, JC, & Chute, AD, 1993, SPC, Process Improvement, And The Deming PDCA Circle In Freight Administration. *Production and Inventory Management Journal*, 34(1), 35.
- [3] Prasjo Diat Lantip, Riyanto, Education Information Technology Yogyakarta: Gava Media, 2011.
- [4] Sevima, Admin. 2020. The 6 Most Effective Learning Methods During a Pandemic According to Experts. <https://sevima.com/6-methods-of-learning-the-most-effective-di-masapandemi-according-to-the-experts/>, opened on May 14, 2022 at 12:03
- [5] Sugiyono (2011:297) Research Methods are qualitative, quantitative and R&D. Alfabet
- [6] Stephen P Robbins and Mary Coulter, Management, (Jakarta: PT Prenhalindo, 1999), 6th Ed, p. 200
- [7] Koontz, Harold & Cyril O'Donnel & Heinz Weihrich. 1986. Management. Volume 2. Translation:Gunawan Hutaaruk. Jakarta: Jakarta Publisher.
- [8] Lewis. Rena B, and Mclaughlin, James J. (2015). Assessing Special Student, Second Edition. USA: Merrill Publishing Company.
- [9] Ghony, D. and Almanshur. F. 2014. Qualitative Research Methodology. Ar-Ruzz Media: Yogyakarta.