

# Academic Digitalization in Postgraduate Programs Universitas Negeri Makassar

Citra Rosalyn Anwar  
Postgraduate Programs  
Universitas Negeri Makassar  
Makassar, Indonesia  
citra.rosalyn.anwar@unm.ac.id

Abdul Hakim  
Postgraduate Programs  
Universitas Negeri Makassar  
Makassar, Indonesia

Nurhikmah  
Postgraduate Programs  
Universitas Negeri Makassar  
Makassar, Indonesia

**Abstract**—The academic services activity at PPS UNM is shifting from manual-based services to online-based services. This phenomenon is interesting to examine because of the transfer of the service system from manual to digital, not only on the readiness of the device and system, but more on the readiness of its human resources as users. This process was raised in this study. By using uses, the Phenomenological view of Albert Schutz, with the focus of the research is the digital academic service system at PPS UNM. The background of the study is the process of transitioning a manual-based academic service system to a digital-based service system. Users of academic digital service systems require adaptation from manual-based service switching to digital bases. This research was conducted at the Universitas Negeri Makassar Postgraduate Program with the subject of this research being, academic staff and lecturers as users of the academic service system, with qualifications, in accordance with the purposive sampling technique of determining samples. The process of collecting data through in-depth interviews and observations, of the research subjects that have been determined. The results of the study show, various obstacles, and ease of use of the academic digital service system in the postgraduate of Universitas Negeri Makassar.

**Keywords**—academic services, digital, campus

## I. INTRODUCTION

The rapid development of information and communication technology, known as Information and Communication Technology (ICT), has penetrated various fields of life including education and teaching [1]. The education world should be in touch with digital, but in reality digital administrative services is still limited. In The perspective of digital campus is rolling with the expectation of the stakeholder that the campus cyber system includes administrative services, easy access to learning resource materials, educational evaluation, access to academic data, lecture schedules, evaluations and learning outcomes that can be accessed at any time. The three main pillars of the digital campus concept are computers, communication, and content [2]. Until now, the process of establishing a digital campus is still in the process of finding the ideal form. The problem is that the development of a good ideal campus is necessary for the availability of infrastructure and adequate quality of human resources.

From year to year, the idea of a digital campus is experiencing rapid progress. At first, it only relied on personal computer utilization using computer network facilities (computer network). Currently, it has grown to utilize online networks that use the internet and intranet.

Intranet, for example, allows the academic community in one campus to communicate online. An intranet network allows the transfer of data and information in one area that is connected directly. Likewise, with the internet, its existence also encourages computer experts to make several applications that support the formation of digital groups, such as academic information systems and other services.

Universitas Negeri Makassar, which is a university that organizes Magister and Doctoral Programs, in the management of academic information services is still not completely abandoning the manual system so that the information service system has not been fully integrated by information service activities at the UNM PPS have several constraints and are less efficient and ineffective. This can be seen as the unavailability of information systems to obtain journal reference sources that become Postgraduate Program subscriptions, academic calendar schedules, schedules that take exams both thesis and dissertation, information on PPS activities in the field of scientific studies including seminars and workshops. The information service system is still being developed and disseminated

Based on this phenomenon, researchers are interested in describing a digital-based academic information service system in the UNM Postgraduate Program. UNM Campus as a college with an “A” (Superior) accreditation, needs to develop or build a university academic information system in assisting educational activities in providing services to achieve its goals, in providing services for all civitas academics, the general public and stakeholders, especially those related to data, information, technology and to encourage the achievement of the vision and mission of UNM with the aim of increasing productivity and quality of education.

The Characteristics of information systems in Universitas Negeri Makassar are supported by higher education institutions to achieve the goals of the institution. The information system aims to provide services needed by the academic community in a reliable and affordable manner; enhance services in relation to the mission of higher education; and provide accurate information input and output. The information system consists of information systems that are independent, but still in line with the vision and mission of the Universitas Negeri Makassar Postgraduate Program.

The purpose of this research is describing academic information service system with this digital campus concept is to provide an overview of the implementation and value of the implementation of the higher education academic

information system applications that increase the productivity and quality of educational services.

Based on the phenomenon described above, the problem of this research is: How is the development of a digital-based academic information service system at the Universitas Negeri Makassar Postgraduate Program that meets the criteria of valid, practical, and effective? These problems are broken down into several sub-problems, namely:

1. What is academic information established in the development of digital information service applications at the Makassar Postgraduate Program?
2. How did the lecturer respond to digital information services at the Makassar Post Graduate Program?
3. What is the response of students to digital information services at the Postgraduate Program of Universitas Negeri Makassar?

In general, this study aims to describe a digital-based academic information service system at the Makassar State Post Graduate Program that meets the criteria of valid, practical, and effective. Operationally, the specific objectives of this research are: 1) Provide an integrated design picture of a digital academic information service system that matches the characteristics and needs of UNM PPS students and 2) Develop a roadmap to assist the management process of campus academic information service systems with the application of information technology towards digital campus.

## II. RESEARCH METHODS

This type of research is Qualitative Descriptive with Phenomenology Paradigm Albert Schutz. Research that provides phenomena and an overview of digital services in the UNM Postgraduate Program. The subjects of this study consisted of: (1) lecturers; (2) students; and (3) administrative officers. Through interviews, direct observation and literature search, the determination of resource persons was done by Snowball sampling technique. Where the initial criteria of the resource person were predetermined.

## III. RESULTS AND DISCUSSION

Digital Services even though the goal is to make it easy but, in practice it is not always easy to implement, especially considering that even human resources must be prepared as users. Various behaviors found in this research are prepared systems themselves that have not been well socialized, especially users. Students still have to do various academic services manually. Administrative officers are still in the stage of adjusting the use of this digital service. Lecturers themselves are still having difficulties in using this service. There are still things they have to do manually.

Communication tools and systems created by humans are then known as Information Technology (IT). IT continues to experience development in terms of shape, size, speed, ability to access multimedia and computer networks. In line with the rapid development of computer network technology, it is easier to communicate and exchange data in computer networks. In the field of education, information technology has been used to support administrative services,

learning processes (lectures), re-registration, libraries, access to values, quick and easy reference searches, research processes, tuition payments, even for new student admission selection.

Communication facilities are growing so rapidly that it is easy to get information both through telephone tables, cell phones, television and satellites growing very rapidly [3]. Weaver et al. define technology as a whole method that rationally leads and has characteristics of efficiency in every human activity [4]. Anglin defines technology as the application of behavioral and natural sciences and other knowledge in a systemic and systemic way, to solve various problems facing humans [5]. Appropriate technology is technology that is in accordance with the culture of the community concerned.

The efforts of each university (PT) to improve service to the entire academic community, one of which is the provision of information and communication technology (ICT) service facilities. One effort to improve the competitiveness of universities that must be prepared is to improve good governance. The management of a good tertiary educational institution cannot be separated from the role and utilization of ICT [6].

The characteristics of information systems needed by universities are as follows Mutyarini & Sembiring [7]:

1. As a supporter of higher education institutions to achieve their goals
2. Providing services that the academic community needs in a satisfying, reliable and affordable manner.
3. Increasing the quality of service in accordance with the mission of higher education
4. Provide accurate information into and out of the institution
5. Consists of information systems that are independent but still in line with the vision and mission of the institution.
6. Each unit can manage its own information system so that the standards and applications used between units vary.
7. It is accessed by a variety of academic communities with different levels of needs, roles, and knowledge.

College academic information system is an information system about the educational activities of a college where the components of education, especially in universities, can communicate through a media that is connected to the intranet and the internet which is more communicative and interactive because it is dynamic, both concerning the academic field at the university High and other fields presented by universities with the aim of facilitating access to information about education and assisting various activities in the management of education in higher education.

Even though the perceived benefits are so great because in terms of time it is more efficient because academic services can be done anywhere and anytime without being bound by time (working hours) and place. Students can do various academic activities without having to come directly to campus. But the ease of course still has to deal with obstacles such as the readiness of human resources as technology users. Socialization to users, and the quality of services prepared, devices and systems. So that during peak hours the service can still be maximized.

## IV. CONCLUSIONS

Digital systems are very important in supporting various forms of academic services, especially for user time efficiency, but on the one hand, the readiness of devices, systems, and users also needs to be noticed. Because no matter how good the system prepared by the UNM Graduate Program still requires the ability of its users.

## REFERENCES

- [1] J. Peppard and J. Ward, *The strategic management of information systems: Building a digital strategy*. John Wiley & Sons, 2016.
- [2] A. Abuarqoub *et al.*, "A survey on the internet of things enabled smart campus applications," in *Proceedings of the International Conference on Future Networks and Distributed Systems*, 2017, p. 50.
- [3] Y. Zheng, M. Hatakka, S. Sahay, and A. Andersson, "Conceptualizing development in information and communication technology for development (ICT4D)." Taylor & Francis, 2018.
- [4] P. Weaver, L. Jansen, G. Van Grootveld, E. Van Spiegel, and P. Vergragt, *Sustainable technology development*. Routledge, 2017.
- [5] G. J. Anglin, *Instructional technology: Past, present, and future*. ERIC, 1995.
- [6] R. Yunis and K. Surendro, "Implementasi Enterprise Architecture Perguruan Tinggi," *J. Fak. Huk. UII*, 2010.
- [7] K. Mutyarini and J. Sembiring, "Arsitektur Sistem Informasi untuk Institusi Perguruan Tinggi di Indonesia," *Pros. Konf. Nas. Teknol. Inf. Komun. untuk Indones.*, pp. 102–107, 2006.