

PORTAL ACADEMIC PORTAL INNOVATION BASED ON WEBSITE IN THE ERA OF DIGITAL 4.0 TECHNOLOGY NOW

ARPAN¹⁾AUTHOR

*Lecturer Of Computer System Study Program
Faculty Of Science And Technology
Universitas Pembangunan Panca Budi
Medan City, North Sumatera Province, Indonesia*

Muhammad Muttaqin²⁾ CORRESPONDING AUTHOR

*Lecturer Of Computer System Study Program
Faculty Of Science And Technology
Universitas Pembangunan Panca Budi
Medan City, North Sumatera Province, Indonesia*

ABSTRACT

Abstract -Technological developments that are intensively carried out from various innovations can be a benchmark for the start of more modern and inseparable technological advances for technology users in accessing various information.To facilitate the use of technology in terms of conducting academic activities through the university's website then clicking on the lecturer portal in accordance with the number of each lecturer's identity. The use of this portal is for easy data collection and supervision of lecturers for each activity through this portal. Some features have been adapted to the needs of lecturer activities after the Tri Dharma established by the University which must be carried out by all lecturers all made easier through the sophistication of technology in the current digital era with no limits on space and time. The research method used in this study is the Survey method, where this method takes data from a sample of a population using a questionnaire to collect data. From the value of this research carried out at the Universitas Pembangunan Panca Budi of Lecturers and Students of the Faculty of Computer Science with the reliability value using the SECI method in Socialization of 0.8045, Externalization of 0.813, Combination of 0.728, and Internalization of 0.751. From the value obtained it is known that the most influential factor is externalization is a factor that comes from outside. As a refinement of future research, it is necessary to develop a system to gain new knowledge in developing cases.

Keywords: Academic Portal, Digital Technology, Knowledge Management Sharing, SECI Method

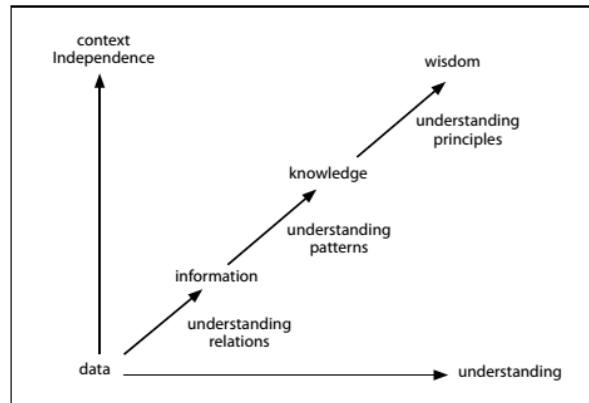
I. Introduction

The current development trend in technology has become a necessity for every user who wants quick access to access, known as the era of digital technology 4.0. Likewise in the educational environment that is sheltered on campus the use of technology makes it easy for lecturers, students and the academic community to use the portal as a medium of information and communication that can be used throughout the academic community which can be accessed wherever they are. From input to the development of a recapitulation sharing system that can be obtained can be used as academic information to improve quality management at Panca Budi Development University by always

updating the application link through various methods and research not only limited to teaching but also for research, community service as a form of assessment a performance that has to be done every semester.

II. LITERATURE REVIEW.

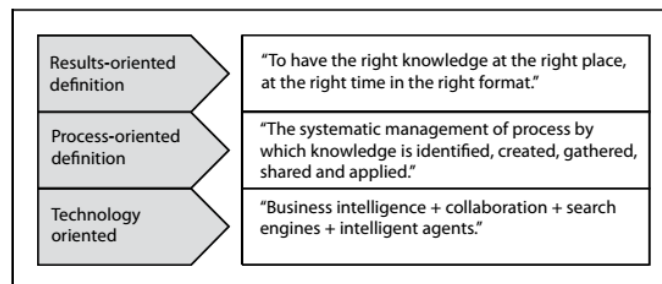
If we talk about knowledge, we will talk about data. Data is a number, word or letter without any context. A collection of data, not information. That is, if a collection of data has nothing to do with each other, then it is not information. In other words, what is important in making data or data collection context data, is the relationship between the pieces of data.



Gambar1. Conceptual Progression From Data to Knowledge Source : Adapted from Liebowitz, (2003)

In general, there are two kinds of knowledge, namely tacit knowledge and explicit knowledge. Tacit knowledge is everything stored in the human brain. Explicit knowledge is everything that is well documented, which is usually stored in facilities, products, processes, services, and systems. And both types of knowledge can be obtained from the interaction or innovation. "Knowledge management is basically about a systematic approach to managing intellectual assets and other information in a way determined by the company with competitive advantage" (Bergeron, 2009).

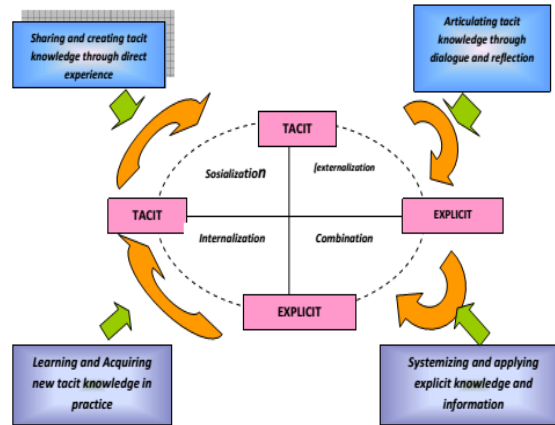
Simply put, knowledge management is the conversion of tacit knowledge into explicit knowledge and dividing it into.



Gambar 2. What is KM ?

Source: Benjamins, V.R., "Knowledge Management in Knowledge-Intensive Organizations", Intelligent Software Components (2001).

There are two main aspects of knowledge management, namely information management and human resource management. In practice, knowledge management involves, inter alia, identification and mapping of intellectual assets in an organization. Where, knowledge management can be considered as a process of auditing intellectual assets that focus on a unique organization, its resources and important functions. (Bergeron, 2009).



Gambar3 :PenciptaanKnowledge management
Sumber :Nonakadan Takeuchi (2004:15)

III. RESEARCH METHOD

The academic portal of the lecturer from the Universitas Pembangunan Panca Budi website consists of menus such as course schedules, subject matters, value management, academic guidance, and final assignment guidance. Academic Guidance and final assignment guidance are used by lecturers to conduct guidance processes such as counseling between lecturers and students so that if there are students who want to ask questions about academic issues, they can directly contact the lecturer through the academic guidance menu available on the academic portal. While the final assignment guidance menu is used by lecturers and students to conduct final assignment guidance or thesis so that students can conduct guidance in addition to meeting directly with the supervisor, this menu can also be used as an alternative to the guidance process. Therefore, the population in this study are academic supervisors and final project supervisors and students who are conducting academic guidance and final assignment guidance. The data collection method uses a survey process through questionnaires distributed to lecturers and academic guidance students who have a portal. In this study, the questionnaire used consisted of four parts, namely Socialization, Internalization, Externalization, Combination.

The research was conducted in several stages, namely the preliminary stage, reducing the data, presenting the data, presenting the model and drawing conclusions, the steps are as follow:

1. The preliminary stage is carried out by doing preliminary observations, finding the phenomenon of the problem and identifying the initial problem in the research and making a research proposal.
2. The second stage is collecting data using a survey process through a questionnaire which will be distributed to lecturers and academic guidance students who have a portal consisting of 4 parts namely Socialization, Internalization, Externalization, Combination.
3. The third stage is the stage of presenting data, presenting data can be done in brief descriptions, charts, relationships between categories, flowcharts, and others. Presentation of data conducted by the author is data from literature studies and previous research relating to the topic of discussion.
4. The fourth stage is the presentation of the model through the results and comparing the results with previous research.
5. The last stage of the conclusion is to conclude the results achieved and recommend to relevant parties.

IV. RESULT AND DISCUSSION

An analysis and research was carried out on the concept of the academic portal of the Universitas Pembangunan Panca Budi, followed by an analysis of the acceptance of the academic portal to the Lecturer and Student respondents at the Universitas Pembangunan Panca Budi, Medan. After that, an analysis of the SECI approach (Socialization, Externalization, Combination, Internalization) was carried out. which will be continued at the stage of the process of analysis of the academic portal using the SECI (Socialization, Externalization, Combination, Internalization) approach. The next stage of analysis that will be carried out is the stage of data collection and analysis in which measurement instruments will be made in the form of questionnaires, data collection, and data analysis. The distribution of questionnaire data is carried out at the Universitas Pembangunan Panca Budi, Medan. Respondents in the study consisted of lecturers and students from each faculty in the Universitas Pembangunan Panca Budi, Medan. The results of the questionnaire respondents were processed using SPSS 22 software. The number of questionnaires analyzed was 60, each of which was divided into two respondents namely students and lecturers at UniversitasPancabudi Medan. The number of questionnaires was considered to be sufficient and sufficient to be analyzed according to the Slovin method. Following the process of distributing the research sample in the form of questionnaire data distributed to respondents of academic portal users at Universitas Pembangunan Panca Budi Medan. The reliability value using the SECI method can be Socialization at 0.8045, Externalization at 0.813, Combination at 0.728, and Internalization at 0.751. From the values obtained, it is known that the most influencing factor is Externalization, which is a factor that comes from outside.s.

CONCLUSION

The conclusions obtained from the research results are:

1. The Knowledge Management System portal makes it easy to manage tacit knowledge to explicit because stored knowledge is digital and more structured.
2. The Faculty of Computer Science has a lot of knowledge about the use of the academic portal so that this facility can be used to process information given by lecturers to students or vice versa it becomes easier to develop guidance activities with an efficient time and want to do knowledge sharing needs to be supported by adequate technology and compensation as an appreciation for the efforts made by lecturers and students as a manifestation of the use of the Academic Portal as a medium for conducting Student Final Assistance Guidance.
3. The reliability value using the SECI method can be Socialization of 0.8045 so that it can be understood that the interaction of individuals involving language and must be observed first shows a consistent value because it is greater than the standard reliability value. Externalization of 0.8105 which means that respondents can capture information through the idea of knowing pictures through an easily understood format, students and lecturers capture relevant knowledge about the use of the Academic Portal through documents into an understanding that is implemented, and this point is another factor influencing the four factors found in this SECI method. The Combination Factor has a reliability value of 0.728, this value is smaller than the other 3 points, but it can still be stated that respondents can capture information about the use of the Academic Portal both from within and outside the UNPAB environment to be implemented on direct use to the Academic Portal owned to do Guidance. Internalization value of 0.751 which shows the results of measurements carried out shows a consistent and trustworthy value because it is greater than the established reliability standard limit of 0.66.

Suggestions for future improvements to the Web-based KMS are:

1. I can use other methods to test knowledge management sharing and can develop the system to get new knowledge in developing knowledge management sharing.
2. Each lecturer and student can make explicit all tacit knowledge possessed so that it can be disseminated through a media portal between lecturers and students. Attitudes that must be

cultivated and cultivated in the formation of this system include a strong urge to create, capture, capture, store, process, and disseminate the knowledge possessed using the Academic Portal that has been provided by the University.

3. The feature that should be improved is the help menu where it will be explained how a good and right mechanism is in conducting guidance using the Academic Portal, so that users, both lecturers and students can better understand their use to achieve the desired academic guidance process effectiveness. There is also a Conference menu to use when making guidance via remote video calls.

BIBLIOGRAPHY

- [1.] Bergeron, B. (2009). Essentials of Knowledge Management. John Wiley & Son, Inc.
- [2.] Cahyadi, D; Using, W; 2015, Web-Based Knowledge Management System as a Human Resource Development System in Water Resources Management, Case Study of Public Companies (PERUM) JasaTirta II
- [3.] Cheng, E.C.K; 2015, Knowledge Management for School Development,, Knowledge Management for School Education, SpringerBriefs in Education, DOI 10.1007 / 978-981-287-233-3_2, The Author (s) 2015
- [4.] Han Sulaiman; 2015, Web-Based Knowledge Management System Service Center, Exacta Factor, 8 (3): 220-230, 2015
- [5.] Hoga, S; Tony, D; Bobby, R; Didik, S; Knowledge Management Information System at Strmik University Widya Dharma Pontianak, Journal of Engineering and Computer Science Vol. 01 No. 03, Jul - Sep 2012
- [6.] Nurelasari, Ela; 2014, Analysis of the application of Higher Education Knowledge Management System Using the Most Admired Knowledge Enterprise, Journal of BianglalaInformatika, Vol. II No. 2, September 2014
- [7.] Rhoni, R; 2013, Application of Knowledge Management in the Library (Case Study in the Curated Stain Library), Khizanah Al-Hikmah, Vol 1 No.1, January - June 2013
- [8.] Rice, J; Rice, B., 2015, International Journal of Organizational Behavior, 671-682, Vol. 9, No. 8, August 3, 2015
- [9.] Setiawan, A; AbRazak C, H; Halina, M, D; 2013, Knowledge Management System as Enabler for Knowledge Management Practices in Virtual Communities, IJCSI International Journal of Computer Science Issues, ISSN (Print): 1694-0784 | ISSN (Online): 1694-0814, Vol. 10, Issue 1, No 1, January 2013
- [10.] Uriarte, J. F. (2008). Introduction to Knowledge Management. Asean Foundation
- [11.] Winda, K.S; Ken D.T; Implementation of Web-Based Knowledge Management System (KMS) Case Study of the Technician and Network Section of the Faculty of Computer Science, Sriwijaya University, Journal of Information Systems (JSI), VOL. 6, NO.2, October 2014
- [12.] <http://pancabudi.ac.id>. Accessed by Arpan, accessed on 1 July 2019 (Online).