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Behavioral Changes of Lecturers in using Learning Management System (LMS) During Covid-19 Pandemic

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Article Info

Abstract

Keywords: Covid-19 Learning Management System Behavioral Changes This study examines lecturers' behavioral changes in using a learning management system (LMS) during the COVID-19 pandemic at Tadulako University. This research used a qualitative approach, and the population was lecturers of Tadulako University selected using a purposive sampling technique. Data were collected through observation, interviews, and documentation. Then, the collected data were analyzed using several stages, including data reduction, data presentation, and conclusions. The results showed changes in lecturers' behavior in Tadulako University in using LMS for distance learning. Based on internal factors, the changes can be seen from lecturers' willingness to improve their skill in using the LMS through the internet and YouTube and learn how to use LMS from other lecturers who have mastered it. Based on external factors, changes occurred due to pressure to implement LMS in distance learning as the pandemic worsened. The applicable policies and circular letters require lecturers to use LMS during the COVID-19 pandemic.

Abstrak

Kata kunci:
Covid-19
Learning Management
System
Perubahan Perilaku

Penelitian ini bertujuan untuk mengkaji masalah perubahan perilaku dosen dalam menerapkan learning management system (LMS) selama pandemi COVID-19 di Universitas Tadulako. Penelitian ini didesain menggunakan pendekatan kualitatif. Populasi penelitian ini adalah dosen Universitas Tadulako yang ditentukan dengan teknik purposive. Teknik pengumpulan data terdiri dari observasi, wawancara, dan dokumentasi, sedangkan analisis data dilakukan dengan beberapa tahap, diantaranya reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan terjadi perubahan perilaku dosen Universitas Tadulako dalam pembelajaran jarak jauh (online) menggunakan LMS sebagai media pembelajaran. Perubahan pada faktor internal dilihat dari adanya kemauan dosen untuk meningkatkan kemampuan melalui internet dan youtube, serta berusaha untuk mempelajari penggunaan LMS dengan dosen yang memahami dan mengetahui penggunaan LMS. Perubahan pada faktor eksternal terjadi karena adanya tekanan terhadap para dosen agar menerapkan pembelajaran jarak jauh dengan menggunakan LMS karena didorong oleh situasi pandemi yang semakin parah, serta adanya kebijakan dan edaran yang mengharuskan dosen untuk menggunakan LMS selama pandemi COVID-19.

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INTRODUCTION

The COVID-19 pandemic has changed people's lives. It changes the way of life in various sectors (Dube, 2020), including education (Rachmawati et al., 2020). This pandemic has a financial impact on educational institutions worldwide (Murphy, Eduljee, & Croteau, 2020). Educational institutions worldwide have been closed during this pandemic due to its massive impacts on the education system, and it affects more than 60% of students (Alqahtani & Rajkhan, 2020; Mukhtar, Javed, Arooj, & Sethi, 2020).

Government around the world have controlled the spread of COVID-19 by issuing policies including social distancing, isolation, and quarantine (Anderson, Heesterbeek, Klinkenberg, & Hollingsworth, 2020; Hopman, Allegranzi, & Mehtar, 2020; Raza, Qazi, Khan, & Salam, 2020; Wilder-Smith & Freedman, 2020). It aims to stop the spread of COVID-19 as the virus can spread through humans and transportation activities. Those policies have been successfully carried out in China (Kraemer dkk., 2020) and then followed by more countries, including Indonesia.

Significant changes due to the pandemic have made educational institutions worldwide, including Indonesia, applying distance learning (online) systems (Gunawan, Suranti, & Fathoroni, 2020). The face-to-face system was not implemented anymore to stop the spread of COVID-19 in universities as government policies emphasize the closure of public facilities, including educational facilities at all levels of education. During the COVID-19 pandemic, the rapid transition to online learning in higher education has forced learning strategies (İnce, Kabul, & Diler, 2020). Learning strategies change rapidly and are not supported by the skill of available human resources. The changes caused by the pandemic are fast, so human resources are forced to work using technology, but they do not have the skill to do so.

Many higher education institutions in Indonesia has implemented online learning based on the Circular Letter of Minister of Education and Culture Number 3 of 2020 concerning Prevention of COVID-19 in the Education Unit (Surat Edaran Mendikbud, 2020a), and Number 36962/MPK.A/HK/2020 concerning Online Learning and Working from Home in the Context of Preventing the Spread of Corona Virus Disease (COVID-19) (Surat Edaran Mendikbud, 2020b), as well as Circular Letter and Guidelines from Regional Heads and Rectors of each University. Based on those circular letters, the Minister of Education and Culture encourages educators to present fun learning from home for students and provide effective teaching and learning activities based on the respective regions' conditions (Kompasiana.com, 2021).

Referring to the circular letter issued by the Ministry of Education and Culture, Tadulako University, the location of this study, has also implemented online learning. The lecturers at this university use various platforms to support online learning, including *WhatsApp*, *email*, *classroom*, *zoom*, *Learning Management System* (LMS). Further, this university's Rector has issued a circular letter concerning online learning implementation by requiring lecturers to use LMS developed by this university.

The circular letter requires lecturers at Tadulako University to use the LMS during the pandemic. LMS is media to deliver and distribute teaching materials, including definition and evaluation of individual learning and educational targets, the process to realize the targets, data collection, and presentation to control the learning organization process as a whole (Soykan & Simşek, 2017).

Technology has played a significant role in teaching in higher education in recent years, and a fundamental role has been demonstrated by LMS (Cantabella, Martínez-España, Ayuso, Yáñez, & Muñoz, 2019). Some universities have utilized technology in learning, but most universities still use conventional learning models in Indonesia. The composition instructors have used LMS since the 1990s (Duin & Tham, 2020; Hutchison, 2019). The pandemic forces universities in Indonesia to use technology as a learning model. Tadulako University uses LMS as the primary platform for online learning or distance learning.

LMS utilization faces many challenges due to the large number of users resulting in dissatisfaction among students, and it has led lecturers to use other platforms (*WhatsApp, email, classroom, zoom*). Some previous studies revealed that LMS could work with information and communication technology (ICT) infrastructure and the readiness of human resources or, in this case, lecturers. During the COVID-19 pandemic, educational institutions in Pakistan have started using online learning (Mukhtar et al., 2020). Meanwhile, most universities in the US, UK, Canada, and Australia, including 28 universities in Saudi Arabia, have used different LMS for their academic activities. The LMS system relies on existing ICT infrastructure, and it uses a computer to run the system (Aldiab, Chowdhury, Kootsookos, Alam, & Allhibi, 2019).

Besides using ICT, the readiness of human resources is crucial in distance learning. The success in the implementation of distance learning depends on the user (Almaiah, Al-Khasawneh, & Althunibat, 2020). It means that user readiness highly supports the implementation of distance learning (online) at Tadulako University. The implementation of this system has changed the behavior of lecturers, both internally and externally.

This study refers to Fritz Heider's theory of social attribution. This attribution theory was proposed by a psychologist, Fritz Heider, who focused on events encountered by ordinary people in their lives and whether they relate the results of these events to internal or external factors (Demetriou, 2011). The theory explains that individual behavior from the internal factor includes traits or characters, attitudes, and others. In contrast, the external factor covers situational pressure in which specific situations affect the individual's behavior (Wijaya, Kebayantini, & Aditya, 2020).

This study examines lecturers' behavior in implementing distance learning (online) during the pandemic at Tadulako University. The field condition shows that many lecturers are not ready to use LMS, impacting the teaching and learning process. This condition encourages changes in lecturers' behavior, both internally and externally. Internally, there is less change in lecturers' behavior as they act as usual. Meanwhile, externally, less firm pressure on the use of LMS causes less optimal use. Based on the elaboration above, this study examines the issues in the changes in lecturers' behavior in using a learning management system (LMS) during the COVID-19 pandemic at Tadulako University. It is crucial to implement this study because it can address the challenges for lecturers during the pandemic. The previous learning system has never been done remotely at this university. The lecturers previously carried out face-to-face learning, and now they are required to use LMS without considering the readiness in running this system. Furthermore, this study significantly contributes to the use of LMS. It is expected to contribute to LMS use in the future, both at this university and others.

METHOD

This study used a qualitative approach to see data more broadly. The qualitative approach aims to understand people's beliefs, experiences, attitudes, behaviors, and interactions (Kalra, Pathak, & Jena, 2013). This research was conducted at the beginning of the COVID-19 pandemic from March to December 2020. The population was lecturers at Tadulako University, Palu, Central Sulawesi. The sample was selected using the purposive sampling technique. It means that the determination of the sample is carried out deliberately with specific considerations. It involved lecturers who use LMS for distance learning with the criteria of lecturers who have never used LMS and then used it after the circular letter and lecturers who try to improve the individual's ability to be advanced in using the LMS.

The data were collected through observation, semi-structured interviews, and documentation. The research instrument was based on the theory developed by Fritz Heider viewed from the internal and external behavior in using LMS during the pandemic. Based on this theory, some semi-structured questions were developed and used as a guide in conducting interviews with informants or samples. The collected data were then analyzed using data reduction, presentation, and conclusion.

FINDINGS AND DISCUSSION

This study examines changes in lecturers' behavior in using a learning management system (LMS) during the COVID-19 pandemic at Tadulako University. This study was carried out based on Fritz Heider's theory, which emphasizes lecturers' behavioral changes in using LMS during the pandemic viewed from internal and external factors.

Behavioral changes based on Internal Factor

In this study, internal behavior refers to lecturers' nature or character and attitudes in implementing distance learning using LMS at Tadulako University. The implementation of distance learning requires lecturers at this university to use LMS in the learning process. The observation and interview results showed that many lecturers had not used LMS in distance learning even though the Rector has issued a circular letter concerning LMS use. The results of interviews with informants showed that:

Internally, some lecturers reject the use of LMS in online learning because they do not know how to use it, and personally, some prefer to use other platforms such as Zoom, Google Classroom, WhatsApp, and email. But, I know that most lecturers prefer Zoom and Google Classroom, and most lecturers stated that they would learn how to use LMS to succeed in the Rector's program (NN2, 2020).

The result of observation revealed that in the implementation of distance learning at Tadulako University, most lecturers used unrecommended platforms for distance learning because of several reasons, for example, have not mastered the use of LMS, limited internet networks. Many LMS users hampered, causing trouble or difficult access to log in to the LMS.

Indeed, the use of an LMS facilitates the implementation of distance learning. LMS is relatively helpful in the online learning process and provides educational material without time or place constraints (Ain, Kaur, & Waheed, 2016). It will be easy to implement in universities with information and communication technology (ICT) infrastructure and adequate human resources. Nevertheless, it will be different for universities without such infrastructure.

The use of LMS dramatically facilitates the learning system during a pandemic, and even it makes the evaluations in educational institutions easier (Alias & Zainuddin, 2005). Further, it facilitates access between lecturers and students, exceptionally when universities are closed due to an emergency. Current conditions force universities to shift rapidly to distance learning (Almaiah et al., 2020). This condition cannot be avoided so that the lecturers have to be ready to face it. The interview showed that the lecturers at Tadulako University made changes individually to encourage the successful use of LMS by finding information on LMS use from the internet and YouTube. However, it has not been able to force lecturers to use LMS. The results of the interview indicated that:

Characteristically, I see that most lecturers have long-established characters, such as being unfamiliar (not familiar) with technology in learning. During the pandemic, they have difficulty dealing with learning systems changes from offline to online systems (NN1, 2020).

Then, these results are confirmed by the following interview results:

I see that many lecturers do not use LMS. I think it is because they do not understand how to use it and their long-established characters. Thus, it is difficult for them to deal with learning systems changes from offline to online systems. However, some have tried to learn how to use the LMS by contacting the LMS instructor at Tadulako University (NN3, 2020).

Previously, almost all lecturers had never used the LMS, and then they had to use it during this pandemic. On the other hand, lack of socialization and training in using LMS made it very difficult

for lecturers to use it optimally. Finally, many lecturers decided to use *WhatsApp, email, classroom*, and *zoom*. Based on the informant's interview, most lecturers used *classrooms* and *zoom* as media in online learning at Tadulako University.

This condition is also influenced by the lecturers' character who is not accustomed to using ICT infrastructure finds difficulties in using the LMS in the learning process in these rapid changes. This condition should receive special attention to prepare their readiness by providing infrastructure that supports distance learning. The availability of ICT infrastructure will familiarize lecturers with the use of technology in the learning process and indirectly develop the lecturer's character to be ready to use technology when there are changes in the learning system. It can be seen from the results of interviews with informants that lecturers' character that is difficult to change causes them getting difficulties in dealing with changes in the learning system during the pandemic (NN4, 2020; NN5, 2020).

This research also examines the attitudes of lecturers in facing distance learning during the COVID-19 pandemic. The interview results revealed that during the pandemic, the lecturer showed positive attitudes towards LMS use. The results of the interview indicated that:

Internally, most lecturers view LMS as something new and have not been able to implement it. Thus, many lecturers have not used LMS. However, they respond because they think more about the negative impact of face-to-face learning. Lecturers tried to face it using Zoom and Google Classroom, which is easier to understand (NN1, 2020; NN4, 2020).

Most of them support it due to worried about the implementation of face-to-face learning. In general, the positive attitudes or supports to stop the spread of COVID-19 at Tadulako University are shown by efforts to increase individuals' ability to use LMS. The pandemic has caused the government to issue policies, including social isolation. Through technology, education can get out of difficult times (Raza et al., 2020), and online learning technology can help carry out online learning even during the regional quarantine period (Zwain, 2019). Various platforms can be utilized in a pandemic, such as WhatsApp, email, Google Classroom, and Zoom. The interview results indicated that many lecturers do not use the LMS even though it is compulsory. Still, they prefer to use other platforms where they mostly use Zoom (NN2, 2020). The use of other platforms is due to the lecturers' capacity in which they are unable to use the LMS maximally. So, most of the lecturers use Google Classrooms and Zoom. Requires lecturers to be able to accept changes in the learning system.

The lecturers' behavior changes in which they did not care about the use of LMS. Now, they want to increase their ability to use it. The results of the interview showed that:

Lecturers respond positively to the change in the learning system from offline to online. However, with the lack of socialization on the use, lecturers are trying to find information through various media (NN3, 2020; NN5, 2020).

They tried to search for information from various digital media and platforms, even asking for training from lecturers who have mastered the LMS. It indicates a positive attitude in which the lecturer has made efforts to use LMS during the pandemic. It is in line with (Zimmerman & Schunk, 2006), who state that individual success and failure in academic achievement are associated with four factors: ability, effort, task difficulty, and luck. The COVID-19 pandemic requires changes in all aspects, including individuals (Habibi, 2020). The changes do not only in educators but also students (Mansyur, 2020). Changes occur due to the current pandemic condition requiring all education elements to change, including changes from conventional to online learning, and it highly affects both lecturers' and students' behavior.

Behavioral Changes based on External Factor

External behavioral changes of lecturers in this study refer to situational pressure in which particular situations influence an individual's behavior. Behavior changes come from both inside and outside of persons, such as pressure or situations. This study examines issues of behavioral changes of lecturers in implementing distance learning during the pandemic.

The behavioral changes can be seen from various aspects. In this study, the changes in lecturers' activities in the teaching and learning process from face-to-face or conventional to distance learning (online). The application of distance learning affects the behavioral changes of lecturers in the teaching and learning process. It can be seen from the results of interviews with informants that:

Almost all lecturers try to understand the use of LMS at Tadulako University, even asking for training in each faculty. They are not accustomed to using technology. But, during this pandemic, everything must change. Lecturers who previously taught conventionally changed to start using modern technology due to the pandemic (NN4, 2020).

It can be seen from the habits of the lecturers in which they previously teach directly, and now they have to shift to the use of technology so that most of them are not ready to face this situation. Therefore, this study aims to examine the issue of behavioral changes of lecturers viewed from external factors.

External factors of behavioral changes of lecturers are seen from the environment. The COVID-19 pandemic causes the change. The pandemic has prompted various governments worldwide and universities to implement a work from home policy and other social policies. The results of the observations and interviews showed that the behavioral changes of lecturers at Tadulako University are significantly based on the individual's internal factors, including the number of lecturers who are trying to understand and master the use of LMS (NN1, 2020; NN3, 2020; NN5, 2020). Due to external factors such as circular letters requiring distance learning and forcing lecturers to use LMS as learning media at Tadulako University. The results of the interview also showed that:

Lecturers are depressed by the current situation (during the pandemic). They are forced to use technology. The Rector of the University of Tadulako urges lecturers to use LMS as learning must be done online (NN2, 2020).

The pressure to use LMS was due to unavoidable circumstances in which Central Sulawesi Province is considered in the COVID-19 red zone. Thus, the Rector of Tadulako University issued a circular letter that requires lecturers to work from home. It followed the Minister of Education and Culture's decision and the Governor of Central Sulawesi Province's circular letter to stop the spread of COVID-19. The demand to implement the social distancing policy and work from home policy requires lecturers to design lessons enabling students to participate in the learning from their respective homes (Firman, 2020).

The emergence of policies and circular letters from the government created external pressure so that lecturers who never use LMS for distance learning try to start using LMS in the learning process. Indeed, it is due to pressure from various parties and pandemic situations. Therefore, lecturers at Tadulako University have to use LMS as learning media for distance learning.

CONCLUSION

Based on the study results, it can be concluded that there are behavioral changes of lecturers at Tadulako University in distance learning (online) using LMS as learning media. Behavioral changes can be seen from two factors, internal and external factors. The internal factor covers the willingness of the lecturers to learn how to use the LMS. Most of the lecturers even looked for information on using the LMS on the internet and YouTube. Besides, they try to find information from lecturers who have mastered the LMS and ask them to provide training. Meanwhile, external factor shows that the lecturer has not fully used LMS as learning media for distance learning at first.

Still, after the issue of policies and circular letters from the central government, local governments, the Rector of Tadulako University, they must use the LMS to support government policies in reducing the spread of COVID-19. The results of this study have addressed the proposed question. The implication is that lecturers have to learn and use various online learning media, not only limited to LMS, but other learning media such as WhatsApp, email, Google Classroom, and Zoom to stop the spread of the COVID-19 in universities.

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