

Online Learning Management System (OLMS) in Indonesian Higher Education: Investigating Benefits and Obstacles

Hidayatullah Yunus

hidayatunhas@englishdept.unhas.ac.id

Hasanuddin University

Abstract

The issue investigated in this paper is about the advantages and the challenges of Online Learning Management System (OLMS) in Indonesian Higher Educations. The aim of OLMS is to provide better service for students and to improve the quality of teaching and learning activity using internet and digital devices used in Indonesian higher education institutions. However, there are some obstacles encountered by lecturers and students in using OLMS. Therefore, this article examines the advantages of OLMS implementation by elaborating and discussing its drawbacks, particularly to investigate more closely in Indonesian Higher Education context. The method for this study was a comprehensive review, analysis, and synthesis of OLMS, its challenges and arguments to counter the challenges. In order to complete a comprehensive and integrative review of the literature surrounding online learning and learning management system, the writer completed an exhaustive review of referred and non-referred publications as outlined by Torracco (2005). As the findings, there are three main benefits of OLMS that Indonesian higher education students can get; OLMS provides easy and communicative access, enhances collaborative learning, and facilitates the students to express their opinion even though there are still some challenges that students and lectures face during the learning process such as; internet poor connection, the ability of lecturers to use online platforms, and the existences of less confident students. Hence, in order to succeed OLMS implementation, this paper concludes that enhancing the quality of online platform, encouraging the lecturers to be more active in teaching, and facilitating the learners are necessarily needed to be improved.

Keywords: Digital Learning, Online Learning, Indonesian Higher Education

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1. Introduction

In this current situation, technology really plays significant roles in education development where electronic devices such as mobile phone, computer, laboratory tool machine, and even robots are utilized to run students' and teachers' work. It also contributes much to the improvement of higher educations since the top universities implement internet-based learning system (Moodle, Sakai, Dokeos, Efront, Atutor, Canvas and Google Classroom) which is generally named as Online Learning Management System (OLMS) to provide better service for students and improve the quality of teaching and learning environment using digital devices. However, according to Ivanovic et al. (2013), in some developing countries, there are still some difficulties in implementing OLMS, and some experts also argue that the system still has some drawbacks, so the implementation would not contribute much to the education development especially in higher education sector. In addition, in my country, Indonesia, OLMS is necessarily needed to be implemented since the demand of internet use is very high, and it is considered as the top five for social media user in the world (Indonesian Ministry of Technology and Communication, 2015). Furthermore, this essay will examine the advantages of OLMS implementation in Indonesian Higher Educations by considering the challenges or the counter arguments and the ways to encounter the challenges. Hence, OLMS plays important roles to give benefits especially for students in relation to Indonesian Higher Education context. The benefits are helping students to have easy and communicative access, to conduct students' collaboration during the class activities and to encourage them to express their opinion.

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*Corresponding author
hidayatunhas@englishdept.
unhas.ac.id

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2. Purpose of the Study

The purpose of this article is to provide a comprehensive review of the importance of OLMS to be applied in Indonesian higher educations. The concept of learning management system is explained by Ivanovic et al., (2013). In particular, this approach is in line with the idea of Shin and Kang (2015) which elaborate online management system as a new learning tool that students can use to develop the learning environment and a way to get some better improvements in their study by using digital learning (Shin & Kang, 2015). Given this purpose, the research questions that served as the basis of this article are:

1. Why is OLMS important to be implemented in Indonesian Higher Education Institutions?
2. What are the challenges of OLMS implementation in Indonesian Higher Educations?
3. What are the ways to encounter the challenges?

3. Methodology

The method for this study was a comprehensive review, analysis, and synthesis of OLMS, its challenges, and arguments to counter the challenges. In order to complete a comprehensive and integrative review of the literature surrounding digital learning and learning management system, the writer completed an exhaustive review of referred and non-referred publications as outlined by Torraco (2005). An extensive database search from Monash University database (ERIC, Proquest Education Journal, A+ Education and PsychINFO) was used and accessed for the keywords; online learning tools, Indonesian higher educations, digital technology, teacher education, language learning and class management, learning development, and strategic human resource management revealed 55 articles were published between the year from 2002 to 2017. Only articles with the key terms and three point discussions (easy access, collaborative activity, expressing opinion) included in the abstract were utilized for full review by the authors, which resulted in 27 final articles for review and inclusive in the research for this article.

The comprehensive review in this study explores the literatures and research focusing on the domain of learning management system, Indonesian higher educations, online and digital learning. The studies are the resources to identify and investigate how the implementation of OLMS can be successful in developing learning and teaching activity in Indonesian higher education. This will provide an early stage insight into the implementation successes and challenges faced by Indonesian higher educations in relation to OLMS. There were also a number of other areas that were proposed as useful for research during the analysis of prior research analyzed, however, many are based on the assumption that the OLMS is further implemented than it is likely to be at a system level. For example, to investigate a range of appropriate pedagogies for use with learning management system, it would have to be possible to identify best practice domains to uncover those issues. It is proposed that at this early stage of implementation, simply gaining a picture of what is happening in relation to OLMS that would be the most valuable place to start. Hence, I come up with three main discussions (communicative access, collaborative activity, expressing opinion) that will be elaborated deeply in the chapter 2 of this study.

4. Discussion and Findings

4.1 Online Learning Management System (OLMS) in Indonesian Higher Education

OLMS is defined as a technology-enhanced online learning environment aiming to solve administrative issues, keep all resources in one place, provide a better structure of courses, display most features of online activities, and it is more independent and flexible (Ivanovic et al., 2013). This approach is taken because it is near the characteristics of OLMS which has communication capabilities leaning towards functionalities, like blog, forums, wiki, or chat. It is quite similar to Moodle's work which is a modular and extensible platform which offers features to support different educational styles. It chiefly follows the established usability conventions (Melton, 2006): it has a simple interface, uses a minimal number of words, features roll-overs providing extra information, etc. Still, usability and privacy concerns must be addressed in detail when using such a solution.

Moreover, it is also a new learning tool that students use to develop the learning environment and enhance their ways to get some better improvement by using digital learning technologies (Shin & Kang, 2015). According to Ivanovic et al., (2013), OLMS is used by educational institutes to control the educational improvement as a graded test, a collaborative assignment, a usage of communication tools and a media to expressing opinion. It is necessary to know that higher education students, in common, seem really enthusiastic with the improvement of

technology, especially in communication. Munge, Thomas, and Heck (2017) note that they tend to spend much time by doing their activity by posting information on social media in various ways. Text, video, audio and animation are the media that students use to express their ideas in a variety of contexts. Hence, it is better to make education and technology walk together since it plays an important role in fulfilling current demand and easing teaching and learning the process (Munge, Thomas, & Heck, 2017). Therefore, the significance of this investigation is to provide more information and cases of OLMS, so it can help students and lecturers to run their learning activity during the process of study.

In order to respond the research questions, it is possible to analyse and to investigate why the effective OLMS is important to be implemented in Indonesian higher educations by investigating three main discussions; easy and communicative access, collaborative activity enhancement, and student's interaction facilitation. Moreover, to explore the topics deeper, the points of challenges in implementing OLMS are also included and discussed after elaborating the benefits that students and teachers can get from the implementation. Having analysed this, the ways to counter the challenges are also provided to make sure all issues of OLMS can be fixed.

4.2 Benefits of OLMS

4.1.1 Easy and Communicative Access

Online Learning Management System really provides useful assistance to the stake holders in higher education (Students, Teachers and Academic staff). All the stakeholders are enabled to access the information given in the system by using personal account that has been registered through the management portal system. As long as internet network can be reached, all data and instruction can be retrieved whether to finish the assignment or to check the announcement. Besides, there are more assistances which let the students get help from lecturers without contacting them through email or telephone. These ideas are elaborated further by indicating two points; OLMS eases students' work with quick and flexible system, and it enhances communication among the stakeholders.

Firstly, the idea of providing the learners an easy and flexible system are the reason why OLMS is considered as a helpful online system. The system is included with additional supportive medias which are usually in the form of innovative use that the digital devices offers, such as video and image files that the students can access in any situation and select the information that best fits their preferences (Nokelainen, 2006). The supportive medias can also trigger the students' willingness to study. For example, Indonesian students living in some isolated areas, they will be very enthusiastic to deal with new digital devices that they rarely encounter in their village (Pangestu & Dewi, 2017). Additionally, They also think that using those supportive medias is the most useful way to give prone access to the students to obtain the instruction provided by the tutors in the system. Moreover, getting access to the video and picture can also enhance the concept of studying anywhere and anytime because they are widely displayed on the internet where people can browse preferable content globally. The system is also more flexible because the lecturers can provide online consultation through OLMS if the students have some inquiries related to their units or assignments. The students, therefore, do not need to spend much of their time to come to the campus every day just to find the academic information or the tutorial assignments.

OLMS in not only considered as easy and flexible system, it can also enhance the communication among the stakeholders which in this case involves lecturers, academic staffs and student themselves. With the condition of Indonesian educational system with its tremendous geographical diversity (Rahman, 2019), the use of LMS in higher education could be beneficial. Generally speaking, communication is one of the most expected skills that is required in the workplace, not only in oral way but also written communication. OLMS provides forum where the students can interact with their teacher and their classmates. Mechanisms that can be equipped in OLMS modules ease lecturers to create clear and high quality teaching material and enhance communication with the learners. Ssekakubo et al. (2011) thought that the Indonesian youngsters are more familiar with digital devices and multimedia application (for instance, the popular video games) and the same components in learning material match their life styles and further work. They also clarify that digital-assisted learning truly provides number of interesting contents, and it is in the form that the learner desires, adaptability to individual needs which improve the development of communication, so it will be great tools for Indonesian youngsters to explore their study through their preferences.

4.1.2 Collaborative Activity

In addition to giving easy and communicative access, a collaborative work among students is also provided in OLMS. The collaborative activity boosts the learners to have the basic skills related to learning as a collective unit to improve the quality of teaching and learning quality through sharing ideas in a group (Bailenson et al., 2008). To achieve successful group work, OLMS is designed to facilitate the learners to work with their classmates by providing some features which involve sharing interaction and among other students in the system. The features are a discussion forum and some interesting internet features.

Providing the lectures with a discussion forum in OLMS is useful for collaborative work. This discussion room seems to confirm most of the time nearly all students had exhibited adequate empathy and avoided adversarial stances. In one of universities in Indonesia, the students have scored highly as "connected knowers", and the collaborative goal of the course was worth half of the total assessment, it is wondered why the students seemed to prefer a relatively low frequency of interactivity and peer support (Universitas Hasanuddin, 2016). To answer this question, it is suggested to look closely at the quality of interactions through dialogue, and in particular investigated the experiences of particular students in order to boost the use of OLMS to learn about hard effort to construct and to reflect critically on their own learning, and to learn collaboratively by involving others empathically and thoughtfully. Hence, the Important indicators can be achieved where the students are able to raise questions to stimulate each other's' thinking and to increase willingness to disclose their uncertainty about particular concepts and a tendency to seek assistance from each other.

Besides a discussion forum, the lecturers can provide room to share and using some interesting medias to build collaborative work among the students. Internet technology has provided a lot of new interesting dimension for tutors to observe in attempting to suggest and urge learning at all stages (Bailenson et al., 2008). Running class activity or completing the assignment by using online game, internet web application and creative video is necessarily useful in OLMS. As an illustration, in Monash University, the students can utilise Kahoot to work in group to answer the questions. This online game is designed like a quiz from tutorial class where the students can collaboratively give response. Besides, the picture such as Wordle also helps since it instructs the students to think critically about the selective words suit to their unit lesson and combine with other fellows in group. Not only Wordle, uploading the result of the group in the video like Youtube can also help other groups to evaluate the strength and the weaknesses. These ways can be great examples for Indonesian higher educations to improve the implementation of OLMS. Therefore, during the learning activity, the students can understand what other groups have done, so they will improve their collaborative works in the next group assignment.

4.1.3 Expressing Opinion

Besides developing collaborative activity, OLMS also gives opportunity for students to express their own opinion. The web interfaces and structures are aimed to urge students' engagement in reflective dialogue within a community of learners by reflecting critically, writing constructively and reading openly. In addition, focussing on OLMS as a learning system make lecturers know the students' perspective because they analyse all students' posts through the system and give feedback in order give better improvement for students' writing and argument construction. Hence, encouraging the students to build their own notion and to improve the creativity is the two main points that the students can obtain through expressing their opinion on OLMS.

The first point is that they are facilitated to share ideas on the system. Learning to show their own opinion was served as the main subject of the subsequent discussion forums. Through the forum, they will be critically engaged with other students and required to post their argument and give feedback to other students. Moreover, the forum also provides reading list for the reference. After reviewing the reading, the students are allowed to reflect what they sum up and post it on the system, so other fellows can also add and criticise the reflection. Besides, the students were also required, to initiate a discussion with a message in which they reflect on the current topic. This activity helps them to give further arguments of the lesson in the class, and exchange ideas with their friends. In relation to Indonesian context, Relmasira et al. (2017) think that this platform is useful for Indonesian students as they do not need to act more formally in using the system, so they can have fun, freely add their own ideas and become engaged in

helping the other students' development. The forums are quite easy to get into, and once one has posted they keep drawing one back in to the web site via email.

Another good point that students attempt while expressing their opinion is the students can create their own creativity through the system. A variety of medias are provided in OLMS can be used to demonstrate their own interest to make it more creative. For example, there is a media called Wordle which let the learners collect keyword from reading lists, working paper and reflection. Having collected the words, they can freely put creative design and convert the result into a picture, then post it on the system. Not only Wordle, Youtube video is also shown on the system, the students can also make a group video project with creative ways in the end of the tutorial class to put some reflection of what they have got during the tutorial class, and what they feel working collaboratively with their friends who have different thought. Consequently, they will more and more improve their creativity not only in extracurricular activity but also in the classroom.

4.2 Obstacles Encountered by Lecturers and Students in Using OLMS

Some critiques point the drawbacks of OLMS in relation to the easy and communicative access. Dougiamas and Taylor (2013) claim that technical issues cannot be avoided. The students have to deal with internet connection which is sometimes in unstable condition especially in developing country like Indonesia (Relmasira, Thrupp, & Hunt, 2017). For instance, while accessing the assignment or interact in the system, they will be bothered by the slow response and the buffering video access, and the deadline to submit the assignment is also approaching. This is also caused by poor connection of the Internet since the internet access in some developing countries is not as fast in the developed. Pangestu and Dewi (2017) in their journal article evaluate that there will be some drawbacks of OLMS in its implementation in Indonesia such as connection problem, slow response and localization. They also consider that Indonesian teachers are encountering in the application of OLMS features are primarily linked with the lack of time to figure out how to use them and to prepare all the wished resources and activities. Besides the instructor's expertise and support, only a few other variables proved to be important for students' perceptions of learning achievements and course satisfaction.

Besides internet poor access, Ineffective maintenance is also considered as the drawbacks. For the LMS-supported e-learning initiatives, maintenance and user support are very crucial as it is the mechanism through which inefficiencies and other usability problems of the LMS can be identified and addressed (Calik & Yayla, 2017; Rahman, Arifin, & Furqan, 2019). For example, in Indonesia, some universities do not have proper maintenance strategies, which resulted in the deterioration of the LMS services (Relmasira et al., 2017). The universities do not even have a technical unit to offer support to the users, while those that had them, were reported as either understaffed or insufficiently trained to be able to deal with the task at the level required. The dimensions of these factors of failure are evaluated, as are the possible interventions likely to avert some of them. The findings are aimed to inform research recommendation towards more successful dissemination of learning management systems.

Moreover, Shin and Kang (2015) argue that the forums are fairly unutilised because the lecturer do not want to simply move from their traditional teaching approach and, some of them still passively contribute responsive feedback in the forum. For instance, when the students have questions related to their assignment, and they post it on OLMS, they will exactly wait for the response soon (at least 2 to 3 days), however, as the research conducted by Abdillah (2014) in Indonesian university, the lecturers are sometimes performing slow response which makes the students are not well motivated to be actively asked and even express their opinion on the system. In addition to this, the lecturers also enjoy their traditional teaching approach even though students and teachers are aware of benefit of OLMS and have no strong willingness to adopt it in teaching and learning activity (Lee, Hsiao & Purnomo, 2014). Lecturers may also demonstrate various assumptions about online learning and its benefits for the student (Bisoux, 2007). It is not easy for lectures to still perceive online learning as having numerous challenges since they have not had willingness to dominate the online discussion tend to silence his own voice in assistance of giving opportunity for the students to improve and examine their own online arguments, and thus had not sufficiently designed reflective interaction.

In relation to confidence in expression opinion, according to Dougiamas and Taylor (2013), when posting opinion on the system is obliged, they will not be well confident to express opinion because all users in the system can see their posts. In Indonesian higher education context, Pangestu and Dewi (2017) consider that not every student has the same confidence since Indonesian students are also diverse especially when it is about expressing ideas through written way. There will be possibility that they will get negative response from another user without having any constructive feedback. In this case, the students will psychologically feel trauma and decrease their motivation to perform that strong confidence

in delivering ideas. Based on Research data of Universitas Pendidikan Indonesia (2013), 80% of Engineering students felt psychological trauma during the system implementation. Moreover, From the tutor's points of view, the biggest challenge to having greater application of various online activities in their practice presents a relatively low percentage of students who use instructive and communicative features on OLMS System such as discussion forums and chats. Even though the tutor has put instruction for students to have discussion in the forum, they seem to not be well motivated to participate actively because they feel bored and rather choose to have direct communication instead of write more ideas on the forum.

4.3 Arguments for OLMS Further Improvement

The technological issues and ineffective maintenance can be solved by hiring professional instructional to help the universities in the preparation and maintenance of the system (Anderson, Steen, & Stavropoulos, 2017). The involvement of the online learning professionals and technicians at the planning level through the model, establishment, delivery, and evaluation suggests that they are the most appropriate to be positioned for successful OLMS implementation. The Implementation of OLMS needs an integrated network connection, high-security protection, content application tools and software, and a learning structure to link the learning to the knowledge requirements of the education. The advantages of implementing OLMS reflect those of applying knowledge management and include the improvement of a technical facility and the design of a knowledge strategies help urge students to communicate, it gives more life to the site as it's always changing with new content.

Furthermore, Kennedy (2011) argues that providing training about OLMS use will be helpful for lecturers. the advantages of OLMS over rather than traditional activity like using blackboard can be seen in OLMS outstanding facilities built to enhance communication in varied ways, but also in providing better management for all kinds of units, i.e. more functional and likable course structure. Moreover, he also upholds that OLMS registration system and assignment submission module and other standard modules are also assessed to some degree in terms of usability. The elements of the e-learning planning process include assessing and preparing organizational readiness factors to consider before going online, determining the appropriate content that ties into the goals of knowledge management, determining the appropriate presentation modes considering factors contributing to effective e-learning, and implementing e-learning (Kakasevski et al., 2008). It seems clear that we needed to further reduce the emphasis on individualized learning and increase the emphasis on engagement in reflective dialogue.

Lastly, related to confidence in expression opinion, when the learners are not well confident even when they are required to post their own ideas, the lecturers should urge the students to be more actively participate and ensure them that they will gain significant improvement when they are seen and criticised by the other students. Not only the students but also the lecturers themselves have to actively response the student discussion forum to show the proper way in giving critical constructive feedback to other's post. Besides, in order to make forums and chats crowded, the system design should include more interesting futures such as pictures of inspiring quotes, interesting photograph, video, music, or important information, so the students regularly visit the forum and get involved in the discussion. Therefore, OLMS really play important roles in encouraging students to express their opinion on OLMS. We realized also that Peter needed to become more engaged in facilitating and moderating dialogue, by adopting a more interactive role similar to his role in on-campus classes; where he alternated (mostly spontaneously) between prompting and managing discussion and clarifying and extending students' conceptual development.

5. Conclusion

In summary, Online Learning Management System truly plays important role in education especially in higher education level in the Indonesian context. This paper shows that the implementation of OLMS will help provide an opportunity for students to get easy and communicative access, work collaboratively, and express their own opinion. The implementation will also give better improvement for higher education institutions in terms of teaching and learning facility because the students will be eased to access the information, assignment, and group work. Furthermore, with the qualified learning system, the higher education in Indonesia can also provide helpful learning management system to develop learning quality.

In the next investigation, it is also better to dig more specific information on how lecturers can get more advantages from OLMS Implementation in this context. The most considerable aspect that should be more concerned are the supplementary assistances needed by lecturers as they demonstrate hard effort to apply these kinds of activities in their own teaching method. It is also recommended that the campus policy makers and the academic staffs are involved to strengthen the regulations of OLMS implementation

in the campus. Therefore, Online Learning Management System will always get better improvement in order to develop the quality of learning activity and fulfil the need of Education.

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