

## **USER EXPERIENCE OF LMS UNISKA AS AN E-LEARNING PLATFORM WITH THE TAM METHOD**

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### **ABSTRACT**

A Moodle-based LMS has become the popular since some schools implemented blended learning. Despite some claims that Moodle-based LMS has been implemented, the user experience of using LMS has not been informed by research. This study attempts to examine the user experience of LMS UNISKA, which is implemented for blended learning at Kadiri Islamic University, by adopting the Technology Acceptance Model (TAM). The descriptive qualitative research is used, with lecturers and students from the English study program as the source. Research data were obtained through observation, interviews, and documentation. Furthermore, the instruments used include non-participant observation, semi-structured interviews with purposive sampling, and documentation obtained through screen recordings from the platform page. The results of this study were obtained from the user experience of LMS UNISKA with two aspects namely; (1) perceived ease of use, users generally found LMS UNISKA useful for organizing learning materials and increasing engagement through multimedia integration. However, the initial challenges faced were unfamiliarity with the system and technical issues such as page maintenance and manual quiz input. Whereas (2) on perceived usefulness, the platform has facilitated a smooth transition from traditional to online learning environments, underlining its potential to support modern educational practices. Improvements in system stability and feature simplicity are recommended to enhance user satisfaction and effectiveness. These findings contribute to understanding the practical application of LMS platforms in higher education, aligning with global trends in e-learning and ICT-based education models.

Keywords: LMS UNISKA, user experience, Technology Acceptance Model

### **INTRODUCTION**

The evolution of technology continues to shape and enhance various aspects of modern life, significantly influencing the way individuals and professionals operate. Technological advancements have enabled the creation of innovations that streamline labor and facilitate numerous human activities. One such advancement is the internet, a cornerstone of information and

communication technology (ICT), which connects millions of devices globally and facilitates the exchange of information (Sima et al., 2020). ICT has also revolutionized educational models, leading to the development of ICT-based learning systems (Chinapah & Odero, 2016). It is imperative for education systems to integrate these technological advancements to improve and maintain high educational standards.

As highlighted by Koc in Fecira and Abdullah in Nento (2023) ICT has the potential to enhance the quality of the learning process. Further emphasize that technology in education fosters collaboration and provides clearer contexts for understanding. A significant shift in education has been the transition from traditional face-to-face learning to online learning, or e-learning. Sujono in Saputra & Setiawan (2021) defines e-learning as the dissemination of learning materials via electronic means such as the internet, satellite broadcasts, and computer-based learning (CBT). Susiati and Oktavia (in Maskar & Sukma Dewi, 2021) note that multimedia as a learning medium aids teachers in delivering material more effectively.

E-learning offers numerous advantages, including the ability for teachers to conduct classes without physical presence and for students to access materials anytime and anywhere. Munir in (Mulyani, 2013) emphasizes that e-learning focuses on the learning process rather than the electronic tools used. In Indonesia, the 2001 Ministerial Decree by the Ministry of National Education encourages the use of telecommunication technology in education, leading to widespread adoption of online learning in universities.

Therefore, the process of disseminating data is facilitated by gadgets that are connected to the internet. Furthermore, it is utilized in the field of education, commonly referred to as e-learning. Online learning enables educators and learners to engage in activities without being constrained by temporal or spatial limitations. Improved learning can be attained by utilizing various forms of media.

The Learning Management System (LMS) serves as an essential tool for educators to efficiently manage their classes and create learning materials. It

enables teachers to monitor student progress, facilitate interactions, and conduct assessments online, providing flexibility for both educators and learners (Ouadoud et al., 2018; Dhika et al., 2020; Rizal et al., 2019; Yudhana & Kusuma, 2021). Various e-learning platforms have been developed, with Learning Management Systems (LMS) being a prominent example. LMS platforms, such as Moodle and Blackboard, facilitate the delivery of materials, monitor student achievements, and enable communication between teachers and students (Agustina et al., 2023; Fearnley & Amora, 2020)).

LMS platforms like Moodle offer features such as uploading materials, forums for discussions, quizzes, and assignment evaluations (Waloyo, 2013). Moodle, known for its accessibility and versatility, stands out as a popular choice among educators globally, offering a range of activity modules and accommodating various media formats (Setyaningsih & Rahmawati (2021); Alanzpulluk & Kesim (2021); (Oproiu, 2015; Palandi et al., (2017)). In essence, LMS facilitates structured learning management, fosters flexibility, and bridges the gap between traditional and online education, benefiting both educators and students alike. Thus, organizing their workload becomes incredibly simple for teachers when they use an LMS. This includes creating lesson plans, keeping track of student progress, and reviewing student work. Students can view their learning outcomes and access instructional materials more easily when they use an LMS. Users can also tailor the LMS to suit their needs due to the variety of LMS options offered.

Kadiri Islamic University (UNISKA) in Kediri City has embraced blended learning through a Moodle-based LMS platform, LMS UNISKA, starting in the

2023/2024 academic year. This initiative aligns with the university's vision and the Rector's Decree. However, the introduction of new technology can present challenges, as users may struggle with unfamiliar interfaces and operational complexities (Paudi, Takdir, & Kaluku, 2021). To assess the acceptance of the LMS UNISKA, the Technology Acceptance Model (TAM) is employed. TAM, developed by Davis in 1989, evaluates user acceptance

based on the key construct perceived ease of use and perceived usefulness (Fatmawati & Sulisworo, 2021).

Users will encounter new knowledge when utilizing new technology. These experiences can be described as the events that users encounter while using an application or technology, which are connected to their behavior, perceptions, reactions, thoughts, and emotions (Rahmawati & Oktadini, 2024). The term human-computer interface, commonly referred to as user experience, encompasses not just software and hardware, but also products, processes, services, society and culture (Joo, 2017). Hence, the utilization of new technologies will result in distinct user experiences for every individual. This study aims to determine the user experience of the LMS UNISKA platform using TAM theory, focusing on the perceptions of students and lecturers from the Department of English, Faculty of Teacher Training and Education at Kadiri Islamic University.

## **METHOD**

The author identifies the research subject as the LMS UNISKA e-learning platform. The Faculty of Teacher Training and Education at Kadiri Islamic University utilizes LMS UNISKA, a Moodle-based e-learning platform. The technology was utilized for blended learning during the academic year of 2023/2024. The study employed the TAM theoretical framework to assess the user experience on the site. This theoretical framework is founded upon the users' subjective interpretations of the platform's level of ease of use and usefulness.

The research employs a descriptive qualitative design to explore events and phenomena in the lives of individuals and groups. The aim is to describe and interpret existing situations, conditions, and factors that cause certain outcomes. Data collection in this study involved the utilization of observation, interviews, and documentation. The study employed non-participant observation techniques to examine the utilization of the LMS UNISKA by lecturers and students. During this phase of the observation, the researcher

physically went to the research site, gathered information on the research, and subsequently obtained permission to use the LMS UNISKA platform as both a student and lecturer. In order to gather research data, the researcher carried out non-participant observation. The primary data was collected through interviews with the individuals being interviewed, while the secondary data was gathered from various documents, including records of the LMS UNISKA usage.

During the interview stage, the researcher performed several tasks, such as developing the interview instrument, selecting interviewees, and conducting the interviews. This study included semi-structured interviews, which incorporated both closed and open-ended interview questions. The researchers employed a purposive sample strategy to select the participant interviews. The study included three interviewees, consisting of three English study program lecturers and three students. To determine the manner in which users utilise the LMS UNISKA, particularly in terms of its ease of use and usefulness. Interviews were done directly with the respondents in the Faculty of Teacher Training and Education, Universitas Islam Kediri. The interviews conducted were semi-structured, with a set of questions that included both closed-ended and open-ended questions.

Furthermore, the data obtained from the documentation of the LMS UNISKA usage consists of screenshots depicting different elements of the platform, including the homepage, dashboard, and login page. The operational manual provided on the LMS UNISKA platform can serve as a data source for this research. To gather documentation data, the process involved accessing the LMS UNISKA page at [lms.uniska-kediri.ac.id](https://lms.uniska-kediri.ac.id) and gathering all the necessary documentation pertaining to the platform's usage.

The study employed the data triangulation technique to assess the validity of the gathered data. Data triangulation is the process of integrating data from multiple sources and processes. In order to authenticate the data, the information gathered via observations, interviews, and documents will be merged. Furthermore, the obtained data will undergo analysis using diverse methodologies, such as data reduction, data display, and conclusion drawing.

Data gathered from different phases of data collecting, including documentation, observation, and interviews, were consolidated throughout the data reduction phase. Subsequently, the material was condensed and significant details were given precedence throughout the sorting process. After eliminating superfluous data and extracting the essential information, the data is presented in a manner that facilitates the researcher's comprehension.

Moreover, once the data has been processed and presented, conclusions are derived, which is the subsequent stage of the direct data gathering and processing procedure. This study encompassed several stages, including prepping, gathering data, analyzing data, and producing a report. The preparatory procedures encompassed the formulation of a research concept and selection of a suitable location, acquiring necessary permissions for the research, and strategizing the methods for data collecting. After the completion of the preparatory step, the process of data collection begins. Subsequently, the gathered data must be examined to generate data processing outcomes. Furthermore, the findings of the investigation are published in the format of an academic journal article. This comprehensive approach ensured a thorough examination of the LMS UNISKA platform and its impact on blended learning at the university.

## **RESULTS AND DISCUSSIONS**

The findings of this study provide insights into the user experiences and perceptions regarding the use of the LMS UNISKA platform for blended learning at Kadiri Islamic University. Data were collected from a sample of students and lecturers in the Department of English, Faculty of Teacher Training and Education. The research focused on two main aspects derived from the Technology Acceptance Model (TAM): perceived ease of use and perceived usefulness.

### **Perceived Ease of Use of LMS UNISKA**

The results indicate that both students and lecturers generally found the LMS UNISKA platform adequate for their needs. However, their experiences with the platform had both positive and negative aspects.

On the positive side, several students appreciated the design of the LMS as shown in figure 1, noting that it helped them transition smoothly from traditional classroom settings to online learning environments. They found that the key features of the platform, such as the navigation menu, course access, and assignment submission processes, were intuitive and easy to use. This user-friendly design made it easier for them to engage with their courses and complete their assignments.

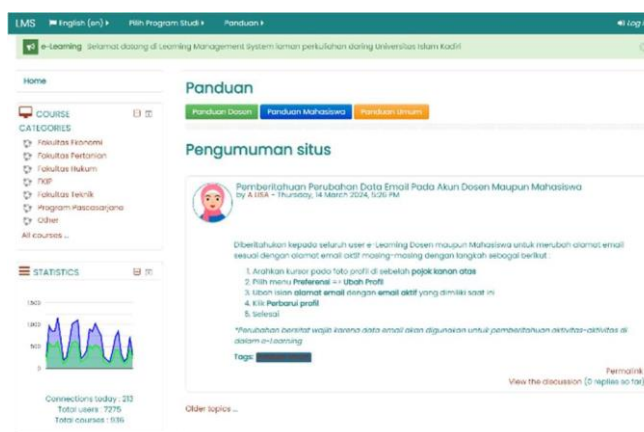


Figure 1 LMS UNISKA Homepage

Despite these positive aspects, students and lecturers also mentioned that adapting to the LMS took some time. They needed a period of adjustment to become familiar with the system and fully utilize its features. For instance, one student remarked:

" I think the display and menu are clear and easy to understand because the menu is simple, but when I first started using the LMS I asked friends about several features because they weren't familiar."

Despite the overall positive feedback, some participants encountered challenges, particularly during the initial phase of using the LMS. These issues

were primarily related to their unfamiliarity with the system and occasional technical glitches. Many students and lecturers had to overcome a learning curve to navigate and utilize the LMS effectively.

One student shared a specific example of a challenge she faced due to her limited knowledge of the system. She made an error while trying to fill out the attendance, which was a critical aspect of her coursework. She stated that:

“Apart from that, I made a mistake in being absent. I only checked absent outside even though if I wanted to be recorded, I had to enter the menu again for attendance.”

The screen recording material below indicates the student failed to mark their attendance due to difficulties encountered when running the LMS UNISKA. In the fourth meeting's photo, there are two entities that are uniquely indicated. Therefore, the system logged his attendance once without any subsequent modifications.



The screenshot shows the 'Kehadiran IV' (Attendance IV) page. At the top, it says 'lakukan absensi secara mandiri' (do attendance independently) and has a 'Return to: Pertemuan IV' button. Below that, it shows 'Kursus ini: Semua kursus'. There are navigation buttons for 'Maret', 'Semua', 'Semua masa lalu', 'Bulanan', 'Mingguan', and 'Harian'. A table displays attendance records with columns: Tanggal, Deskripsi, Status, Poin, and Catatan. One record is highlighted in orange: 'Sen 25 Mar 2024', 'Sesi kelas reguler 12', 'Permissi', and '1 / 2'. Below the table, it shows 'Sesi yang diambil: 1', 'Poin dari sesi yang diambil: 1 / 2', and 'Persentase dari sesi yang diambil: 50,0%'. There is another 'Return to: Pertemuan IV' button at the bottom.

Tanggal	Deskripsi	Status	Poin	Catatan
Sen 25 Mar 2024 12	Sesi kelas reguler	Permissi	1 / 2	

Figure 2 Students Attendance Report

However, as users became more accustomed to the platform, these problems diminished, indicating a learning curve effect. Over time, both students and lecturers became more proficient in navigating and using the LMS, leading to a smoother and more efficient experience.

Similarly, the three lecturers interviewed agreed that the LMS is a significant improvement over its previous version. They praised the updated



features and improved appearance, which made it easier to use and more effective for their teaching needs. Despite these enhancements, the lecturers noted that some issues still needed to be addressed.

One major concern was related to page maintenance which can be seen in figure 3 below this paragraph. The platform occasionally froze and was very slow when lecturers tried to log in, causing frustration and delays. This issue highlighted the need for technical improvements to ensure a more reliable and efficient user experience.

One lecturer also mentioned that:

"I can easily upload materials and create assignments, which saves me a lot of time. However, some troubles come when I tried to upload the material into LMS because of failure in logging. It makes me late to upload the learning material for students."

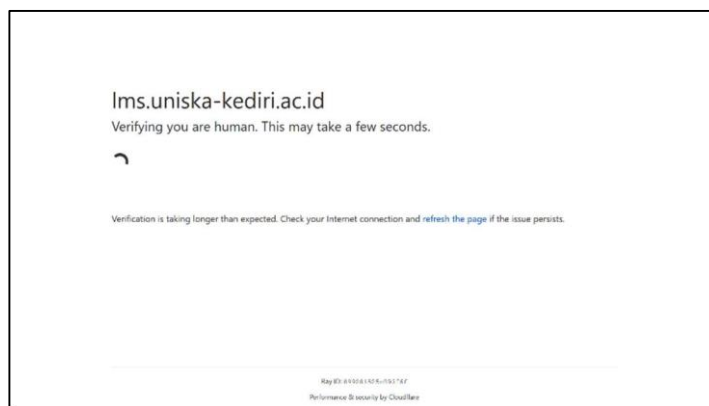


Figure 3 Failure to Reach LMS UNISKA

Besides of the bad of page maintenance in LMS, a lecturer also found that she cannot input quiz automatically into the LMS. She had to manually input the questions one by one along with the answer choices. She said as follow:

"At the first time, I guess I could input my quiz automatically such as in Quizziz and Google Form but no- I have to input one by one, number to number and it wastes my time too much."

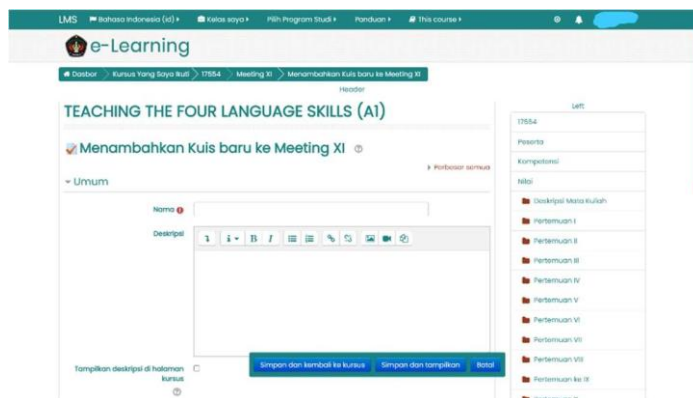


Figure 4 Quiz Creation Menu

To address this problem, the lecturer plans to create quizzes using other websites such as Quizizz and then place the links on the LMS so all students can access them. According to (Waloyo, 2013), some essential functions of an LMS include the ability to upload and share materials easily, facilitate forums and discussions, create quizzes and surveys, and evaluate student assignments. The LMS UNISKA incorporates these features, but it is not entirely user-friendly because some functions are not automatic. However, it does allow learners to easily track their scores.

### Perceived Usefulness of LMS UNISKA

Regarding the perceived usefulness of the LMS UNISKA, the platform was widely regarded as beneficial for enhancing the learning experience. Students consistently reported that the LMS UNISKA helped them better organize their study materials and provided a centralized location for various academic activities. This centralization made it easier for students to access course content, participate in discussions, and submit assignments all in one place. One student particularly appreciated the platform's ability to streamline their academic tasks, stating that:

"Before using LMS, I always forget the folder to save my material file. After using LMS, I have no worry to save my material because every time I need it, I can access directly into my LMS account."

Presented below is evidence showing the capability of the LMS UNISKA to serve as a repository for personal files. In this manner, students are able to retrieve the specific personal files they choose to preserve on the LMS UNISKA. Nevertheless, the platform's storage capacity remains restricted, allowing only files ranging from 50MB to 100MB to be accommodated.

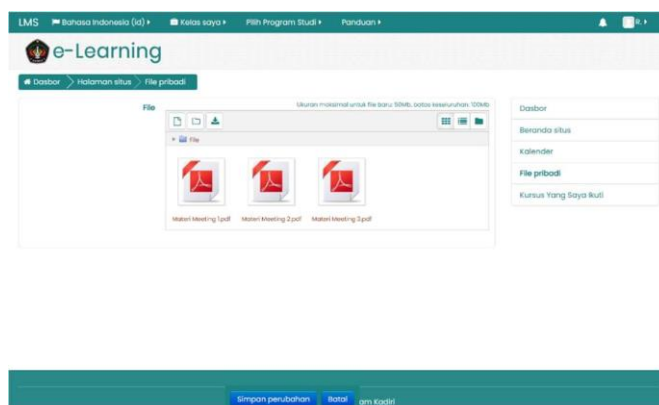


Figure 5 Availability of Personal Files Feature

However, a student stated that he needs the lecturer to do online meeting class and explain the material given.

"Sometimes I think I don't match with this system. I agree that we had easiness because we can access the file, we can do the assignment from a long distance. Somehow, I need someone to explain the material, yet, I don't understand how many times I read it. At last, I can't get high score in doing the assignment."

Similarly, lecturers also found the platform effective for delivering course materials, tracking student progress, and facilitating communication. They appreciated how the LMS allowed them to efficiently manage their courses and engage with students. LMS UNISKA are capable to share materials as instructional resources, as seen in the screen grab below. Links to external material sources and material files are among the several kinds of materials that might be utilized.

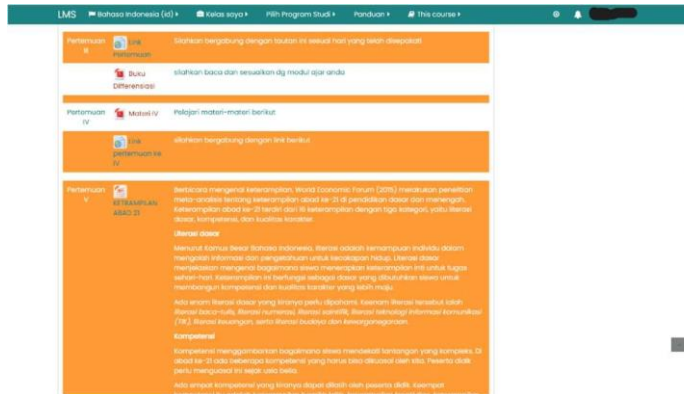


Figure 6 Capability to Share Materials

One lecturer particularly valued the ability to integrate multimedia resources and interactive elements into lessons, which enriched the teaching and learning experience. He noted that the platform's capability to incorporate videos, quizzes, and interactive activities made the lessons more dynamic and engaging for students. This feature not only enhanced student understanding but also made the teaching process more versatile and interesting.

"The LMS allows me to incorporate videos and quizzes into my lectures, which enhances student engagement. It's also easy to organize material I want to deliver to the students in each week. Moreover, I also can keep track of students' progress."

This statement is supported by the Technology Acceptance Model (TAM), which posits that perceived usefulness significantly impacts users' intention to use technology (Davis, 1989). While the LMS is recognized as a beneficial tool for supporting the blended learning model, making it easier to balance online and offline educational activities, two lecturers noted that it still needs improvements to address existing bugs.

The implementation of LMS UNISKA in the even semester of the 2023/2024 academic year provided a practical example of how digital tools can enhance traditional learning environments. This experience highlighted both the strengths and areas for improvement within the platform. Looking forward,

an improved version of the LMS could significantly boost the enthusiasm of both students and lecturers in using the system. As one lecturer stated:

“Lecturers need to be guided in their use because the LMS is still new and needs to be guided. In terms of benefits, it is very good, very useful. But its use must be improved to make it more user friendly.”

As an illustration, the provided screen recording demonstrates that this particular piece of the page has a tutorial on how to use the LMS UNISKA. The number of available guides for students is smaller in comparison to the number of guides accessible for lecturers. New users of the LMS UNISKA are likely to encounter issues.

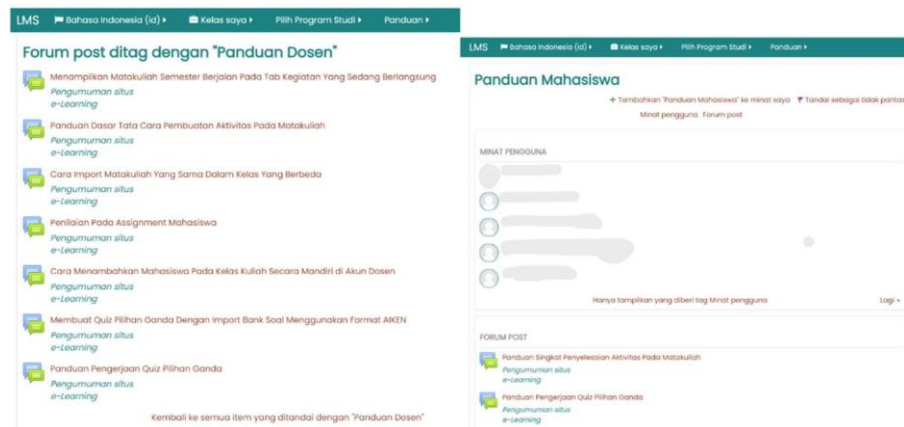


Figure 7 User Guide Menu

Overall, the research concludes that while the LMS UNISKA offers several benefits and is useful for its users at Kadiri Islamic University, it also has many disadvantages. These findings contrast with the research conducted by (Quansah & Essiam, 2021), which found that most students at their university were happy to use the Moodle LMS as an e-learning platform. At UNISKA, however, both lecturers and students have yet to express full satisfaction with the LMS due to various aspects that still need improvement.

## **CONCLUSION**

This study indicates that there exist both favorable and unfavorable evaluations about the utilization of LMS UNISKA as an e-learning platform by lecturers and students enrolled in the English Study Program at the Faculty of Teacher Training and Education, Kadiri Islamic University. LMS UNISKA offers several beneficial elements for online learning, including online presence, the ability to share learning resources, post assignments, track grades and study progress, as well as various other efficient functions. Additionally, there are several issues like limited page accessibility during high visitor traffic, ineffective functionalities, and inadequate guidance. Nevertheless, due to its numerous enhancements in services, LMS UNISKA can be regarded as a viable choice for using as an e-learning platform.

## **Implication**

The study's findings indicate that the utilization of LMS UNISKA as an E-Learning platform in blended learning can be effectively implemented. This indicates that the functionalities offered by LMS UNISKA are capable of facilitating online education for both instructors and students. However, the advantages acquired do not exclude the risk of encountering drawbacks. Examples of limitations include access constraints during login and platform operation, as well as inefficiencies in certain functions. The developers of the LMS UNISKA platform should explore this in the future to enhance the user experience. This study's findings can serve as a valuable tool for educators and students to evaluate the future implementation of the LMS UNISKA. Therefore, the platform can serve as an excellent online educational hub.

## **Suggestion**

To address these issues and enhance user satisfaction and overall effectiveness, several recommendations can be made such as: implement comprehensive training programs for students and lecturers, establish a robust technical support system, simplify the user interface, develop automated

features for tasks like quiz creation, implement a regular feedback mechanism, roll out incremental updates based on user feedback, optimize the platform for high traffic, and enhance communication tools for better interaction. By implementing these recommendations, Kadiri Islamic University can enhance the usability and effectiveness of the LMS UNISKA platform, ensuring a smoother and more productive blended learning experience for both students and lecturers.

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