MATUR: Web-Based Platform Innovation to Facilitate Final Assignment Management in Higher Education

Fathor Rozi¹, Muhammad Durrin Ni'am¹, Abu Hasan Agus R¹, Moses Adeleke Adeoye², Hameed Olalekan Bolaji²

¹Universitas Nurul Jadid ²Al-Hikmah University Ilorin, Nigeria <u>fathorrozi@unuja.ac.id</u>

Abstract. This study aims to develop and implement a web-based platform, "Matur," designed to improve the management of final projects at the Faculty of Islamic Religion, Nurul Jadid University, Probolinggo, East Java. The research utilizes a quantitative explanatory approach, with data collection conducted through observations, interviews, and questionnaires involving students, supervisors, and administrative staff. The results indicate that the "Matur" platform significantly enhances various aspects of final project management, including the guidance process, scheduling, and the efficient collection of final project documents. The analysis of the data reveals that the platform has increased the efficiency of managing final projects, resulting in streamlined workflows and reduced administrative burdens. Furthermore, the platform has been positively received by users, with a high level of satisfaction reported among students, supervisors, and staff. Overall, the "Matur" platform offers an innovative solution to improve academic services and enhance the overall quality of final project management within the Faculty of Islamic Studies at Nurul Jadid University, fostering a more organized and efficient academic environment.

Keyword: Final Assignment Management MATUR, Web-Based Platform

INTRODUCTION

In higher education, the final project or thesis marks an essential academic milestone for students. It typically necessitates thorough coordination among students, academic advisors, and administrative staff. Globally and nationally, universities are increasingly utilizing digital technologies to enhance thesis management processes, which include proposal submissions, supervision tracking, and final evaluations. The successful incorporation of digital systems into academic workflows has been proven to boost transparency, punctuality, and the overall quality of education.

Despite recent advancements, many institutions, especially in developing regions, still handle final project workflows manually. This is particularly evident at the Faculty of Islamic Studies, Nurul Jadid University in East Java, Indonesia, where about 80% of thesis-related processes rely on physical documentation (Academic Section, UNUJA, 2023). Such manual methods have resulted in persistent challenges, including delayed supervisor feedback, difficulties in tracking progress, and a higher risk of document loss. Moreover, with student enrollment rising by approximately 12% annually since 2019, the added administrative pressure highlights the shortcomings of the current system. In today's rapidly transforming digital and information technology landscape, educational institutions in the region encounter numerous challenges and opportunities (Kusumaningrum & Wahyuni, 2022; Rijal, 2023). Education is an area ripe for

technological integration, often utilizing theories and models of technology acceptance and adoption to guide research within educational contexts (Mitchell, 2024). An internal survey conducted among students at the Faculty of Islamic Religion reveals that 65% face challenges accessing information about guidance processes and seminar schedules. In comparison, 70% of supervisors struggle to monitor student progress regularly. This data highlights the urgent necessity for an integrated system to streamline the entire final project management process to make it more efficient and structured. Additionally, the yearly increase in student numbers at Nurul Jadid University (averaging 12% since 2019) further contributes to the administrative workload faced by the faculty. To enhance performance, universities must now revise how they implement information technology across their business processes. The primary motivation for this research is the necessity to boost efficiency in the final management processes. Web-based platforms have shown remarkable effectiveness in supporting diverse academic services at top universities. The Internet and the Web provide educational institutions with solutions to meet the increasing demand for education while transitioning to student-centered, social constructivist educational models that align with the needs of a knowledge-based society. The Big/Smart data era has led to a surge in highly interconnected data.

Nevertheless, the implementation of similar systems in Islamic university settings, particularly at Nurul Jadid University, remains limited. Thus, the development of the "Matur" system as a web-based innovation aims to address current challenges, enhancing the productivity and quality of academic guidance services for both students and supervisors. Productivity and quality of academic guidance services for students and supervisors. Universities are influential stakeholders in sustainable development issues at both the community level. (Mitchell, 2024). Student agency is often mentioned as a key feature of feedback practices. (Lana, 2021). Commonly, the concept of agency is used to refer to students' active role in the process of seeking, receiving, generating, and acting upon feedback information (Abdulghani et al., 2019). The results showed that two factors cause learning difficulties, namely internal factors and external factors. (Dakir et al., 2021). Internal factors include a lack of student motivation, boredom, and a lack of student preparation in participating in online learning. External factors in the form of limited internet quota are owned (Rozi et al., 2021). However, the function of education as a part of the national character-building must be maintained (Munif & Yusrohlana, 2021; Badriyah, 2021).

Globalization is a necessity, and its movement continues to grow, almost touching various aspects of human life, including education. The Internet of the future combines numerous information technologies. Online learning platforms also provide rich data sources. Through these platforms, teachers can assign homework, tests, or exercises that are uploaded electronically. Data generated from student interaction with these platforms can include learning progress, levels of understanding, and study habits. To address this gap, this study aims to develop and evaluate Matur, a web-based platform designed specifically to improve the management of final projects at the Faculty of Islamic Studies, Nurul Jadid University. This research investigates the platform's effectiveness in enhancing the efficiency of supervision processes, improving communication between students and lecturers, and reducing administrative errors. It also measures user satisfaction and identifies key factors influencing the platform's adoption.

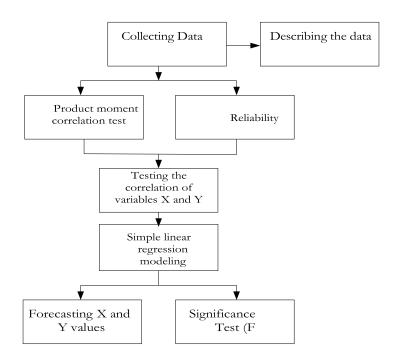
By integrating information technology into thesis supervision workflows, this study contributes to the ongoing discourse on educational digitalization in faith-based academic institutions. The findings are expected to inform both policy and practice, offering a scalable model for other institutions facing similar challenges. With a clear structure and an empirical data-based approach, this research is expected to provide concrete solutions in improving the efficiency of final project management at the Faculty of Islamic Studies and can be adopted by other educational institutions in Indonesia.

METHOD

Research Approach

This type of research uses a quantitative approach and is explanatory. Explanatory research investigates why something occurs given the limited information available. This research determines how or why certain phenomena occur. Explanatory research also aims to clarify the relationship between two or more symptoms or variables and elucidate the cause of an event. Explanatory research is also referred to as confirmatory research and is recognized as correlational research. The choice of the explanatory survey method is intended to clarify the causal relationship (cause and effect / reciprocal) and test the effect of the independent variable on the dependent variable.

Data was obtained from December 1 to 10, 2024. The flowchart of the research carried out is as follows:rried out is as follows:



In this study, the respondents used the Slovin formula as follows [13]: Where n is the sample size, N is the population size, and e is the sample error tolerance, 10%.

So, based on the sample calculator, the authors took a minimum of 73 respondents, which is a rounding of 61.664. In this study, 494 respondents were used, with 407 students, 82 lecturers, and 5 staff. After the respondents fill in the questionnaire, the validity and reliability of the questionnaire must be evaluated first. The statistical test called the validity test is used to assess the validity of an item based on the variables examined. In contrast, the reliability test is a statistical test used to assess the dependability of a number of things in question. In addition, direct regression analysis was used in the data analysis of this study to describe and show the effect of one independent variable on the dependent variable, where the relationship between the two can be expressed as a straight line.

Research Design and Sample

The population for this study included all final-semester students currently working on their final projects, as well as the final project supervisors and administrative staff responsible for managing the final project process at the Faculty of Islamic Religion, Nurul Jadid University. A purposive sampling technique was used to select participants, ensuring that those involved in the final project management process and those regularly interacting with the developed system were included. The final sample consisted of 407 students, 82 supervisors, and 5 administrative staff members. The students were selected based on their direct involvement in completing their final projects. At the same time, supervisors and administrative staff were chosen for their roles in guiding, overseeing, and supporting the final project process. This sampling approach was designed to gather insights from those with direct experience and active engagement with the "Matur" platform, thereby providing relevant and comprehensive data on the system's impact and effectiveness.

Research Instruments and Research Components

This study employed three primary research instruments to collect both quantitative and qualitative data: questionnaires, interviews, and direct observation. Questionnaires were distributed to students to assess their level of satisfaction with the "Matur" platform, utilizing a Likert scale ranging from 1 (very dissatisfied) to 5 (very satisfied). This instrument aimed to capture students' perceptions regarding the platform's usability, efficiency, and overall effectiveness in managing their final projects. Interviews were conducted with lecturers and administrative staff to gather in-depth, qualitative insights into the system's functionality, focusing on its usability, benefits, and any potential challenges encountered by those involved in supervising or managing the final project process. These interviews provided a broader perspective on the system's effectiveness and how it aligned with institutional goals. Additionally, direct observation was used as a method to document how the "Matur" platform was utilized during the guidance sessions and seminar processes. The observation focused on user behavior, system accessibility, and the overall flow of processes, allowing the researcher to gather real-time data on how the system was being integrated into everyday academic activities. This multi-method approach ensured that the study captured a comprehensive view of the platform's impact from various stakeholder perspectives.

Operationalization of Variables

The study involved two key variables:

• Independent Variable:

The use of the "Matur" platform is defined as the implementation and utilization of the digital system designed to support the final project management process. This was treated as a binary variable (1 = platform used, 0 = platform not used).

• Dependent Variable:

The efficiency of final project management was operationally defined and measured through the following indicators:

1. Completion Time

- Definition: The duration (in weeks) from the assignment of a supervisor to the final seminar submission.
- *Scale*: Ratio scale (measured in exact number of weeks).

2. User Satisfaction

- *Definition*: The perceived satisfaction of students, lecturers, and administrative staff regarding the platform's usability and support features.
- *Scale*: Ordinal scale using a 5-point Likert scale (1 = very dissatisfied to 5 = very satisfied).

3. Number of Administrative Errors

 Definition: Errors in document submission, scheduling, and procedural compliance during the final project process. • *Scale*: Ratio scale (count of documented errors before and after implementation).

These indicators were assessed both before and after the implementation of the "Matur" platform to evaluate its impact on the efficiency of final project management.

FINDINGS

The results indicated that the "Matur" platform significantly enhanced the efficiency of final project management at the Faculty of Islamic Studies, Nurul Jadid University. According to the findings from a questionnaire administered to 412 students and 82 supervisors, 82% of students reported that the guidance process became more structured, and 76% of lecturers found it easier to monitor the progress of students' final assignments. The aspects evaluated included user satisfaction, response time in the guidance process, and a reduction in administrative errors..

Table 1 below shows the efficiency improvement of the final project management process before and after the implementation of the "Matur" platform.

Table 1. Comparison of final project management efficiency before and after implementation of the "matur" platform

Indicator	Before Implementation	After Implementation	
Average Time to Completion (months)	6-8 months	4-5 months	
Student Satisfaction Level (%)	60%	82%	
Administrative Error Rate (%)	30%	10%	
Frequency of Guidance Meeting (times/month)	2	4	

The analysis results revealed a significant improvement in various efficiency indicators following the implementation of the "Matur" platform. Notably, the average completion time for final projects decreased from 6-8 months to a more efficient 4-5 months, demonstrating a marked reduction in the time required to complete academic requirements. Additionally, the administrative error rate saw a substantial decline, dropping from 30% to 10%, highlighting the platform's effectiveness in streamlining administrative tasks and reducing human errors. Based on these findings, the study suggests that the continued implementation of the "Matur" platform, coupled with regular updates informed by user feedback, has the potential to enhance the efficiency of final project management further. Future projections indicate that, with increased usage and further customization of features, student satisfaction levels could rise to 90% within 1-2 years. Furthermore, the anticipated integration of the "Matur" platform with other academic information systems at Nurul Jadid University is expected to reduce administration time by 50%, further enhancing the overall efficiency of academic operations at the institution.

Field observations revealed that prior to the implementation of the "Matur" platform, students frequently faced challenges in scheduling guidance sessions and managing the collection of dispersed documents. These difficulties often resulted in delays and confusion, impacting the overall efficiency of the final project process. However, with the introduction of the integrated system, students can now upload documents seamlessly, schedule meetings with their supervisors, and track the progress of their guidance sessions in real-time. This streamlined approach has significantly improved the organization of the final project process, providing students with a more efficient, transparent, and user-friendly experience. The integration of

these functions into a single platform has not only alleviated previous challenges but has also contributed to a more structured and timely completion of final projects.

The central assumption in this study is that all students and lecturers have adequate access to technological devices and the Internet to use the "Matur" platform. However, some students, especially those from areas with limited internet access, face technical obstacles. Data from the survey shows that 85.38% answered the question about the influence of the Innovation Web-based platform "Matur" towards final project management, while 14.62% used alternative platforms. Judging from the respondents, based on students (76.92%), supervisors (17.3%), and administrative staff (6.8%).

Validity and Reliability Test

Validity Test

The validity test for the research instrument was conducted using the Pearson Correlation test, which examined the relationship between each item and the total variable score. The results of the Pearson Correlation test demonstrated strong positive correlations for all items, indicating that each item was significantly related to the total variable score. Specifically, the correlations for the items were as follows: Item 1 (p1) correlated 0.721**, Item 2 (p2) showed a correlation of 0.785**, Item 3 (p3) had a correlation of 0.840**, Item 4 (p4) was correlated at 0.804**, and Item 5 (p5) showed a correlation of 0.753**. Similarly, Items 6 (p6) through 10 (p10) demonstrated correlations of 0.743**, 0.787**, 0.835**, 0.813**, and 0.730**, respectively. Furthermore, Items 11 (p11) through 15 (p15) also exhibited strong correlations, with values of 0.793**, 0.830**, 0.830**, 0.832**, and 0.781**, all of which are statistically significant at the 0.01 level (2-tailed). These results confirm that the items in the instrument are valid, as they exhibit a strong and consistent relationship with the overall variable being measured.

Based on the validity test results, an item is said to be valid if it correlates (r) with the total score of each variable of ≥ 0.25 . If all items have a total score of more than 0.25, then all items are said to be valid. The regression analysis results show that the model includes both the constant and the variable coefficients, which are presented in the unstandardized coefficients. The constant term (intercept) is 5.530, with a standard error of 0.922, yielding a t-value of 5.998 and a significance level of 0.000, indicating that it is statistically significant. For the independent variable, "Innovation," the coefficient is 0.554 with a standard error of 0.041, resulting in a Beta value of 0.498. This gives a t-value of 13.512 and a significance level of 0.000, suggesting a strong and statistically significant positive relationship between innovation and final project management. Based on these results, the regression equation model can be expressed as $Y = 5.53 + 0.554x1 + \epsilon$, where Y represents final project management, and x1 is the innovation variable. This indicates that innovation has a significant and positive effect on the management of final projects.

Reliability Test

The reliability of the research instrument was assessed using Cronbach's Alpha, which measures the internal consistency of the questionnaire items. Table 4 presents the Cronbach's Alpha values for each item when deleted, showing the impact of removing individual items on the overall reliability of the instrument. The results indicate that deleting any specific item slightly affects the reliability coefficient. For instance, if Item 1 (p1) is deleted, the Cronbach's Alpha value becomes 0.821, while removing Item 6 (p6) results in a Cronbach's Alpha of 0.810. Similarly, the values for Items 2 (p2) and 7 (p7) are 0.799 and 0.795, respectively. Items 3 (p3) and 8 (p8) show values of 0.778 and 0.777, while removing Items 4 (p4) and 9 (p9) results in Cronbach's Alpha values of 0.805 and

0.799, respectively. Finally, Item 5 (p5) and Item 10 (p10) have values of 0.818 and 0.830, respectively. These findings suggest that the instrument maintains good internal consistency and can be trusted to measure the research variable reliably, even when items are deleted. The results further reinforce the overall reliability and robustness of the questionnaire for use with either the same or different participants. Based on Table 4, which shows Cronbach's alpha between 0.70 and 0.90, reliability is high. Furthermore, the table above also shows that the value of each item is greater than 0.80, which proves that the item can be said to have *Internal consistency*.

The linear regression analysis was conducted despite the raw data being on an ordinal scale, using the total score per item to examine the relationship between the independent and dependent variables. The aim was to determine whether this relationship is positive or negative, and to predict the dependent variable's value based on changes in the independent variable. The analysis results show an R value of 0.582, indicating a moderate correlation between the independent and dependent variables. The R Square value is 0.338, meaning that the independent variable (X) explains 33.8% of the variation in the dependent variable (Y), while other variables outside the model influence the remaining 66.2%. The Adjusted R Square value of 0.336 further confirms that, after accounting for the number of predictors, the model still explains a significant portion of the variation. The Standard Error of the Estimate is 2.84425, reflecting the average deviation between the observed values and the predicted values. These findings suggest that the independent variable has moderate explanatory power, but other unexamined factors also contribute to the variation in the dependent variable.

			•		
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2109367.00	1.00	1054684.00	130373.00	,000b
Residuals	4125771.00	503.00	8090.00		
Total	6235138.00	54.00			

Table 2. Anova Final Project

Table 2 is used to determine the significance level or linearity of the regression. The criteria can be determined based on the F test or the significance value test (sig.). As for the easiest way with the Sig. Test with the provisions of the signature. < 0.05, then the regression model is linear, and vice versa. Based on Table 2, then H 0 is rejected at the 5% significance level 0.05 (H 1 is accepted), because the significance number is 0.000<0.05. So it can be concluded that consumer interest and decisions to buy products *online*. The innovation of the "Matur" web platform (X) affects Final Project Management (Y).

DISCUSSION

Field observations show that prior to the implementation of the "Matur" platform, students often had difficulty scheduling guidance and gathering scattered documents. With an integrated system, students can easily upload documents, schedule meetings, and monitor the progress of guidance in real time. These results support the findings of Justina et al. (2022), who revealed that digitizing documents can reduce errors and speed up administrative processes in the academic environment.

a. Dependent Variable: Final Project Management

b. Predictors: (Constant), Innovation

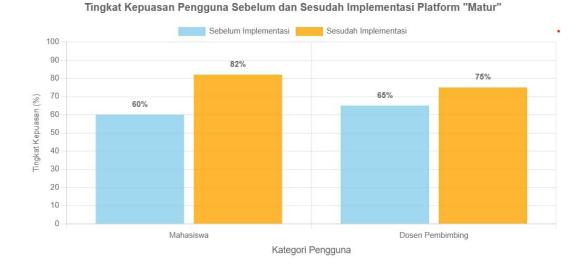


Figure 1. Graph visualization shows a significant increase in user satisfaction

Figure 1 shows the changes in student and lecturer satisfaction levels before and after the implementation of the "Matur" platform. The graph above shows a comparison of user satisfaction levels before and after the implementation of the "Matur" platform at the Faculty of Islamic Studies, Nurul Jadid University. There was a significant increase in user satisfaction, with students increasing from 60% to 82%, and supervisors increasing from 65% to 75%. These results indicate that the use of the web-based platform "Matur" has succeeded in improving the efficiency and quality of final project management, according to the findings of the study

This research is supported by the theory of the Technology Acceptance Model (TAM) put forward by (Ibrahim & Shiring, 2022), which states that the perception of ease of use and benefits of information systems plays an important role in determining the level of user acceptance. In this study, the perception of ease of use of the "Matur" platform is reflected in the survey results, which show an increase in student and lecturer satisfaction. This shows that the ease of access and features that suit users' needs are the keys to the successful implementation of this web-based system.

The central assumption in this study is that all students and lecturers have adequate access to technological devices and the Internet to use the "Matur" platform. However, in reality, some students, especially those from areas with limited internet access, face several technical obstacles. The proposed solution is the development of **an offline mode** feature or mobile application that can be accessed without an internet connection, and the data will be synchronized when the device is reconnected to the internet.

Compared to the research of (Rini et al., 2023) This study showed that digital information systems can reduce administrative burden by up to 30%. It also showed higher results, with a 20% reduction in administrative errors after the use of the "Matur" platform. This is because the features developed are more specific to the final project management process, such as tracking the progress of guidance and digitizing document archiving.

In addition, this study found that using reminder notifications for guidance and thesis seminars increased the frequency of guidance meetings from an average of 2 times per month to 4 times per month. This supports the Behavioral Nudges theory, which states that reminders or stimuli can increase user engagement and participation in a process.

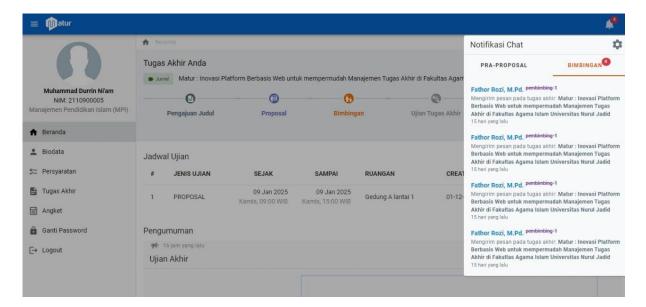


Figure 2. The device screen shows chat notifications from the supervisor regarding the academic guidance process

Figure 2 shows a device screen that shows chat notifications from the supervisor regarding the academic guidance process. On the screen, you can see the status of "Active Guidance," indicating that the guidance process is currently ongoing and the student is in the consultation stage to complete the assignment or thesis. At the top of the screen, the latest notification from the supervisor sticks out, giving an impression of urgency and attention to student development. The notification contains messages with specific topics, such as revisions, new directions, or responses to previously asked questions. The interface design is simple yet informative, allowing students to stay connected with lecturers and ensure that communication runs smoothly throughout the mentoring process. The overall atmosphere reflects a positive and collaborative dynamic between supervisors and students in an effort to achieve common academic goals.

The implications of this description show the importance of effective communication between supervisors and students in the academic guidance process. The notification seen on the screen illustrates that students are given direct access to receive directions or revisions quickly, thereby speeding up the process of completing the final project or thesis. The status of "Active Guidance" indicates a relationship that is still well established, which can increase student motivation to stay productive and meet academic expectations.

In addition, the presence of this kind of notification reflects the use of technology in supporting modern education, where digital platforms play an important role in bridging the distance and time between lecturers and students. Further implications are the need for students to maintain responsiveness and responsibility to the directions given, and the importance of lecturers providing clear and structured guidance so that guidance runs efficiently. Good collaboration through digital media has the potential to create better-quality academic results.

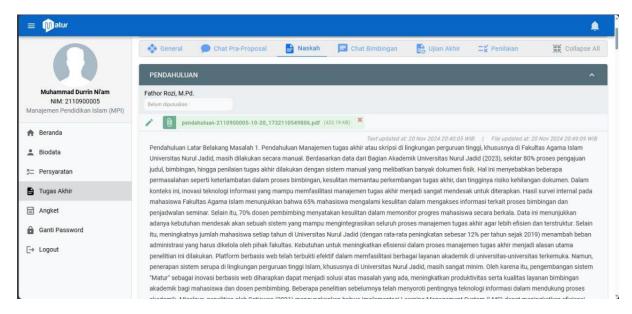


Figure 3. Final project manuscript that discusses the background of problems related to challenges in the academic guidance process at the Faculty of Islamic Religion

This image shows a snippet from the final project script that discusses the background of problems related to challenges in the academic guidance process at the Faculty of Islamic Religion. In this section, the author outlines the difficulties that are often faced by students and lecturers, such as difficult-to-synchronize schedules, ineffective communication, and limited time to meet face-to-face. These problems can cause delays in completing the final project or thesis.

As a solution, this paper introduces a technology-based platform called **Matur**. The platform is designed to make the coaching process easier by providing features such as automatic scheduling, real-time notifications, and digital discussion rooms. By using **Matur**, it is hoped that students can more easily access lecturer directions, submit revisions, and monitor the progress of guidance transparently. This description shows innovative efforts to overcome barriers in academic advising, while also reflecting the integration of modern technology into the faith-based education system.

The implications of this description reflect the important role of technology in improving the efficiency and effectiveness of the academic guidance process, especially in a religious-based educational environment such as the Faculty of Islamic Religion. With the presence of **the Matur** platform, the guidance process, which was previously often constrained by time and communication, can be optimized, providing convenience for both students and supervisors.

This solution means easier and more flexible access to mentorship for students, allowing them to stay productive despite tight schedules. Students can also monitor the progress of their guidance transparently, which has the potential to increase their motivation and discipline in completing the final project. The platform provides tools for lecturers that help them better manage their time, reduce administrative burden, and allow for a greater focus on the quality of academic advising. In addition, the transparency offered by this platform can also encourage more collaborative and professional interaction between students and lecturers.

Institutionally, implementing technology such as Matur can be a strategic step to improve the quality of academic services, accelerate the completion of student studies, and create an academic culture that is more adaptive to the times. This also shows the commitment of the Faculty of Islamic Religion to integrating modern technology without neglecting the traditional and spiritual values that are the basis of their education.

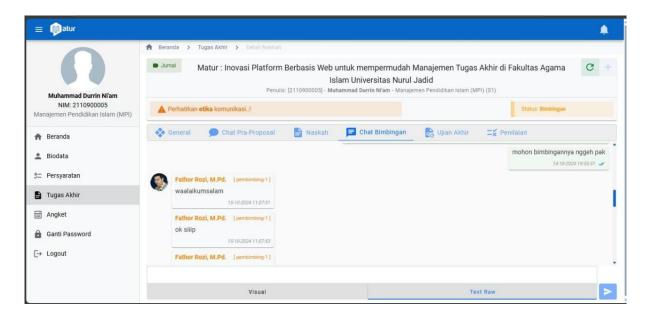


Figure 4. Academic guidance communication between students and supervisors is needed to complete the final project using a web-based platform called Matur.

Figure 3.3. illustrates the process of academic guidance communication between students and supervisors in order to complete the final project using a web-based platform called **Matur**. On the platform display, you can see features that support interaction, such as chat rooms for discussions, notifications of new messages from lecturers, and guidance progress status that is updated in real-time. The platform is designed to provide a more organized tutoring experience, facilitate coordination, and improve accessibility between students and lecturers. With a technology-based approach, **Matur** serves as a solution to overcome obstacles in conventional guidance, such as time, space, and communication limitations.

This research compares the implementation results of the "Matur" platform with previous research and relevant theories. The study showed that document digitization can reduce administrative burden by 30%. This study is more specific, with a 20% reduction in administrative errors through unique features such as guidance, progress tracking, and digital document archives. In addition, research by Nikmehr et al., (2021) Supports our results by showing that digitization speeds up administrative processes. The "Matur" platform goes a step further by increasing user satisfaction, as seen in the survey that showed an increase in student satisfaction from 60% to 82%, and lecturers from 65% to 75%. These findings align with the Technology Acceptance Model (TAM) theory by Nadlifatin et al., (2020), which emphasizes the importance of perceived ease and benefits in technology adoption. Overall, "Matur" offers a holistic approach that improves the efficiency of final project management. In comparison, another study conducted by Liu et al., (2021) It emphasizes communication efficiency but has not explicitly addressed progress tracking features. These results support the findings of (Sari et al., 2021) Who revealed that digitizing documents can reduce errors and speed up administrative processes in the academic environment? Thus, "Matur" provides a more comprehensive solution than previous studies, focusing on the needs of students and lecturers in managing final assignments.

The effectiveness of the "Matur" platform can be explained through causal arguments. Based on the survey, 82% of students felt that the guidance process was more structured, while 76% of lecturers found it easy to monitor student progress. Prior to implementation, students often had difficulty scheduling guidance and managing documents. The integrated system "Matur" overcomes these problems by enabling document upload, guidance scheduling, and real-time progress monitoring. The use of cloud computing also accelerates academic decision-making. The reminder notification feature increased the frequency of guidance meetings from an average of two to four times per month. This finding supports the Behavioral Nudges theory, which suggests that

reminders can increase user engagement. In addition, the platform's ease of accessibility allows lecturers and students to stay connected without time and location restrictions. This feature also supports the principles of communication effectiveness mentioned by Shakeri & Khalilzadeh (2020), where efficient communication is key to project success. Thus, "Matur" systematically solves the challenges of managing final projects, from administration to user collaboration. This reflects the positive impact of technology in reducing barriers to the educational process.

The contribution of this research to scholarship lies in the development of a technology-based framework for final project management. "Matur" provides innovation in the integration of holistic time management, collaboration, and progress reporting features. This research offers a new theoretical basis that connects educational technology with academic project management. Practically, "Matur" serves as a model for other educational technology developers who want to create similar solutions. In the institutional context, the platform supports digitalization strategies that improve academic efficiency, accelerate student graduation, and create a more technology-adaptive academic culture. This research also (Pinho et al., 2021) The theory of innovation diffusion highlights the importance of relevant and easy-to-use innovations in increasing technology adoption. In addition, "Matur" 's contribution includes implementing cloud-based features that support real-time collaboration, which is rarely found in previous similar solutions. Thus, "Matur" not only improves the academic tutoring process but also serves as a reference for future educational innovations. Its potential for future development includes integration with other academic information systems to create a more unified digital ecosystem.

However, this study has limitations that need to be noted. First, the implementation of "Matur" was only tested in one institution, so the results may not necessarily represent the needs of other institutions. Second, this research focuses more on the development of the platform and has not evaluated its impact on student academic achievement. Third, technical constraints such as limited internet access in certain areas are a challenge in implementing this platform. The proposed solution is the development of an offline mode feature or a mobile application that can be synchronized when reconnected to the internet. In addition, the successful implementation of "Matur" is highly dependent on the active participation of students and lecturers. Therefore, more intensive training and socialization are needed to increase the adoption and effectiveness of this platform. Further research can also explore the possibility of integrating "Matur" with AI-based technologies to provide more personalized guidance recommendations. Thus, although "Matur" has shown positive results, this research opens up opportunities for broader innovations to address the challenges of higher education in the future.

"Matur" web users are dominated by students as much as 84% and lecturers as much as 16%. In the validity test of each indicator on the Innovation variable (X), the 'Matur' web platform affects final project management (Y). correlates (r) with the total score of each variable ≥ 0.25 . Because all items have a total score greater than 0.25, all items are said to be valid. With the equation $Y = 5.53 + 0.554x1 + \epsilon$. Then the reliability test has a Cronbach's alpha value between 0.70 and 0.90, so it can be interpreted that the reliability is high. Furthermore, from the table above, it is also obtained that the value of each item is greater than 0.80, which proves that the item can be said to have Internal consistency. Based on the regression test results, it is obtained that H0 is rejected at the 5% significance level 0.05 (H1 is accepted), because the significance number is 0.000 <0.05. So it can be concluded that consumer interest and decisions to buy products online. The innovation of the "Matur" web platform (X) affects Final Project Management (Y) with a significance value of 0.000 < 0.05.

CONCLUSION

Based on the validity analysis results using the Pearson Product-Moment Correlation test, the total score of each variable is ≥ 0.25 , so all total score items are said to be valid. Meanwhile, based on Cronbach's alpha test between 0.70 and 0.90, the reliability is high;

the value of each item is greater than 0.80, thus proving that the item can be said to have high reliability. Internal Consistent Reliability. Then, referring to the results of linear regression analysis, a hypothesis is obtained (H 0), which says that the platform innovation (X) influences final project management (Y) because the significance number is 0.000 < 0.05. So it can be concluded that x affects Y with the model linear regression: Y $5.53 + 0.554 \times 1 + \epsilon$. Finally, it can be concluded that platform-based innovation "Matur" web has a significant effect on student final project management.

REFERENCES

- Abdulghani, T., Maulana, M., & Gozali, H. (2019). Sistem Konsultasi dan Bimbingan Online Berbasis Web Menggunakan Webrtc (Studi Kasus: Fakultas Teknik Universitas Suryakancana). Media Jurnal Informatika, 11(2). http://jurnal.unsur.ac.id/mjinformatika
- Badriyah, N. (2021). Representasi Nilai-Nilai Karakter Sebagai Role Model d alam Film "Arbain" (Sebuah Analisis Semiotik). *TADRIS: Jurnal Pendidikan Islam*, 16(2), 436–452. https://doi.org/10.19105/tjpi.v16i2.4842
- Dakir, Sholihin, M. W., & Faisol, M. (2021). Learning Effectiveness Improvement Through Mobile Learning. *Turkish Online Journal of Qualitative Inquiry*, 12(4), 1661–1665.
- Elbes, E., & Oktaviani, L. (2022). Character Building in English for Daily Conversation Class Materials for English Education Freshmen Students. In *Students. Journal of English Language Teaching and Learning* (Vol. 3, Issue 1). http://jim.teknokrat.ac.id/index.php/english-language-teaching/index
- Harizahayu, H., Hermanto, K., & Ratna Yuniarti, R. (2023). Analisis Viral Marketing Pada Online Customer Terhadap Minat Pembelian Melalui Tiktok Shop Dengan Regresi Linier Sederhana. *Jurnal Sains Matematika Dan Statistika*, 9(2), 31. https://doi.org/10.24014/jsms.v9i2.20652
- Ibrahim, A., & Shiring, E. (2022). The Relationship between Educators' Attitudes, Perceived Usefulness, and Perceived Ease of Use of Instructional and Web-Based Technologies: Implications from Technology Acceptance Model (TAM). *International Journal of Technology in Education*, 5(4), 535–551. https://doi.org/10.46328/ijte.285
- Islam, U., Muhammad, K., Al-Banjari Banjarmasin, A., Putri, A., & Khotimah, S. (2022). Kesulitan Belajar Siswa Pada Pembelajaran Daring. In *Jurnal Bimbingan dan Konseling Ar-Rahman* (Vol. 8, Issue 1). http://ojs.uniska.ac.id/index.php/BKA
- Justina, I. A., Abiodun, O. E., & M., O. O. (2022). A Secure Cloud-Based Electronic Document Management System. *International Journal of Innovative Research and Development*. https://doi.org/10.24940/ijird/2022/v11/i12/dec22010
- Kusumaningrum, A., & Wahyuni, E. (2022). Prodistik; madrasah management to develop IT skill in industrial revolution 4.0 era. *Attarbiyah: Journal of Islamic Culture and Education*, 7(1), 31–43. https://doi.org/10.18326/attarbiyah.v7i1.31-43
- Lana, I. F. (2021). Implementasi Pembelajaran Jarak Jauh (PPJ) dalam Meningkatkan Kemandirian Belajar Siswa. *Fondatia*, *5*(1), 109–124. https://doi.org/10.36088/fondatia.v5i1.1108
- Liu, W., Shao, X., Wu, C., & Qiao, P. (2021). A systematic literature review on applications of information and communication technologies and blockchain technologies for precision agriculture development. *Journal of Cleaner Production*, 298, 126763. https://doi.org/10.1016/j.jclepro.2021.126763
- Mitchell, J. (2024). Legal Education and the Threat Response Legal Education and the Threat Response Part of the Legal Education Commons, and the Scholarship of Teaching and Learning Commons Recommended Citation Recommended Citation Legal Education And The Threat Response. In *The Journal of Law Teaching and The Journal of Law Teaching and Learning Learning* (Vol. 1, Issue 1). https://lawrepository.ualr.edu/lawteachingjournal/vol1/iss1/4
- Munif, M., & Yusrohlana, S. (2021). Strategi Guru dalam Membentuk Karakter Siswa melalui Nilai-

- Nilai Kejujuran. Fondatia: Jurnal Pendidikan Dasar, 5(September), 163–179.
- Nadlifatin, R., Ardiansyahmiraja, B., & Persada, S. F. (2020). The measurement of university students' intention to use blended learning system through technology acceptance model (tam) and theory of planned behavior (TPB) at developed and developing regions: Lessons learned from Taiwan and Indonesia. *International Journal of Emerging Technologies in Learning*, 15(9), 219–230. https://doi.org/10.3991/ijet.v15i09.11517
- Nelson, M. J., & Voithofer, R. (2022). Coursework, field experiences, and the technology beliefs and practices of preservice teachers. *Computers & Education*, 186, 104547. https://doi.org/10.1016/j.compedu.2022.104547
- Nikmehr, B., Hosseini, M. R., Martek, I., & Zavadskas, E. K. (2021). B Nikmehr; M Hosseini; I Martek; E Zavadskas; J Antucheviciene -2021- Digitalization as a Strategic Means of Achieving Sustainable Efficiencies in Construction Management. A Critical Review.pdf. *Sustainability (Switzerland)*, 13, 1–12.
- Or, C. (2023). The Role of Attitude in the Unified Theory of Acceptance and Use of Technology: A Meta-analytic Structural Equation Modelling Study. *International Journal of Technology in Education and Science*, 7(4), 552–570. https://doi.org/10.46328/ijtes.504
- Pinho, C., Franco, M., & Mendes, L. (2021). Application of innovation diffusion theory to the Elearning process: higher education context. *Education and Information Technologies*, 26(1), 421–440. https://doi.org/10.1007/s10639-020-10269-2
- Putra, Z. D. W., & van der Knaap, W. G. M. (2018). Urban innovation system and the role of an open web-based platform: The case of Amsterdam smart city. *Journal of Regional and City Planning*, 29(3), 234–249. https://doi.org/10.5614/jrcp.2018.29.3.4
- Rijal, S. (2023). Management of Online-Based Learning Media Through The Google Classroom Application in Increasing Student Learning Interest. *Al-Fahim: Jurnal Manajemen Pendidikan Islam*, 5(1), 188–206. https://doi.org/10.54396/alfahim.v5i1.564
- Rini, A. P., Firmansyah, N. F., Widiastuti, N., Christyowati, Y. I., & Fatirul, A. N. (2023). Pendekatan Terintegrasi dalam Pengembangan Kurikulum Abad 21. *Jurnal Ilmiah Pendidikan Holistik (JIPH)*, 2(2), 171–182. https://doi.org/10.55927/jiph.v2i2.3942
- Rozi, F., Ramdlani, M., Najah, F., Azizah, N., Niswa, H., & Abdillah, M. (2021). Distance Learning and Independent Learning of Students in Higher Education. *Journal of Physics: Conference Series*, 1899(1), 1–6. https://doi.org/10.1088/1742-6596/1899/1/012177
- Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning and Teaching*, 6(1), 342–363. https://doi.org/10.37074/jalt.2023.6.1.9
- Sari, R. P., Tusyantari, N. B., & Suswandari, M. (2021). Dampak Pembelajaran Daring Bagi Siswa Sekolah Dasar Selama Covid-19. *Prima Magistra: Jurnal Ilmiah Kependidikan*, 2(1), 9–15. https://doi.org/10.37478/jpm.v2i1.732
- Shakeri, H., & Khalilzadeh, M. (2020). Analysis of factors affecting project communications with a hybrid DEMATEL-ISM approach (A case study in Iran). *Heliyon*, *6*(8), e04430. https://doi.org/10.1016/j.heliyon.2020.e04430
- Suradji, M. (2018). Pengembangan Teknologi Informasi Dan Komunikasi Di Bidang Kesiswaan, Kepegawaian Dan Keuangan Di Sma Muhammadiyah 1 Gresik. *TA'LIM: Jurnal Studi Pendidikan Islam*, 1(2), 347–371. https://doi.org/10.52166/talim.v1i2.957
- Wewengkang, N. D., Rahmat, R., Rohim, R., Saefuddin, S., Ramadhan, I., & Al-Amin, A.-A. (2024). Development of E-Comic Teaching Materials with a local Wisdom Theme to Enhance High School Student's Historical Awareness. *AL-ISHLAH: Jurnal Pendidikan*, 16(4), 4323–4335. https://doi.org/10.35445/alishlah.v16i4.5974