



The Use of E Tihamah Application to Support MA Tihamah Putra Education

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Abstract

This study investigates the use of the E Tihamah application in supporting the educational management of facilities and infrastructure at MA Tihamah Putra. Educational support units play a pivotal role in ensuring the smooth operation of educational institutions, especially in managing resources and infrastructure. As the digital era advances, the optimization of educational management through technology becomes increasingly important. In this context, the E Tihamah application is introduced as an innovative solution to enhance the efficiency and accuracy of facility management, ultimately contributing to more effective educational processes. The research employs a descriptive qualitative approach to analyze the technical and operational aspects of the application and its functions. Data were collected through direct observation of the application's features and its impact on the school's administrative efficiency. The results highlight the significant improvements in administrative processes, communication, and decision-making transparency. Furthermore, the study explores the role of the application in supporting digital learning and fostering better interaction between teachers, students, and parents. This paper concludes that the E Tihamah application plays a key role in enhancing educational quality by streamlining management and supporting interactive, independent learning. The study recommends continuous training for stakeholders and regular updates to the application to meet evolving educational needs.

Keywords : Application, education application, educational management, educational support.

1. Introduction

Educational support units are essential components within educational institutions that function to facilitate the smooth and effective operation of the overall educational process (Yahya, Rahman, & Mulyadi, 2023), even though they are not directly involved in teaching activities. These units encompass various aspects designed to create an optimal learning environment (Kerimbayev, Umirzakova, Shadiev, & Jotsov, 2023). As stated by Supratman (2001), the management of educational support units is an integral part of overall educational management. In this context, effective coordination between units and operational efficiency are key to ensuring that support units can effectively enhance the learning process. Optimizing the role of support units in education has become increasingly relevant in the digital era, which emphasizes efficiency and accuracy in data management.

According to the Regulation of the Minister of National Education No. 9 of 2007 on Standards for Education Management by Primary and Secondary Education Units, point (a) mandates that schools or madrasas must establish written policies regarding the management of facilities and infrastructure. Furthermore, point (b) highlights the importance of program management to ensure that facilities and infrastructure consistently support educational processes. This underscores that the management of facilities and infrastructure is not merely administrative but also strategic in achieving educational goals. In light of this regulation, technological innovation in managing facilities and infrastructure is an urgent need to enhance the quality of education (Harini, Prananosa, Terminanto, Herlina, & Sulistianingsih, 2023).

In this context, the E Tihamah application is present as a solution to overcome various challenges in managing facilities and infrastructure in the MA Tihamah Putra environment. This application is designed to systematically record, store, and manage information related to facilities and infrastructure. Thus, the use of the E Tihamah application can increase efficiency and accuracy in management, which ultimately supports the creation of a more effective education process. This technological advancement not only provides benefits in administrative aspects for administrators (Ye, Hao, & Wu, 2024), but also supports more data-based decision making and transparency (Kurniawan, Purnama, Siminto, Riady, & Az Zaakiyyah, 2024).

The urgency of this research lies in the need to harness technology to support better educational management, particularly at MA Tihamah Putra. The implementation of the E Tihamah application is expected to serve as a relevant innovation example for other educational institutions facing similar challenges. Furthermore, this research aims to provide empirical insights into the benefits of using this application to enhance the quality of facilities and infrastructure management.

This study aims to analyze the effectiveness of the E Tihamah application in supporting education at MA Tihamah Putra. The benefits of this research are not limited to providing empirical data but also include offering practical recommendations for schools in managing their facilities and infrastructure. The findings of this study are expected to contribute to the development of more efficient and effective technology-based educational management strategies, ultimately enhancing the quality of educational services as a whole.

2. Research Method

This study uses a qualitative descriptive approach to describe in detail the use of the E Tihamah application in supporting the management of facilities and infrastructure at MA Tihamah Putra. Research data were obtained through direct observation of the application features, how the system works, and related

documentation produced by the application. The main focus of the study is on the technical and operational aspects of the E Tihamah application in supporting education management. Data collection was carried out using an in-depth observation method of the E Tihamah application, including exploration of the main functions of the application such as recording inventory of facilities, reporting damage, and supporting data management systems.

Data analysis was carried out using a thematic approach, which aims to identify patterns of use of the E Tihamah application in learning. The aspects discussed include Types of Applications in Learning, E Tihamah Functions for Teachers and for Students where the analysis is then directed at the role of the application in increasing material accessibility, facilitating interaction, and supporting independent learning.

3. Results and Discussion

3.1 Applications as User Support Tools

Applications are software programs that play a critical role in supporting various user activities (Saefullah, Anwar, Ulum, Widodo, & Juman, 2022), particularly in data processing and the provision of relevant information. Applications are designed to perform specific functions within a computer system to enhance efficiency and simplify the completion of specific tasks. Moreover, applications serve as tools to manage, process, and facilitate data communication in various technological environments (Anastasia Desmeria Br Ginting et al., 2024), making them solutions tailored to users' needs in diverse work and daily activity contexts.

According to Jogiyanto (2005), applications are software designed to systematically process data and generate outputs that meet user requirements. (Turban, Leidner, Mclean, & Wetherbe, 2008) reinforced this definition by explaining that applications are software programs specifically designed to assist users in completing particular tasks and improving work efficiency. In contrast, Laudon and Laudon (2012) emphasized the role of applications in data management and communication, describing them as software that facilitates the management of information across various technological environments. Furthermore, Sutarman (2012) asserted that applications are software enabling computer users to complete tasks more easily. Meanwhile, McLeod & Schell (2008) defined applications as software that supports users in performing specific tasks, particularly those related to data processing and providing relevant information.

3.2 Educational Applications

According to Ye et al. (2024), educational technology is considered to provide learners with opportunities to receive high-quality education. Educational applications are defined as technology-based software designed to support teaching

and learning activities more effectively and efficiently (Sudarsana et al., 2019). These applications play a significant role in facilitating access to educational materials, fostering online interaction between educators and learners, and enabling evaluation and assessment processes in learning. Sudaryono (2016) stated that educational applications simplify access to learning materials while improving the quality of learning through interactive approaches. Meanwhile, Munir (2017) added that educational applications support both formal and non-formal education by offering innovative methods.

According to Rusman (2012), technology-based educational applications provide convenience for students in accessing lessons and evaluating their learning outcomes independently. Additionally, Arsyad (2014) revealed that educational applications support both conventional and distance learning, enabling synchronous (real-time) and asynchronous (non-real-time) interactions between students and teachers. This perspective highlights that educational applications not only facilitate material delivery but also promote learning that is more flexible and responsive to the diverse needs of students.

Referring to the various opinions above, it can be concluded that educational applications significantly contribute to enhancing the flexibility, accessibility, and quality of education through the utilization of information and communication technology. This allows educators and learners to overcome the limitations of traditional learning methods while creating opportunities for more interactive and independent learning experiences. Customizing and developing educational applications to meet user needs is a crucial aspect of ensuring their successful implementation in various educational contexts.

3.3 Types of Applications in Learning

Educational applications can be classified based on their functions in supporting the learning process. The classifications are summarized in Table 1 below.

Table 1. Types of Applications in Learning

Type of Application	Description	Examples
Learning Management System (LMS)	Digital platforms for managing teaching and learning processes, including material access, assignments, and evaluations (Rusman, 2012).	Moodle, Google Classroom
Multimedia-Based Learning	Applications combining text, images, videos, and audio to create interactive and engaging learning experiences (Munir, 2017).	Kahoot!, Edmodo, Nearpod

Collaborative Learning	Tools that enable group discussions, information sharing, and joint project completion in an online setting (Munir, 2017).	Padlet, Google Docs, Microsoft Teams
Interactive Learning	Applications designed to actively engage students through quizzes, simulations, and educational games (Arsyad, 2014).	Quizizz, Duolingo, Seesaw

These applications provide accessibility, encourage collaboration, and enhance the overall learning experience dynamically and effectively. Choosing the appropriate application based on specific educational needs is essential for achieving optimal learning outcomes.

3.4 E-Tihamah Application in Learning

The E-Tihamah application is designed to support learning and educational administration at MA Tihamah Putra digitally. This application not only facilitates students' and teachers' access to learning materials but also assists in the efficient management of assignments and assessments. Rusman (2012) emphasizes that using such applications supports a more structured learning system while enhancing student engagement.

Munir (2017) highlights that multimedia-based applications like E-Tihamah can create more flexible and interactive learning experiences. With multimedia features, the application enables students to gain a deeper understanding of materials through visual and auditory approaches.

In addition, Sudaryono (2016) asserts that digitalization through applications like E-Tihamah can improve the overall quality of learning. This includes aspects such as evaluation and academic data management, which become more efficient. Meanwhile, (Arsyad, 2014) stresses the importance of educational technology in fostering collaboration and student participation, which are also key benefits of this application.

Additionally, the E-Tihamah application has the potential to serve as a better communication tool between teachers, students, and parents. With integrated digital communication features, this application can support a more transparent and harmonious relationship within the educational ecosystem.

With the numerous benefits it offers, the E-Tihamah application can be an innovative solution to address the challenges of modern education. Improved accessibility, ease of academic management, and more interactive learning experiences are some of the positive impacts felt by all involved parties. Optimal utilization of this application should be continuously encouraged through training and the development of features that meet user needs.

3.5 Functions of E-Tihamah for Teachers

E-Tihamah is a platform designed to support teachers in the learning process by providing access to various learning resources, professional training, and collaboration tools among teachers. According to Mulyasa (2009), it is crucial for teachers to possess competencies as agents of learning, and E-Tihamah helps fulfill this need. Dri Atmaka (2004) emphasizes the teacher's responsibility in developing students both physically and spiritually, which can be supported by the tools available on this platform. Additionally, Purwanto (2009) asserts that the delivery of knowledge by teachers can be enhanced through the use of technology such as E-Tihamah.

To install the E-Tihamah application, the first step is to open Google Play Store or App Store on your device. Then, type "E-Tihamah" into the search bar and select the application that appears. Afterward, press the Install button to start the download and installation process. Once the installation is complete, open the E-Tihamah application, and you will be prompted to log in with a registered account. If you do not have an account yet, follow the registration instructions provided on the screen. After successfully logging in, you can begin utilizing the various features available in the application according to your needs.

The E-Tihamah application offers a variety of features that facilitate teachers in managing educational activities. One of its primary menus is Class Management, where teachers can effectively organize and monitor schedules and learning materials. Additionally, there is an Attendance Menu, which enables teachers to record student attendance digitally, making the process faster and more accurate. Another essential menu is Assessment, which helps teachers compile student grades more easily and systematically. Lastly, the Communication Menu provides a platform for teachers to interact with students and parents, ensuring more focused communication regarding student learning progress.

Through these features, the E-Tihamah application enhances teachers' efficiency and productivity in carrying out educational tasks. Thus, E-Tihamah serves not only as a teaching aid but also as a means to improve the overall quality of education.



Figure 1 First View of E Tihamah Application for Teachers

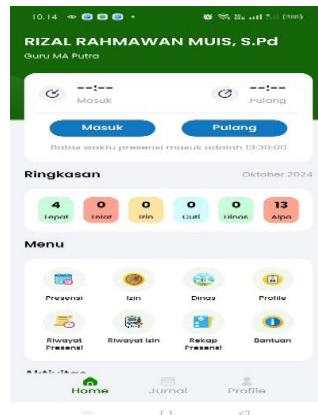


Figure 2. Content in the E Tihamah application

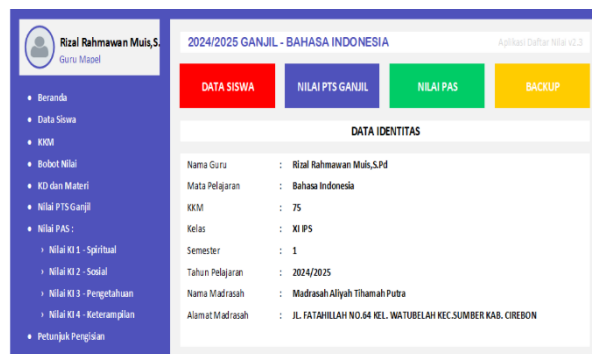


Figure 3. Student Assessment Features in the E-Tihamah Application

The E-Tihamah application provides significant benefits for teachers, one of which is enhancing their professionalism in performing their duties. With features such as class management, digital attendance, and structured assessments, teachers can work more effectively and efficiently. This application enables teachers to plan, implement, and evaluate the learning process in a more organized manner.

The ease of access to student-related data and information also helps teachers monitor student progress in real-time, allowing them to take appropriate actions when necessary. Additionally, the application simplifies daily teaching activities. Through the use of digital platforms, lesson materials can be shared quickly, and communication with students becomes more seamless.

According to Rahmawati (2022), an educational technology expert, "The use of digital-based educational applications can enhance teachers' competencies in managing learning and improve their technological skills." Similarly, Supriyadi

(2023) states, "The integration of technology into teaching and learning activities supports teachers in becoming more adaptive and responsive to students' needs and the dynamics of modern education."

Thus, the E-Tihamah application not only facilitates the learning process but also contributes to improving the quality and professionalism of teachers.

3.6 E-Tihamah for Students

The E-Tihamah learning application provides significant benefits in enhancing student engagement. Ahmad (2023) stated that The use of technology in education increases students' accessibility to learning, allowing them to study anytime and anywhere. Meanwhile, Yulianto (2022) highlighted that Digital-based applications enable students to take greater responsibility for their learning, as they can monitor their progress and grades directly. This aligns with the perspective that technology facilitates a more independent and efficient learning process. Through the features offered, supported by expert opinions, the E-Tihamah application has proven to be an effective tool for improving the quality of education for students, enabling them to access materials and actively engage in the learning process.

The E-Tihamah application for students is designed to simplify various student activities, including school payments, daily necessities, and access to important information. With the payment feature, students can settle school fees digitally without needing to visit the school, thus making the process more efficient. Additionally, the application supports students in managing daily needs, such as purchasing stationery or uniforms, through an integrated platform.

The application also offers an Academic Information feature, allowing students to quickly and easily view schedules, grades, and announcements. According to Junaedi (2021), an expert in digital education, Applications that facilitate online payments and access to information provide students with convenience in carrying out school activities, enabling them to focus more on the learning process. Similarly, Prof. Sulastri (2022), a specialist in educational technology, emphasized that The integration of payment and academic information features into a single application supports efficiency and transparency in school management and student learning.

With the conveniences offered, the E-Tihamah application plays a crucial role in helping students manage their academic tasks and other needs more effectively.



Figure 4. E Tihamah Application for Students

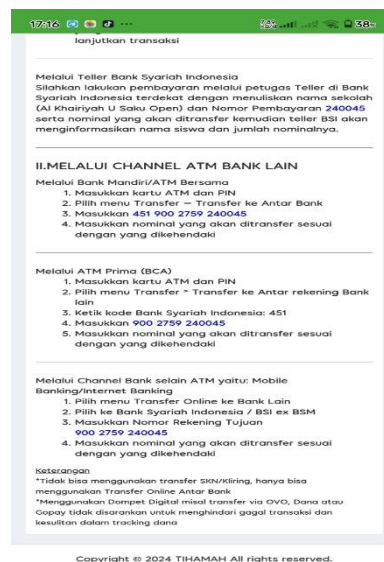


Figure 5. How to Pay Student Pocket Money

The E-Tihamah application provides various payment options to meet students' daily needs. Students can easily make payments at the school canteen for purchasing food, at the school store for buying stationery or uniforms, as well as for purchasing books required for their studies. This process is conducted digitally, enabling fast and cashless transactions, making it safer and more practical for students. This feature also allows parents to monitor their children's school expenses in real-time. Additionally, the application accommodates payments for other essential student needs, such as school supplies and reading materials.

4. Conclusion

The E-Tihamah application plays a crucial role in supporting educational activities at MA Tihamah Putra through the digitalization of learning processes and educational management. This application offers features such as class management, digital attendance, academic evaluation, integrated communication, and payment systems, significantly enhancing the efficiency, transparency, and flexibility of the educational process. By integrating technology, it facilitates better interactions between teachers, students, and parents, as well as supports more interactive and independent learning. Furthermore, this application improves the professionalism of teachers in managing the teaching and learning process while providing students with easier access to learning materials and various school services.

To ensure the sustainability and optimization of the use of the E-Tihamah application, regular training for teachers, students, and parents on how to use the application should be conducted. Additionally, it is recommended that the developers continuously improve the application's features based on user feedback to address the evolving educational needs. Adequate technological infrastructure, such as hardware and internet connectivity, should also be ensured to facilitate the smooth implementation of the application. With these efforts, the E-Tihamah application can become a sustainable solution for enhancing the quality of education in the digital era.

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