

# Digitalization of New Student Registration at the Salafiyah Baitul Kirom Islamic Boarding School

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## ABSTRACT

Salafiyah Baitul Kirom Islamic Boarding School, located in Mulyosari Village, Tanjungsari District, South Lampung Regency, Lampung Province, is an educational institution that contributes to shaping the younger generation through strong religious and moral values. However, the process of new student registration is still conducted conventionally through manual form completion and document submission via WhatsApp, resulting in inefficiency, time consumption, and a higher risk of administrative errors. This study aims to identify the problems in the existing new student registration process and to analyze the implementation of an online registration system as a solution to improve the admission process. This research employed a descriptive qualitative approach. Data were collected through observation, interviews, and documentation, and then analyzed using data reduction, data presentation, and conclusion drawing techniques. The results show that the conventional registration system creates several obstacles, including slow administrative services, difficulties in data management, and limited access for prospective students living far from the boarding school. The implementation of an online registration system offers significant benefits in improving the efficiency, transparency, and accuracy of the registration process, while also reducing the administrative burden on the admission committee. In addition, the system facilitates better data management and provides easier access to information for prospective students. Therefore, the online registration system can serve as an effective solution to support the digital transformation of student admissions at Salafiyah Baitul Kirom Islamic Boarding School.

## 1. INTRODUCTION

The admission of new students is a strategic process in ensuring the continuity and development of educational institutions, including Islamic boarding schools. For pesantren, the admission process is not merely administrative, but also represents the institution's initial interaction with prospective students and their families. Therefore, an effective, efficient, and transparent admission system is essential to support institutional credibility and service quality. In the context of rapid digital transformation, conventional admission practices such as manual form completion and direct submission of documents are increasingly considered inadequate because they tend to be slow, less efficient, and more vulnerable to administrative errors. The use of information systems in educational administration has been widely recognized as an important step toward improving organizational effectiveness. Information systems enable institutions to process data more accurately, reduce manual workloads, and provide faster access to information for users. In student admission activities, digital systems are particularly relevant because they support the

management of applicant data, document verification, scheduling, and announcement of results in a more integrated manner. For Islamic boarding schools that continue to rely on conventional administrative procedures, the adoption of web-based systems offers an opportunity to modernize services while maintaining institutional values and educational goals. Several previous studies have shown that digital-based admission systems provide important benefits for Islamic educational institutions. Jufri, Sulaeman, and Dani (2020) found that a web-based registration application in pesantren simplified the administrative process and accelerated data processing. Inayah, Cholissodin, and Priharsari (2021) also demonstrated that a web-based student admission system improved the systematic management of registration data and supported better service delivery. Likewise, Falah and Harefa (2022) reported that an online admission information system increased accessibility for prospective students and reduced the committee's administrative burden.

These studies indicate that the digitalization of the student admission process contributes positively to administrative efficiency. Further studies also confirm that online admission systems strengthen institutional communication, transparency, and service quality. Fatoni (2021) showed that the integration of digital approaches in student admission can improve communication between institutions and prospective students. Suleman, Widodo, and Silviana (2022) found that a web-based admission information system facilitated data processing and provided wider access to information for users. Kurniati, Tri, and Rahmayani (2023) similarly concluded that online student admission systems reduced delays in administrative work and improved the accuracy of reporting. Collectively, these studies suggest that the implementation of digital systems is increasingly important for educational institutions seeking to improve governance and responsiveness in the digital era. Although previous studies consistently highlight the advantages of online admission systems, most of them focus on system design, technical development, or implementation in general educational institutions and other pesantren contexts. There is still limited research that specifically examines how the digitalization of new student registration responds to the real administrative problems faced by a particular Islamic boarding school, especially in relation to efficiency, accessibility, transparency, and data management in local institutional settings. In other words, prior studies have not sufficiently addressed the contextual needs and practical challenges experienced by Pondok Pesantren Salafiyah Baitul Kirom in managing a conventional student admission process. This study is intended to fill that gap by analyzing the problems found in the conventional new student admission process at Pondok Pesantren Salafiyah Baitul Kirom and by examining the implementation of an online registration system as a solution to these problems. Unlike earlier studies that generally emphasize technical system development, this research focuses on the relevance of digitalization to the institutional needs of the pesantren, particularly in improving service efficiency, minimizing administrative errors, widening access for prospective students, and supporting more effective data management. Thus, this research contributes not only practically, by offering a solution for the institution under study, but also academically, by enriching the discussion on the digital transformation of administrative services in Islamic boarding schools.

## 2. METHODS

This study employed a descriptive qualitative approach to analyze the implementation of the online new student registration system at Pondok Pesantren Salafiyah Baitul Kirom. This approach was chosen because the research focused on understanding the actual conditions of the existing admission process, identifying administrative problems, and describing the implementation of the online registration system in improving the admission service.



**Figure 1.** Research Stages

The research subjects consisted of the new student admission committee, administrative staff, the finance department, and prospective students involved in the registration process at Pondok Pesantren Salafiyah Baitul Kirom. These subjects were selected because they were directly involved in both the conventional and online-based registration process, so they were considered capable of providing relevant information related to the implementation of the system. The data collection techniques used in this study included observation, interviews, and documentation. Observation was conducted to examine the stages of the existing new student admission process and to identify problems occurring in the field. Interviews were carried out with the admission committee and related staff to obtain information regarding the weaknesses of the previous manual system, system requirements, and the perceived benefits of the online registration system. Documentation was used to collect supporting data related to registration procedures, administrative records, and system implementation results. The research was conducted through several stages. First, the researchers analyzed the previous new student admission system used at Pondok Pesantren Salafiyah Baitul Kirom in order to identify the problems encountered and to determine the system requirements. Second, the researchers designed and developed the proposed online registration system based on the needs analysis. Third, the system was implemented by installing it on the server and conducting trials involving prospective student accounts, the finance department, and the admission committee. Finally, an evaluation was carried out to assess the system's performance and suitability before it was officially used in the new student admission process. The data analysis technique applied in this research consisted of three stages: data reduction, data presentation, and conclusion drawing. Data reduction was conducted by selecting and simplifying the information obtained from observation, interviews, and documentation according to the focus of the study. Data presentation was then carried out by organizing the findings in a systematic and descriptive form to facilitate interpretation. The final stage was drawing conclusions based on the patterns and relationships found in the data regarding the effectiveness and benefits of the online registration system in supporting the new student admission process.

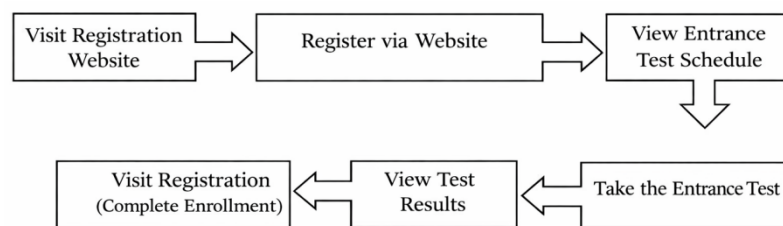
### 3. RESULTS AND DISCUSSION

#### RESULTS

The development of information technology has brought significant changes to various aspects of life, including education. Educational institutions are required to adapt to digital advancements to improve service quality, administrative efficiency, and ease public access to information. Digital transformation is not only a necessity but also a crucial strategy for maintaining the competitiveness and sustainability of educational institutions in today's fast-paced and connected modern era. In line with this, the Salafiyah Baitul Kirom Islamic Boarding School, as a religious-based educational institution, also faces challenges in its conventional admissions process. The manual registration system, which relies on filling out physical forms and sending documents via instant messaging apps, presents various obstacles, such as delays, potential data errors, and a high administrative burden. Implementing an online registration system for new students is a strategic step to create a more effective, efficient, transparent process that aligns with

current technological developments. The current student registration process is currently running offline. In this section, the flow or stages involved in the new student registration process currently conducted offline at Pondok Pesantren Salafiyah Baitul Kirom will be described. The stages are as follows: (1) Prospective students come to the Islamic boarding school to obtain the registration form. (2) Prospective students fill out the registration form and submit the required documents. (3) The boarding school staff check the completeness of the documents and verify the data. (4) Prospective students take the entrance examination. (5) Announcement of the test results. The weakness of the current system is that prospective students must spend a considerable amount of time and money to be physically present at the registration location, especially those coming from outside the city who live quite far from the boarding school. In addition, the committee is burdened with manual data entry tasks that consume significant time and effort, which affects service speed, data management, and the quality of the reports produced.

Description of the Online Registration System. The Online Registration System at Pondok Pesantren Salafiyah Baitul Kirom is designed to optimize the new student admission process. This system is built using a web-based platform and can be accessed through computers, laptops, and smartphones. The main features of the Online Registration System include: Online Registration, Prospective students can complete the registration form online without having to come directly to the Islamic boarding school. Data Verification. The registration committee can verify prospective students' data online. The Online Registration System at Pondok Pesantren Salafiyah Baitul Kirom is designed to optimize the new student admission process. This system is built using a web-based platform and can be accessed through computers, laptops, and smartphones. The main features of the Online Registration System include:



**Figure 2.** Registration Flow for Accepting New Prospective Students

Based on Figure 2 above, the initial step in the new student admission process is registering by visiting the registration website, followed by viewing the entrance examination schedule and completing the re-registration process. The flow of the online new student registration system at Pondok Pesantren Salafiyah Baitul Kirom begins when prospective students visit the registration website provided by the institution. This stage serves as the initial access point for applicants to obtain information regarding the admission process. Through the website, prospective students can learn about registration requirements, procedures, and important announcements related to new student admission. The availability of this website reflects the institution's effort to provide easier and more accessible services in line with digital developments. After accessing the registration website, prospective students proceed to the registration stage through the online system. At this stage, applicants are required to fill in the registration form and submit the required data through the website. This online mechanism simplifies the registration process because prospective students no longer need to come directly to the boarding school to complete administrative requirements. In addition, the use of the website allows data to be collected in a more structured and systematic manner, thereby reducing the risk of errors that often occur in manual registration. The next stage in the process is viewing the entrance examination schedule. After completing the registration,

prospective students can access information regarding the date and implementation of the entrance examination through the same website. This feature is important because it ensures that applicants receive accurate and timely information without depending on direct notification from the committee. As a result, the dissemination of information becomes more efficient and transparent, while also minimizing the possibility of miscommunication between the institution and prospective students.

Once the examination schedule has been announced, prospective students take part in the entrance examination according to the determined schedule. This stage remains an essential part of the admission process because it functions as a selection mechanism to assess the readiness and qualifications of applicants. After completing the examination, prospective students can once again access the website to view the test results. The online announcement of results provides convenience for applicants, especially those who live far from the institution, because they can obtain the information quickly without having to come directly to the boarding school. The final stage in the admission flow is re-registration for applicants who have passed the selection process. At this stage, accepted students are required to complete the re-registration procedure as a confirmation of their willingness to officially join Pondok Pesantren Salafiyah Baitul Kirom. Overall, this flow demonstrates that the online registration system is designed to make the admission process more effective, efficient, and transparent. By integrating the stages of registration, schedule access, test participation, result announcement, and re-registration into one digital platform, the institution is better able to improve administrative services and provide convenience for prospective students.

### 3.1 Use Case Diagram

An overview of the user scenario in the new student admission registration system can be seen in Figure 3.

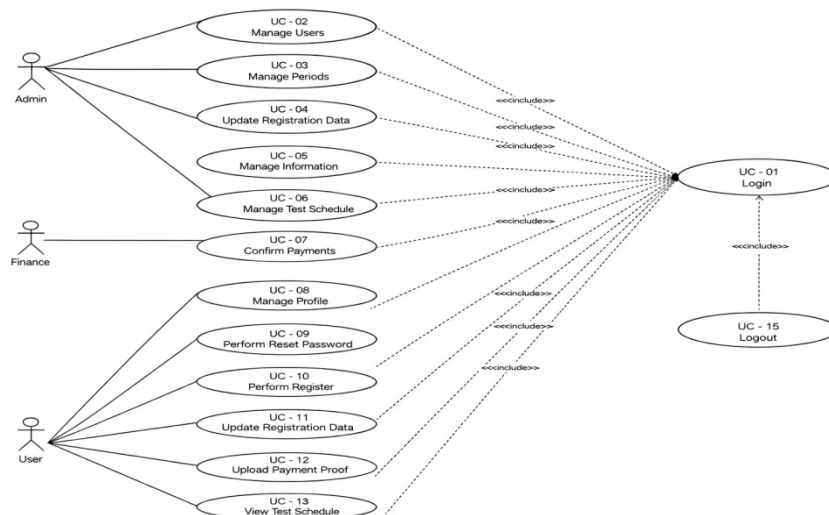
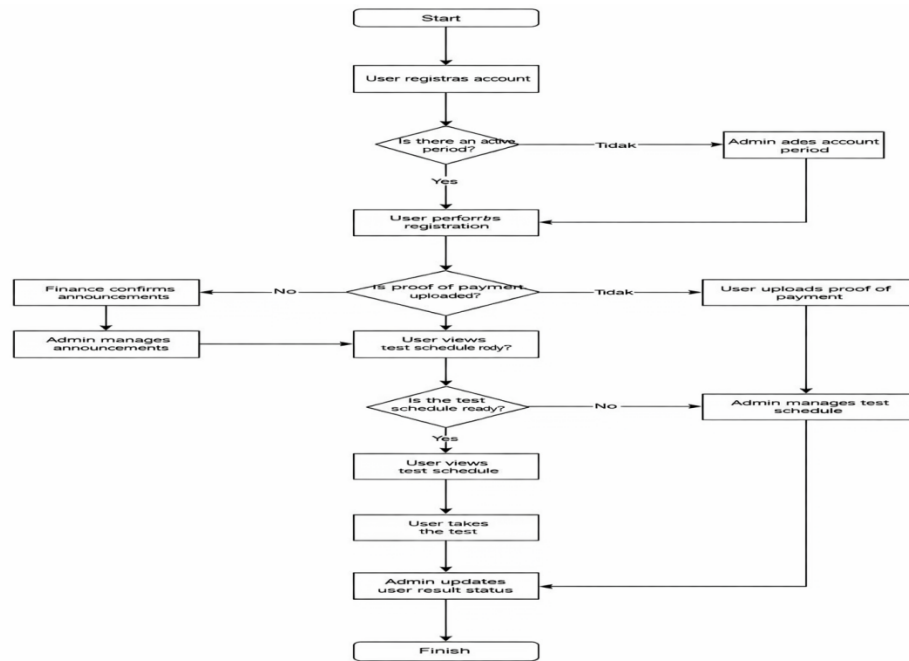


Figure 3. Use Case Diagram of the New Student Admission System

### 3.2 Online based System Flowchart

An overview of the user scenario in the new student admission registration system can be seen in Figure 3.

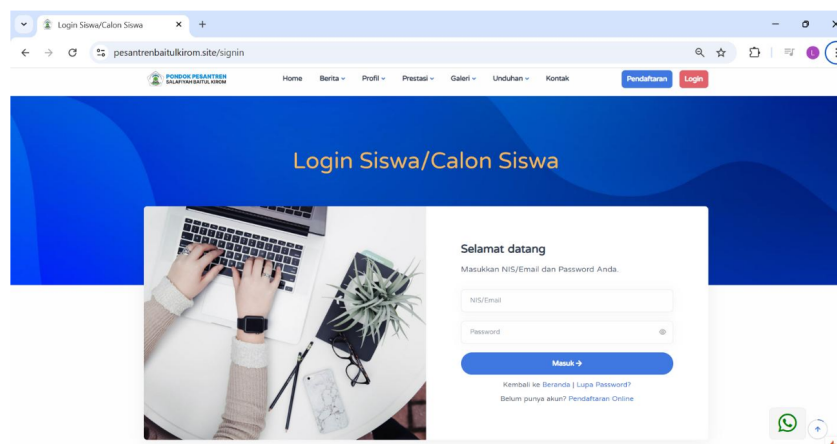


**Figure 4.** Online based System Flowchart

Figure 4 shows a flowchart of the online-based system for registering new students, implemented at the Salafiyah Baitul Kirom Islamic Boarding School. Each prospective student goes through the process of creating a user account, logging in to the website, completing the registration form and requirements, and then viewing information about the implementation and results of the entrance exam.

### 3.3 Online New Student Registration System Interface

The initial page accessed by prospective new students who wish to register is <https://pesantrenbaitulkirom.site/signin>. The next page will appear as shown in Figure 5.



**Figure 5.** New Student Login Page

The first step is to select the Online Registration menu to create a new account to gain access to the online student admissions system. Users will be asked to enter their name, email address, password, phone number, and address, which will be used to log in to this website.

### 3.4 Online New Student Registration System Interface

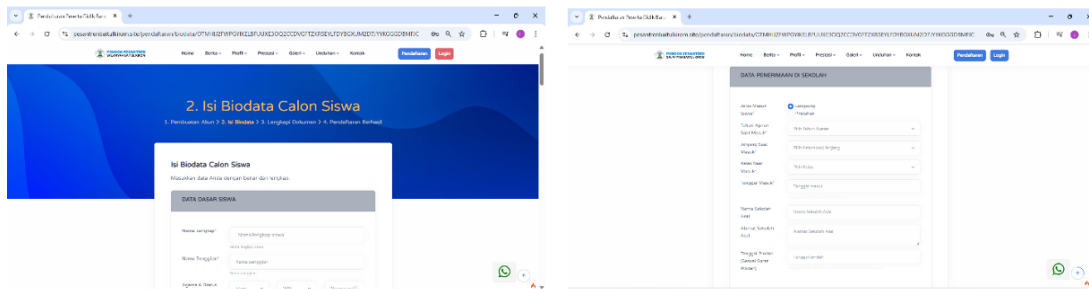


Figure 6. Prospective Student Registration Page

After logging in, you will see several menus related to registering new prospective students, as shown in Figure 6. New prospective students are asked to fill in their biodata.

### 3.5 System Testing

System testing was conducted using the black box method, which tests the software based on the system's functional specifications without testing the design and program code. [10] In this study, the registration module was tested by conducting system function validation tests. A sample test can be seen in Figure 7.

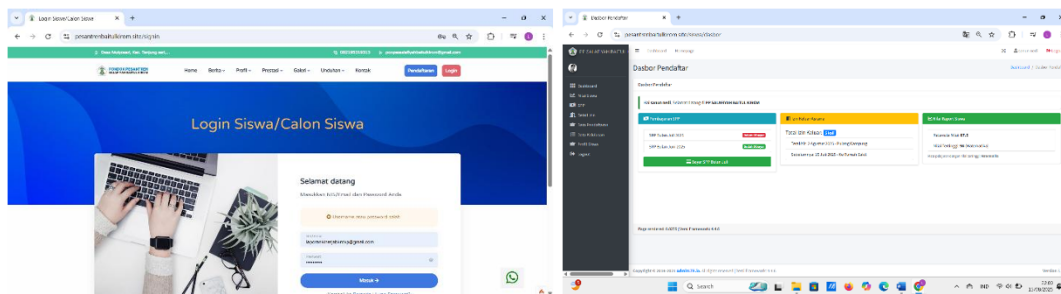


Figure 7. Log In Input Validation Test

Testing is performed by entering an unregistered email address and password that doesn't match the registered one. This will result in a response stating that the email address or password used is incorrect. When logging in with valid information, the next page will be the user's homepage/dashboard.

## DISCUSSION

The implementation of the online registration system at Pondok Pesantren Salafiyah Baitul Kirom demonstrates a clear alignment between the research findings and the fundamental concept of digital transformation in educational administration. The results show that shifting from a conventional, paper-based system to a web-based platform significantly improves efficiency and reduces administrative burdens. This outcome supports the basic premise that information systems can streamline organizational processes by minimizing manual intervention and automating data management tasks. From a theoretical perspective, the findings reinforce the concept of Management Information Systems (MIS), which emphasizes the role of technology in enhancing decision-making and operational effectiveness. The system developed in this study enables structured data collection, real-time verification, and centralized information storage. These features are consistent with the hypothesis that integrating digital platforms into admission

processes increases data accuracy and transparency compared to traditional manual systems. The results also show a positive correlation between system implementation and service quality improvement. Prospective students no longer need to travel to the boarding school to complete registration, which reduces time and financial costs. This finding aligns with service quality theory, particularly in terms of responsiveness and accessibility. By providing online access, the institution demonstrates adaptability to user needs in a digital environment. When compared with previous studies on web-based student admission systems in Islamic boarding schools, the findings are consistent with earlier research that concluded digital systems enhance operational efficiency and broaden institutional outreach. Similar to prior studies, this research confirms that online registration platforms allow institutions to reach prospective students from wider geographical areas. There is no significant conflict between this study and previous findings; instead, it strengthens the general argument supporting digitalization in pesantren administration. However, the discussion also reveals certain practical considerations. While the system improves efficiency, its effectiveness depends on user readiness, internet accessibility, and digital literacy among prospective students and administrative staff. This aspect highlights a potential gap between theoretical expectations and real-world implementation, especially in areas where technological infrastructure may still be limited.

In terms of data management, the system contributes to improved accuracy and reduced human error. Manual data entry often results in duplication or misinterpretation of information, whereas digital forms with validation features minimize such risks. This outcome supports the hypothesis that system automation enhances reliability and consistency in administrative records. The implementation also has implications for institutional transparency. By providing online announcements of test schedules and selection results, the system reduces ambiguity and potential miscommunication. This transparency strengthens trust between the boarding school and the community. Theoretically, this aligns with governance principles that emphasize accountability and open information systems within educational institutions. Another important implication relates to strategic planning. With comprehensive and digitally stored data, the boarding school can analyze trends in applicant demographics, educational backgrounds, and regional distribution. This supports evidence-based decision-making and long-term development strategies. The research therefore extends beyond operational benefits and contributes to institutional sustainability planning. Despite its advantages, the transition from offline to online systems may require organizational adaptation, including staff training and system maintenance. Resistance to change can occur if stakeholders are not adequately prepared. This indicates that successful digital transformation is not solely dependent on technological tools but also on human resource readiness and management support. Overall, the discussion confirms that the results are consistent with the initial hypothesis that implementing an online registration system would enhance efficiency, accuracy, and service quality. The study supports existing research while also providing contextual evidence from Pondok Pesantren Salafiyah Baitul Kirom. The implications are significant both theoretically, in reinforcing information system and digital transformation concepts, and practically, in offering a scalable model for other Islamic boarding schools seeking to modernize their admission processes.

#### 4. CONCLUSION

Based on the results of this study, it can be concluded that the implementation of the online registration system at Pondok Pesantren Salafiyah Baitul Kirom has improved the effectiveness and efficiency of the new student admission process. The system simplifies several important stages of

admission, including online registration, access to entrance examination schedules, announcement of test results, and re-registration. Compared with the previous conventional system, the online system reduces administrative workload, minimizes the risk of data errors, and provides faster access to information for prospective students. The findings also indicate that the online registration system contributes to greater transparency and better data management in the admission process. Through a centralized digital platform, applicant data can be managed more systematically, while prospective students can obtain admission information more easily without having to come directly to the boarding school. This is particularly beneficial for applicants who live far from the institution, as it reduces both time and financial costs during the registration process. Therefore, the implementation of the online registration system is not only a practical solution to the administrative problems previously faced by the institution, but also a strategic step toward supporting the digital transformation of educational services at Pondok Pesantren Salafiyah Baitul Kirom. In this regard, the system has demonstrated its potential to enhance service quality, improve institutional efficiency, and support more accurate and sustainable student data management.

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