

## Centralized Website Optimization at Modern Islamic Boarding School Baitussalam

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### ABSTRACT

The increasing demand for technology in society has led to the widespread use of websites as essential information platforms. Pondok Pesantren Modern (PPM) Baitussalam manages multiple educational units, ranging from kindergarten to high school levels, including Integrated Islamic Kindergartens, Elementary Schools, Junior High Schools, and a Senior High School across Prambanan and Cangkringan. However, the existing websites for these units are not fully centralized, and some are not operating optimally. This training activity aims to integrate and optimize the websites into a single, centralized platform to enhance information accessibility. The training was conducted through lectures, interactive discussions, and hands-on mentoring sessions. As a result, the centralized school website now enables all educational units within PPM Baitussalam to streamline information dissemination for teachers, students, and the public. Additionally, it simplifies access to school-related information and facilitates online student registration, eliminating the need for in-person visits. The implementation of this centralized website significantly improves efficiency in information management, enhances accessibility, and supports digital transformation in education.

**Keywords:** Optimization, Centralized Website, Community Service

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## INTRODUCTION

The Internet is a centralized global network with computers that provides users with a set of information or documents (Comer, 2018). One of the most popular Internet facilities is the World Wide Web, which makes information accessible using a hypertext approach (Dikaiakos, 2004). Pages or Internet sites that can be accessed through the World Wide Web network are called websites, which are pages that are equipped with image animations and can interact with databases. Information technology is developing rapidly and demands the delivery of fast and accurate information (Rajiullah et al., 2019). Schools from Early Childhood Education to High School must have national standards, it is hoped that the delivery of information, especially in the academic field, will be faster (Council et al., 2015). This aligns with Government Regulation of the Republic of Indonesia Number 57 of 2021 concerning National Education Standards, which covers aspects such as content, processes, graduate competencies, education personnel, infrastructure, management, financing, and assessment (Indonesia, 2021). One effective medium for delivering school-related information is a school profile website (Asrin & Utami, 2023). A school website serves as a platform that provides details about the school's background, schedule, curriculum, activities, contact information, and news updates (Taddeo & Barnes, 2016). The structured presentation of school information through a dedicated website can enhance accessibility and communication between schools and stakeholders.

Schools as educational institutions in information delivery activities still need to interact with teachers, students and the general public and socialize so that they are better known by the wider community, namely by providing complete, detailed and clear information about the school's profile (Purba & Panday, 2015). So far, many schools have been delivering information to the public only in a simple way, through bulletin boards. With the delivery of such information, there are still many shortcomings, including limited information delivery, less widespread information dissemination and relatively less favorable updating of the latest information in schools (Kullenberg et al., 2018). Websites today appear because of increasing market and community needs in the field of technology (Kirk et al., 2016). Today's websites not only provide services or a company profile for a company, but also become a place to sell and buy, entertainment, forums, and various other creativities that can support and attract the market and consumers to use its services or just look (Wirtz & Lovelock, 2021). A website is an entire web page that contains a large amount of information in a domain (Moro-Visconti, 2022). The information contained in the web is presented on a web page formed from a set of text, graphics, images, sounds, and videos (Berners-Lee et al., 2023).

The Baitussalam Modern Islamic Boarding School was established in 1986 in the Taskombang area in Prambanan, Klaten. Right In 1998, the students of the Baitussalam Modern Islamic Boarding School established the Baitussalam Integrated Islamic Kindergarten (Ahmad, 2024). From year to year, PPM Baitussalam has experienced rapid development. In 2007 he established an Integrated Islamic junior high school with a boarding system. PPM Baitussalam established an Integrated Islamic Senior High School Baitussalam in 2014 with a boarding system. Along its the

rapid development, PPM Baitussalam established PPM Baitussalam 2 in Cangkringan and established Integrated Islamic Kindergarten Baitussalam 2, Integrated Islamic Elementary School Baitussalam 2 and Integrated Islamic junior high school Baitussalam with a full day system. The rapid progress of the times and the increasingly fierce global competition require the younger generation of Islam to have a balanced provision of religious and general science. The maturity of IMTAQ and science and technology is an absolute requirement to win competition in all fields. To Address these needs, the Integrated Islamic Junior High School and Integrated Islamic Senior High School Baitussalam Boarding School, which is an Integrated Islamic School, combines the Islamic Boarding curriculum and the national education curriculum and provides a competency-based education pattern with a portion of 60% practicum or scientific research and 40% theory. Thus, graduates of PPM Baitussalam are expected to become intelligent, and disciplined, have an Islamic personality, have life skills, and be skilled in foreign languages (Arabic or English), as well as in other scientific fields (Ratnasari & Kumalasari, 2019). The websites owned by PPM Baitussalam are still not centralized and connected, for example, the website of Integrated Islamic Senior High School has an address <http://smait.baitussalam.sch.id>, Integrated Islamic Junior High School website with <https://smpit.baitussalam.sch.id> link address, Integrated Islamic Elementary School Website with <https://sdpit.baitussalam.sch.id> link address, Integrated Islamic Kindergarten Website with <https://paudit.baitussalam.sch.id> link address.

Where the websites of each unit are not centralized and connected, and there are still many that are not optimal, it is necessary to centralize information to be more directed and optimal. From the results of direct observation in the field along with interviews with the head of the foundation and teachers at the Baitussalam Foundation, the serious problems faced by partners while managing the website are as follows: (1) The website managed by each unit, kindergarten, elementary, junior high and high school, is not optimal. (2) The website managed by each unit, kindergarten, elementary, junior high, and high school, is less centralized so that the information obtained is not centralized into one part. From the results of the analysis of the situation and problems presented above, a solution was offered, namely holding training related to optimizing the management of a centralized website for teachers and the Administration of Kindergarten Integrated Islamic, Elementary Integrated Islamic, Junior High School, Integrated Islamic Senior High School, Modern Islamic Boarding School Baitussalam Prambanan Yogyakarta.

## METHOD

The implementation of this service includes several important stages as follows: 1. Creation of a Centralized Website: The first stage is the creation of a centralized website, which serves as the main platform for various activities and information. This website is designed to facilitate the access and management of information by all participants and stakeholders (Thompson et al., 2021). 2. Web Filling Training: After centralized website is completed, the next stage is website filling and maintenance training. This training is designed to teach participants how to manage content, update

information, and effectively use website features (Thilakarathna, 2023). 3. Evaluation and Optimization: The final stage involves evaluating the use of the website and optimizing its functionality (Eisenberg & Quarto-vonTivadar, 2009). This evaluation aims to assess the effectiveness of the website in meeting user needs and identifying areas that require improvement. Based on the evaluation result, adjustments were made to improve the performance and usability of the website. The Service Methods Used included lecture and discussion methods. The lecture method conveys basic information about the use and management of websites. This method allowed participants to gain the theoretical knowledge necessary to manage websites. Meanwhile, the discussion method was applied to discuss practical problems that participants may face when managing a website. This discussion also provided an opportunity for participants to share their experiences and practical solutions. The training participants involved in this community service activity were teachers and administration of Integrated Islamic Kindergarten, Integrated Islamic Elementary School, Integrated Islamic Junior High School, and Integrated Islamic High School of Modern Islamic Boarding School Baitussalam Prambanan Yogyakarta totalling nine people. The training was held for 2 days in the ICT Room of the Integrated Islamic Elementary School Baitussalam 1 Prambanan.

## RESULTS AND DISCUSSION

The stages in creating a centralized website include designing and structuring the website, utilizing key features, access and security, and integration with other systems. Centralized websites have been successfully developed with intuitive designs and organized structures. The main page displays a clear navigation menu, including sections for news, activity information, documentation, and contacts. This structure is designed to make it easier for users to quickly find the information that they need. The website has essential features, such as an online registration form, an activity calendar, and a photo gallery. These features are designed to facilitate active participation from users and provide easy access to up dated information. A centralized website can easily be accessed through a variety of devices, including computers, tablets, and smartphones. Security systems have been implemented to protect user data and prevent unauthorized access, thus ensuring the integrity and confidentiality of information. This website has been integrated with other relevant systems; such as internal databases and communication platforms. This integration allows efficient data synchronization and facilitates centralized information management. On the main page of the centralized school website, there are several menus, namely Home, Profile, Education, Gallery, Articles, Contacts and Registration, as shown in Figure 1.



**Figure 1.** Centralized school website home page view

The purpose of this main page is to present the functions or features contained in the centralized school website owned by the Baitussalam Modern Islamic Boarding School. Thus at the beginning of accessing the school website, visitors or users of the Baitussalam Modern Islamic Boarding School website could understand the content and how to use this centralized school website. The profile page contains the History of the Baitussalam Modern Islamic Boarding School, which contains the units owned by the Baitussalam Modern Islamic Boarding School, including Integrated Islamic Kindergarten Baitussalam 1 Prambanan, Integrated Islamic Kindergarten Baitussalam 2 Cangkringan, SDIT Baitussalam 1 Prambanan, SDIT Baitussalam 2 Cangkringan, Integrated Islamic Junior High School Baitussalam 1 Prambanan, Integrated Islamic Junior High School Baitussalam 2 Cangkringan and Integrated Islamic Senior High School Baitussalam Prambanan. Integrated Islamic Kindergarten Baitussalam 1 Prambanan, Integrated Islamic Kindergarten Baitussalam 2 Cangkringan, Integrated Islamic Elementary School Baitussalam 1 Prambanan, Integrated Islamic Elementary School Baitussalam 2 Cangkringan, Integrated Islamic Junior High School Baitussalam 1 Prambanan, Integrated Islamic Junior High School Baitussalam 2 Cangkringan and Integrated Islamic Senior High School Baitussalam Prambanan. The gallery page contains, a photo and video page that displays all activities from all units owned by the Baitussalam Modern Islamic Boarding School. The photos on the school website gallery were divided according to the category of activities carried out. With the photos in the school gallery, all activities carried out by all units in PPM Baitussalam can be seen by teachers, students and the general public. The photos in the school gallery will also provide added value to the school website owned by the PPM Baitussalam. The article page of the main website contains Islamic Materials, news, activities, and achievements of the Baitussalam Modern Islamic Boarding School. This menu will indirectly inform the general public about the achievements of students owned by PPM Baitussalam from kindergarten to Senior High School. In addition, the news page will be filled in or will be updated by the admin of this school's centralized website; to fill in or update the news, there is a display or form that must be filled out by the admin. The items that must be included are the title of the news, the date, month, and year of filling in the news, the category of the news and a summary of the

news to be displayed or updated. The presentation of news on the school's centralized website will provide information for teachers, students, and the general public who access the centralized website owned by the PPM Baitussalam. The contact page contains the contact persons of all units that can be contacted. The registration page contains the registration of all units in PPM Baitussalam, as shown in Figure 2.



**Figure 2.** View of the main page of registration on the centralized school website

This centralized website is also equipped with a new online student admission (PPDB) system. The online PPDB system will allow prospective students to register online from home or other places so that there is no need to come to school, which will certainly provide added value for PPM Baitussalam. The registration system is carried out centrally in all units owned by the PPM Baitussalam. This website is equipped with the registration flow, achievements owned by each educational unit, student activities in each educational unit, testimonials of students and alumni and contact persons for each educational unit owned by the PPM Baitussalam. The testimonials contain the impressions and messages of alumni when attending school in each unit owned by PPM Baitussalam so that it can be an inspiration and encouragement for students who want to attend school at PPM Baitussalam. The main page of the centralized website also illustrates activities in the field of education spread across the Baitussalam Islamic Boarding School Unit, as shown in Figure 3.



**Figure 3.** Main page of a centralized website in the field of education

In Figure 3, it is explained that the main page of the website is centralized, where: a. KMI is Kulliyatul Mu'allimin Al-Islamiyah if clicked, a homepage about KMI news appears, namely <https://baitussalam.sch.id/kmi-2/>; b. Integrated Islamic Kindergarten 1 is a kindergarten owned by the Baitussalam Modern Islamic Boarding School located in the Prambanan complex, if clicked, a home page appears about Kindergarten 1 news, namely <https://baitussalam.sch.id/paud-baitussalam-1/>; c. Integrated Islamic Kindergarten 2 is a Kindergarten owned by the Islamic Boarding School Modern Baitussalam which is located in the Cangkringan complex, if clicked, a home page about Kindergarten 2 news appears, namely <https://baitussalam.sch.id/paud-baitussalam-2/>; d. SDIT 1 is an IT elementary school owned by the Baitussalam Modern Islamic Boarding School located in the Prambanan complex, when clicked, a home page appears about Integrated Islamic Elementary School 1 news, namely <https://baitussalam.sch.id/sdit-baitussalam-1/>; e. Integrated Islamic Elementary School 2 is an Integrated Islamic Elementary School owned by the Baitussalam Modern Islamic Boarding School which is located in the Cangkringan complex, if clicked the home page appears about Integrated Islamic Elementary School 2 news, namely <https://baitussalam.sch.id/sdit-baitussalam-2/>; f. Integrated Islamic Junior High School 1 is an Integrated Islamic Junior High School owned by the Baitussalam Modern Islamic Boarding School located in the Prambanan complex, if clicked it appears the home page about Integrated Islamic Junior High School 1 news, namely <https://baitussalam.sch.id/smpit-baitussalam-1/>; g. Integrated Islamic Junior High School 2 is a Junior High School owned by Baitussalam Modern Islamic Boarding School which is located in the Cangkringan complex, if clicked, a home page about Integrated Islamic Junior High School 2 news appears, namely <https://baitussalam.sch.id/smpit-baitussalam-2/>; h. Integrated Islamic Senior High School is an Senior high school owned by the Baitussalam Modern Islamic Boarding School which is located in the Prambanan complex, if clicked, a home page about Senior High School news appears, namely <https://baitussalam.sch.id/smait-baitussalam/>.

The next stage of this service is to conduct a web-filling training. The training began with a presentation on the use and benefits of information technology in general and then explained the website and the Internet. The advantages of the website and disadvantages of the conventional way of presenting information were also explained. Then continued with a presentation about a centralized school website, this presentation discussed the importance of why a centralized school website is needed. Furthermore, the role and advantages of the school website were explained. This training activity used laptops and Smart TVs, as shown in figure 4





**Figure 4.** Presentation of Service Materials

The use of these two supporting tools allowed participants to easily understand the material taught or explained. After the presentation of the school website in general, the following material continued with an explanation of the home page or the main page of the centralized school website. In addition to the lecture method, training is also carried out using the question and answer method and assistance related to the centralized school website. The mentoring activity of the service team was carried out for one month, during which the service team monitored the progress of the participants in managing the school website of each unit. Based on the mentoring session, there was a lot of improvement in the participants' ability to utilize the school website and manage the school website in each unit. With a school website that can be managed properly, it can advance the school, especially in the dissemination of information in line with the advancement of community technology. The next step in the implementation of this service was to conduct an evaluation. The results of the evaluation were based on aspects of user satisfaction, centralized website performance, functionality, content and information. Based on surveys and interviews with users, most participants showed a high level of satisfaction with the ease of use and accessibility of websites. However, some users have reported difficulties navigating certain features, such as registration forms and activity calendars.

Website performance analysis generally shows good page load times, but some pages take longer to load, especially when accessed via mobile devices. This indicates the need for further optimization to improve the access speed. Regarding functionality, most of the features work well, however there are some technical issues such as minor bugs in the form system and errors in certain links. This issue affects the user experience and needs to be resolved immediately. Website content is generally relevant and informative, however some parts require updates or additions to increase relevance and usability. Some users have also proposed that the information should be better structured. Some of the optimizations made by the team include: 1) Speed Optimization: Page load times have been improved by optimizing images, fixing inefficient code, and using caching techniques to speed up page access. 2) Responsiveness Improvements: The responsive design has been updated to ensure a better user experience across a wide range of devices, including smartphones and tablets. 3) Functionality Improvements: Bug Fixes: Technical issues such as errors on broken forms and links have been fixed to ensure smooth and uninterrupted



functionality. 4) Feature Improvements: Several new features have been added based on user feedback, including updates to the search system and filters to make it easier to access information. 5) Content Update: Addition of Information: The content has been updated to include the latest and relevant information, and an FAQ section to answer common user questions. 6) Content Drafting: The information structure has been rearranged to make it easier to navigate and ensure that important information is easy to find. 7) Testing and Feedback: Advanced Testing: These website has undergone a series of additional tests to ensure that all changes are working properly. Testing engages users at different skill levels to ensure optimal accessibility. User Feedback: Feedback from users after optimization shows a significant improvement in satisfaction and ease of use, with many reporting that the website is now more responsive and informative.

## CONCLUSION

From the results of community service in the form of Centralized Website Optimization training (Case Study of Integrated Islamic Kindergarten, Integrated Islamic Elementary School, Integrated Islamic Junior High School, Integrated Islamic Junior High School) at the Modern Islamic Boarding School (PPM) Baitussalam Prambanan Yogyakarta, it can be concluded in general that the centralized school website provides many benefits for schools, teachers, students at the Modern Islamic Boarding School (PPM) Baitussalam and the general public, the conclusions that are usually taken: a centralized school website can integrate all units in PPM Baitussalam in disseminating information for teachers, students and the general public; The centralized school website can optimize and make it easier for teachers, students and the general public to access information about schools or information about the world of education in general, besides that this centralized school website makes it easier for prospective students to register in all units at PPM Baitussalam without the need to do it at school.

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