Assistance in Management and Technology-Based Mosque Digitalization to Improve the Quality of Community Services

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Abstract: This community service activity aims to improve the quality of mosque management and operations, utilizing digital technology to strengthen the relationship with the congregation. The methods used in these activities included educational methods, training, and mentoring. The target of this community service activity was the imams and takmirs in Kudus Regency, in optimizing administrative tasks and activities. The evaluation process for this community service activity involved assessing coordination, planning, surveys, training, and digital technology implementation to ensure effective mosque management. It includes analyzing data from each stage, quantitatively and qualitatively, to identify trends, challenges, and successes. The results of this service showed that had significantly enhanced the quality of community service. Mosque administrators and religious institution managers adopted digital solutions using the masjidkudus.com application, enhanced religious activity monitoring, and improved communication with worshippers via the website. These activities raised awareness about the importance of digitalization, paving the way for mosques to become centers of education and communication, ensuring sustainability and benefit for the Muslim community in Kudus.

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Introduction

In the modern era, mosques as places of worship must provide easy access, so that worshippers are enthusiastic about performing their prayers (Ucu, 2015). In the digital age, effective mosque management and digitalization have become increasingly important as they can enhance the efficiency and effectiveness of mosque administration (Manajemen & Agung, 2020). Ideally, a mosque should serve various functions, including education, religious studies, and community activities (Lestari, 2019). In Kudus, only a few mosques have implemented technology due to the majority of mosque administrators being elderly; good management enables mosque administrators to optimize human resources, finances, and facilities management (Suprihanto, 2018). With effective management, mosques can provide better services and strengthen their role in society (Lestari, 2019). Digitalization also plays a crucial role in improving communication, financial management, and transparency in mosque administration (T.M.A.M, 2022).

Mosque management involves resource management to achieve desired goals (Imanuddin et al., 2021). The management process encompasses fundamental functions, including planning, organizing, directing, and supervising(www.detik.com, 2018). Its focus is

on optimizing resource utilization to effectively achieve organizational goals (Zamroni & Fahana, 2021).

Mosque digitalization involves the implementation of technology in mosque administration, such as web-based applications and information systems (Https://www.dimasindonesia.com/home, n.d.). This can enhance communication, financial management, and transparency. Digitalization also facilitates the development of human resources potential in the mosque (Zamroni & Fahana, 2021). Takmir masjid is an organization responsible for overseeing all mosque-related activities, including mentoring young Muslims around the mosque. (Siswanto, 2005). Its duties include related to organizing religious activities (Andriana Pertiwi, 2013), maintaining mosque cleanliness and upkeep, and fostering good relationships with the congregation and the local community (Imanuddin et al., 2021).

In the era of Society 5.0, the needs of mosques through web platforms for congregants are becoming increasingly important (Siswanto, 2005). This technological evolution combines the sophistication of modern technology with the human role, enabling mosques to provide more efficient and easily accessible services for congregants. By leveraging knowledge and technology, mosques can provide real-time information on prayer schedules, lectures, and other religious activities, as well as facilitate online zakat payments and donations, thereby facilitating congregants' participation and support for religious activities. https://masjidkudus.com/.

Relevant previous research, there is existing research relevant to this community service, focusing on mosque digitalization, mosque management, and mosque mentoring. Community service projects address mosque management and community engagement. Putri Aulia's research compares the effects of digitization on mosque management, revealing differences between Masjidku and Smart Masjid applications (Aulia et al., 2022). Meanwhile, community service by Muhammad Syahrullah and Santoso provides training to enhance mosque management and multimedia skills through direct sessions (Syahrullah et al., 2022). Another service by Guntur MaulanaZamroni and Jefree Fahana involves implementing a mosque information system, enhancing participant understanding and utilization, and improving mosque management through digitization (Zamroni&Fahana, 2021). In contrast, Ahmad Muhammad Thantawi develops a networked mosque system through the Smart Masjid application, emphasizing smart building technology for effective management(Ahmad Muhammad Thantawi dkk, 2020). Priyono and Fawaidi (2020) focus more on raising community awareness and coordinating efforts for mosque prosperity, conducting regular training sessions guided by community empowerment teams. These projects contribute to improved mosque management and community involvement, fostering a prosperous environment for religious activities.

The community service initiative on mentoring mosque management and digitalization aims in Kudus City to elevate the standard of mosque administration and operations while harnessing digital tools to fortify the bond between the mosque and its worshippers. Through this endeavor, mosques seek to achieve several specific objectives. Firstly, the implementation of efficient and transparent financial management systems fosters trust within the congregation and ensures judicious allocation of funds. Secondly, targeted training sessions enhance mosques' event planning skills, leading to more seamless and successful gatherings. Thirdly, embracing digital platforms such as websites, applications, and social media channels enables mosques to bolster communication with worshippers and expand their outreach. Additionally, training programs focusing on management techniques

and technological advancements empower mosque personnel to adeptly oversee operations and leverage digital resources. Moreover, partnerships with nearby organizations and institutions facilitate resource-sharing and garner support for broader community endeavors, including social initiatives and infrastructure projects. Through the pursuit of these objectives, the community service initiative endeavors to equip mosques with the capabilities to enhance congregation satisfaction, foster community engagement, and cultivate an enriched religious environment that is inclusive and dynamic.

This research has contributed to developing an understanding of mosque management and digitalization, strengthening mosque services and roles in the community. The aims of this community service is to enhance the quality of mosque management and operations while leveraging digital technology to strengthen the relationship between the mosque and its congregation (Suprihanto, 2018). Specific goals include improving financial management, enhancing event management, optimizing technology usage, increasing staff skills, collaborating with local organizations, and mentoring young Muslims around the mosque. The benefits of this service include increased efficiency and effectiveness in mosque management, improved service quality for the congregation, financial transparency, and accountability, as well as enhanced skills for staff and volunteers (Manajemen & Agung, 2020).

Method

The chosen method for implementing PKM involves direct activities to support the participants' abilities, such as educational methods, training, and mentoring through the utilization of open-access software via the Masjidkudus.com web application within the partner group. The PKM (Community Partnership Program) activities were conducted in the mosques in Kudus, specifically in the Ngembal area, as partners. Preparations for these activities commence after the signing of the agreement contract between the Head of Research and Development Institution (LP2M) and continue with the Faculty of Islamic Economics and Business (FEBI) in conjunction with the Head of the Community Service Program Team (PKM). Internal planning had already begun in internal meetings to allocate tasks according to each team member's expertise, including Governance Management, Motivation Training, Character Building, Multimedia Workshops, and the application of Masjidkudus.com.

The community service method was carried out in four main phases. The first phase was the preparation and coordination stage, in which community service coordinators coordinate with mosque partners and conduct surveys and observations to confirm the service location agreement. The second stage, the survey and observation phase, involved identifying targets, surveying needs, program planning, direct observation, and interviews with relevant stakeholders (Imanuddin et al., 2021).

The third stage is the dissemination of information, where information about the benefits of digitalization and effective management principles is conveyed to mosque administrators, worshippers, and related communities. The final step, the training, guidance, and mentoring phase, involves providing practical skills in using information technology and modern management, as well as providing active guidance for implementing technology and management using the created web application http://masjidkudus.com/.

The evaluation instrument for this activity can encompass various methods of data collection, such as questionnaires, interviews, direct observation, and document analysis. Questionnaires can be utilized to gather data on participants' perceptions and needs regarding

mosque management and digitalization, while interviews can provide deeper insights into participants' experiences and perspectives. Direct observation can be conducted during workshops or training sessions to observe participants' participation and responses firsthand. Document analysis can also be performed to evaluate the effectiveness of the program by examining relevant documents such as program plans, activity reports, and participant evaluations.

Once the data was collected, the next step was to conduct a descriptive analysis. It involved organizing and presenting data systematically to provide a clear picture of the observed situation or phenomena. Descriptive analysis can be done by summarizing data in the form of tables, graphs, or descriptive statistics such as mean, median, and mode. This analysis helps identify patterns, trends, or conclusions that can be used to design appropriate solutions. During the evaluation phase, it is important to consider the goals and success indicators established beforehand. This evaluation can help assess the effectiveness of the program, identify areas for improvement, and evaluate its impact on participants and the community. Thus, comprehensive evaluation instruments and data analysis will help ensure the success and sustainability of community engagement activities.

Result and Discussion

The results and findings from the implementation of community service activities reflect the effectiveness of the four main phases undertaken. The coordination phase serves as a crucial foundation for formulating the implementation strategy of the community service. Collaboration with various parties, including the Abdimas team, academics, students, application developers, and mosque administrators (Takmir), has successfully directed the implementation that aligns with the local community's needs. This PKM activity involved direct activities to support the participants' program skills through discussions, lectures, and practical application usage with the utilization of open-access software available within the partner group members (Syahrullah et al., 2022). The Abdimas team played a significant role in formulating action strategies and facilitating the necessary collaborations, emphasizing the importance of teamwork in understanding community needs (Priyono & Fawaidi, 2020). This coordination phase resulted in an implementation strategy that focuses on meeting the local community's needs, including training mosque administrators in the use of digital technology. Collaboration with academics and students also brought innovative thinking into the mosque digitalization project. Collaboration with application developers enabled the creation of an effective and user-friendly technology platform. This is consistent with Aulia's work on mosque applications, where the results show that the created application does not provide notifications of congregants' reports directly via email or WhatsApp to mosque administrators, and not many are aware of this application. In contrast, in the Smart Mosque application, administrators are informed about any letters or reports that have been received through the Smart Mosque application (Aulia et al., 2022).

Figure 1. Activity Planning.

Figure 2 Activity Planning distribution mail.

In the survey and observation phase, we gained a better understanding of the needs and challenges faced by mosques in the Kudus region (Armansyah et al., 2021). The survey and observation results provided deep insights into the condition of mosques, technology infrastructure, management needs, and community preferences. This data forms the basis for more focused and effective planning, ensuring that the digitalization project can provide maximum benefits.

Figure 3. Implementation of Activities with Takmir and Mosque Administrators Participants

Finally, the training, guidance, and mentoring phase has brought significant changes in how mosque administrators and takmir manage the mosque. Training provides practical skills in using information technology and modern management. Guidance assists them in implementing effective technology and management in their daily practices (Priyono & Fawaidi, 2020). Mentoring is a long-term oversight that ensures sustainable development and adaptation to technological changes.

Figure 4. Material Dissemination Phase with Mosque Administrators and Religious Institutions

Figure 5. Participants in Mosque Digitalization Training attended by Takmir and Mosque Administrators

With the adoption of digital technology, mosque administrators and takmir have improved efficiency in mosque administration, enhanced communication with worshippers, provided religious information, and organized religious activities. The result is a more organized mosque, connected to its congregation, and capable of providing better services according to community needs. All these phases play a crucial role in transforming traditional mosques into effective and open service centers in the digital era (Hutagalung et al., 2022).
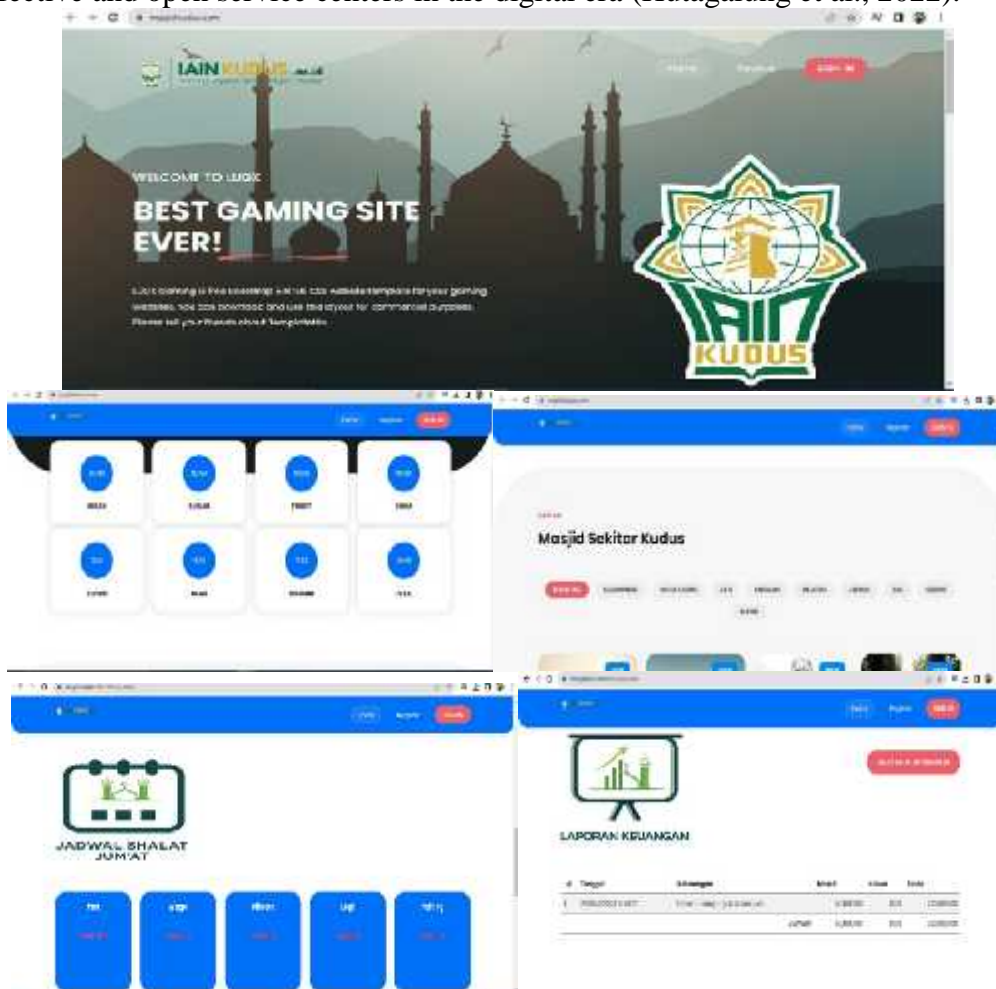

Figure 6. Web Page of the Mosque Digitalization Application

In community service activities, evaluation is conducted to assess the effectiveness of each stage. The coordination stage initially involves data collection on location approval and

readiness of relevant parties. Evaluation of this stage includes analyzing the level of compliance and availability of necessary resources. The survey and observation stage focus on gathering data on the needs of the community and the served mosques. Evaluation at this stage includes survey data analysis to identify patterns of needs that can serve as the basis for planning subsequent programs. Furthermore, in the material dissemination stage, evaluation is focused on participants' understanding of the material presented and the success of discussion sessions in reinforcing their understanding. The final stage, training and mentoring, is evaluated to assess changes in participants' skills and knowledge and the effectiveness of guidance in overcoming potential challenges.

In analyzing and discussing the evaluation results, it is important to consider the successes and challenges that may arise during each stage (Adhari, 2021). Relevant references can be used to support findings, such as previous research on effective training strategies and the impact of digitalization on mosque management (Ahmad Muhammad Thantawi et. al, 2020). Discussions should also lead to recommendations for improvements and the development of future activities, as well as the importance of continuing support and mentoring for participants to ensure the sustainability and success of implementing effective technology and management in the long term (Andriana Pertiwi, 2013).

Conclusion

The community service activities focused on mentoring management and technology-based mosque digitalization in Kudus have had a significantly positive impact on improving the quality of services to the community. Through a planned and sustainable approach, mosque administrators (Takmir) and religious institution managers have been introduced to relevant digital solutions. The impact has resulted in tangible changes in mosque management and service to the community. Digitalization has helped mosque takmir manage finances more efficiently, facilitate the monitoring of religious activities, and expand access to religious information for worshippers. Communication between the mosque and the community has also become more effective through the use of digital technology. The quality of service to the community has improved because the mosque is more connected to its worshippers and can provide more relevant and easily accessible information and services. Furthermore, these PKM activities have raised greater awareness of the importance of digitalization in mosque management and services in this digital era. Mosque takmir and religious institution managers played an active role in taking concrete steps towards this positive change, which is a crucial initial step. The PKM activities paved the way for a brighter future where mosques are not only places of worship but also centers of education, communication, and better service.

Recommendation

Expansion of Geographic Coverage: The first recommendation is to expand the scope of PKM activities to other areas in Kudus. Although these activities are currently only conducted in the Ngembal region, the benefits of mosque digitalization and technology-based management improvement can be applied throughout Kudus. By involving Takmir and religious institutions from various regions, we can extend the positive impact of mosque digitalization, enhance the quality of service to the community, and create consistent efficiency in mosque management throughout Kudus.

Sustainability through Training and Maintenance: The second recommendation is to maintain the sustainability of these activities through regular training and the upkeep of

adopted technology. Mosques that have adopted digitalization need ongoing training for Takmir to fully utilize the technology. Additionally, regular maintenance of the hardware and software used in digitalization is essential to ensure that everything runs smoothly. By maintaining the sustainability of these activities, we can ensure that mosque management and digitalization remain effective and beneficial to the community and the people of Ngembal and the entire Kudus region.

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