



IMPLEMENTATION OF A DIGITAL-BASED ACCOMMODATION RESERVATION SYSTEM FOR OPTIMIZATION OF PNBP AT THE BEKASI HAJJ DORMITORY

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Abstract

The utilization of State-Owned Assets (BMN) at Bekasi Hajj Dormitory and the broader push for public service digitalization have led to the implementation of an online accommodation reservation system, SIASAH. This application stands as the sole digital system across all Hajj dormitories in Indonesia, developed to uphold Good Governance principles by considering effectiveness, efficiency, and transparency in service management, particularly in optimizing Non-Tax State Revenue (PNBP). This study employs a qualitative approach, using the PESTLE analysis model. Data were gathered through interviews with the application developers, reservation and accommodation staff, and service users, complemented by a review of documents such as accommodation usage reports and official website data from Bekasi Hajj Dormitory. The findings indicate that SIASAH has successfully enhanced financial accountability and transparency. However, the system continues to face significant challenges, including public resistance to technology adoption, limitations in human and physical resources, and a sub-optimal integration of environmentally friendly practices. To address these issues, the report recommends a broader marketing strategy via social media platforms, strengthening resource management, and developing digital archiving features. These measures are crucial for ensuring the system's sustainability, improving its efficiency, and elevating the quality of public services provided.

Keywords: SIASAH, Digital Reservation, Non-Tax State Revenue (PNBP), Hajj Dormitory, Good Governance, PESTLE Analysis, State-Owned Assets (BMN).

Abstrak

Pemanfaatan Barang Milik Negara (BMN) di Asrama Haji Bekasi serta dorongan terhadap digitalisasi layanan publik mendorong diterapkannya sistem reservasi akomodasi online melalui aplikasi SIASAH, yang menjadi satu-satunya sistem digital di lingkungan Asrama Haji se-Indonesia. Aplikasi ini dibangun untuk mendukung prinsip Good Governance dengan menekankan efektivitas, efisiensi, dan transparansi dalam pengelolaan layanan, khususnya dalam optimalisasi Penerimaan Negara Bukan Pajak (PNBP). Penelitian ini menggunakan pendekatan kualitatif dengan model analisis PESTLE. Sumber data diperoleh melalui: (1) wawancara dengan pengembang aplikasi, petugas reservasi dan akomodasi, serta pengguna layanan dan (2) telaah dokumen berupa laporan penggunaan akomodasi dan data dari situs resmi Asrama Haji Bekasi. Hasil penelitian menunjukkan bahwa SIASAH mampu meningkatkan akuntabilitas dan transparansi keuangan, namun masih menghadapi kendala seperti resistensi masyarakat terhadap penggunaan teknologi, keterbatasan sumber daya, dan belum optimalnya penerapan teknologi ramah lingkungan. Untuk itu, diperlukan strategi pemasaran yang lebih luas melalui media sosial, penguatan manajemen sumber daya, serta pengembangan fitur arsip digital guna mendukung keberlanjutan dan efisiensi sistem dan peningkatan kualitas layanan publik.

Kata Kunci: SIASAH, Reservasi Digital, PNBP, Asrama Haji, Good Governance, PESTLE, BMN.



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INTRODUCTION

Law Number 9 of 2018 concerning PNBP emphasizes that PNBP is a source of state revenue that must be managed optimally to support national development.¹ Asset optimization is a primary focus in increasing state revenue. The utilization of state assets is expected to not only serve as an alternative source of revenue but also make a significant contribution to the state budget.² Utilization of BMN through a rental mechanism is considered to provide the largest contribution to PNBP.³ Utilizing state assets through transparent and efficient digital service innovations can improve administrative effectiveness, accelerate service processes, and encourage increased state revenue.⁴

Minister of Religion Regulation Number 44 of 2014 explains that the Hajj Dormitory is responsible for managing facilities to support the operation of the Hajj pilgrimage and providing services to the wider community.⁵ Based on Government Regulation Number 59 of 2018, the Hajj Dormitory is one of the sources of PNBP at the Ministry of Religion.⁶ The Hajj Dormitory provides various services to the community, including room service, meeting rooms/halls, and facilities for Hajj rituals. Utilizing the Hajj Dormitory outside the Hajj season allows for the optimization of state assets to increase efficiency and occupancy of available facilities.

In Indonesia, there are 10 Hajj Dormitories under the Ministry of Religious Affairs spread across various regions, namely the Hajj Dormitories in Aceh, Medan, Padang, Jakarta, Surabaya, Banjarmasin, Balikpapan, Makassar, Lombok, and Bekasi. As part of its service modernization efforts, the Bekasi Hajj Dormitory is the only one to have developed an online reservation system through its website <https://asramahajjibekasi.com/>. This system is expected to facilitate public access to services through digitalization and expand marketing reach to improve utilization of available facilities.

Digital service innovations at the Bekasi Hajj Dormitory were initially implemented in 2020 during the COVID-19 pandemic. At that time, the website served as a platform for employees working from home to create performance reports and digitally record attendance. As the pandemic subsided and supported by the Action for Change program promoted by the Head of the Bekasi Hajj Dormitory, an integrated digital-based system, SIASAH (Hajj Dormitory Information and

¹ UU No 9 Tahun 2018 Tentang Penerimaan Negara Bukan Pajak, 2018.

² Surya Hadi Purnama, "Optimalisasi Pemanfaatan BMN: Kontribusi Terhadap Penerimaan Negara," *Media Kekayaan Negara*, no. 27 (2017).

³ Ayutia Nurita Sari, *Pengelolaan Aset Negara, Tantangan Dan Peluang Yang Perlu Diketahui*, 2022.

⁴ Dwiyani Permatasari, *Aplikasi Sewa Barang Milik Negara, Solusi Pemasaran Aset Idle Guna Meningkatkan Penerimaan Negara Bukan Pajak (PNBP)*, no. November (2020).

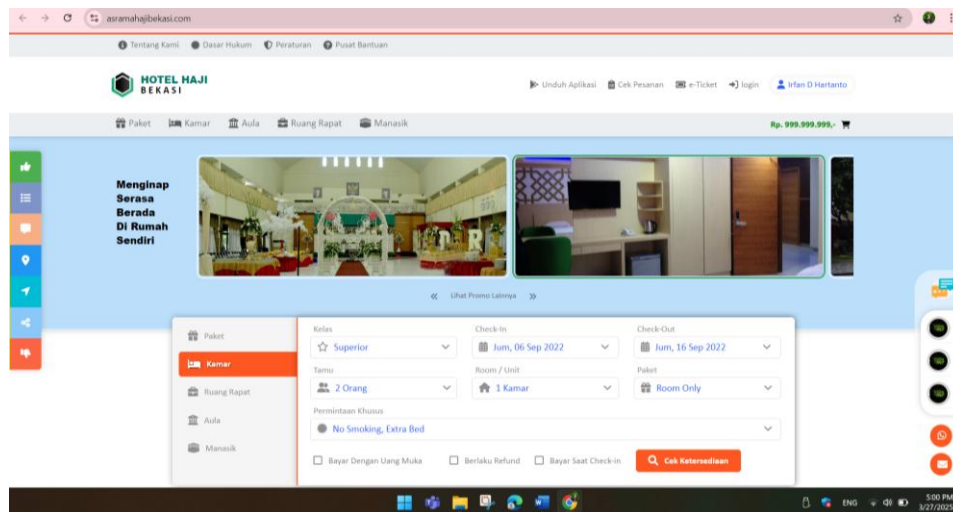
⁵ Peraturan Menteri Agama Republik Indonesia Nomor 44 Tahun 2014 Tentang Organisasi Dan Tata Kerja Unit Pelaksana Teknis Asrama Haji, 2014.

⁶ Peraturan Pemerintah Nomor 59 Tahun 2018 Tentang Jenis Dan Tarif Atas Jenis Penerimaan Negara Bukan Pajak Yang Berlaku Pada Kementerian Agama, no. 2 (2018): 10044.

Administration System), was developed in 2022. One of the main services within this system is digital-based accommodation reservations, aimed at improving services to the public and expanding the reach of Hajj Dormitory facilities.⁷

The digital reservation system at the Bekasi Hajj Dormitory offers various features that make it easier for users to choose services according to their needs. Through this system, prospective users can access information about available facilities, such as manasik (ritual practice) services, rooms in various classes ranging from economy to superior, as well as halls and meeting rooms with adjustable capacities. Furthermore, the system offers a choice of service packages, such as breakfast packages, full-day packages, and full-board packages, allowing users to customize their bookings according to their preferences and budget. Through this system, users can directly select a reservation date and make payments digitally.

Figure 1. Initial View of the Digital-Based Reservation System at the Bekasi Hajj Dormitory



Source :<https://www.asramahajibekasi.com/>

The use of digital-based reservations not only facilitates public services but also contributes to more orderly, transparent, and accountable management of non-tax state revenues (PNBP). This system ensures controlled transaction recording and minimizes administrative errors, thereby increasing efficiency and accuracy in financial management.⁸ With this system, revenue management can be more structured and easily audited, supporting the principles of good financial governance.

As a work unit that receives non-tax state revenue (PNBP) from the Ministry of Religious Affairs, the Bekasi Hajj Dormitory consistently meets its annual PNBPs target. However, during the COVID-19 pandemic, PNBPs revenue declined due to activity restrictions and reduced facility

⁷ Aef Saepuzaman, *Rancangan Aksi Perubahan SIASAH – Sistem Informasi Dan Administrasi Asrama Haji*, 2022, 1–25.

⁸ Saepuzaman, *Rancangan Aksi Perubahan SIASAH – Sistem Informasi Dan Administrasi Asrama Haji*.

utilization. This can be seen in the PNBP revenue data presented in the following table:

Table 1. Target and Realization of PNBP at the Bekasi Hajj Dormitory

Year	Target (Rp)	Realization (Rp)
2020	1,364,000,000	385,294,200
2021	84,194,000	1,577,061,000
2022	1,050,000,000	921,583,500
2023	2,500,000,000	2,619,663,680
2024	2,939,000,000	3,355,476,967
2025	1,732,500,000	447,961,214

Source: Financial Report of the Bekasi Hajj Dormitory PNBP Treasurer (Data as of March 26, 2025)

Since the implementation of a digital-based accommodation reservation system at the Bekasi Hajj Dormitory in 2022, this service has not yet provided significant benefits. Most users still rely on conventional reservation methods, such as in-person site surveys or booking through accommodation staff, especially repeat customers. This is evident from the recapitulation of PNBP transactions, which shows that the majority of reservations still do not go through the digital reservation system, as shown in the following table.

Table 2. Recapitulation of PNBP Transactions at the Bekasi Hajj Dormitory

Year	Service	Number of Transactions	Reservation Via
2023	Rituals	74	• Online (Application) : 1 • Direct (Receptionist) : 73
	Room	232	• Online (Application) : 5 • Direct (Receptionist) : 227
	Hall	75	• Online (Application): 6 • Direct (Receptionist) : 69
	Meeting room	129	• Online (Application): 7 • Direct (Receptionist) : 122
2024	Rituals	110	Direct (Receptionist) : 110
	Room	204	Direct (Receptionist) : 204
	Hall	92	Direct (Receptionist) : 92
	Meeting room	232	Direct (Receptionist) : 232
2025	Rituals	37	Direct (Receptionist) : 37

	Room	59	Direct (Receptionist) : 59
	Hall	11	Direct (Receptionist) : 11
	Meeting room	50	Direct (Receptionist) : 50

Source: Financial Report of the Bekasi Hajj Dormitory PNBP Treasurer (Data as of March 26, 2025) and Accommodation Officer Report

Meanwhile, the Bekasi Hajj Dormitory must pay for domain registration costs annually.

The attached domain registration payment report details the following:

Table 3. Payment Report for the Bekasi Hajj Dormitory Digital Reservation System Domain

Payment Year	Domain Name	Service Provider	Supplier (Rp)	Tax (Rp)	Total payment (Rp)
2023	www.asramahajibekasi.com/	PT Web Media Technology Indonesia	9,523,355,-	1,263,301,-	10,786,656,-
2024	www.asramahajibekasi.com/	CV Sayders Tech Engineering	12,044,200,-	1,597,700,-	13,641,900,-
2025	www.asramahajibekasi.com/	CV Sayders Tech Engineering	12,044,200,-	1,597,700,-	13,641,900,-

Source: Payment Order for Bekasi Hajj Dormitory UPT^{9,10,11}

The lack of optimization in the utilization of the digital reservation system raises concerns about the effectiveness of the investment, as it has not significantly contributed to improving services or non-tax state revenues. Therefore, an in-depth analysis is needed to assess the extent to which the implementation of this digital reservation system is able to optimize the utilization of State Assets (BMN) and their contribution to state revenue.

One approach used to assess the effectiveness of public policy is to understand its implementation stages. Implementation is a crucial stage in the public policy cycle that determines the effectiveness of achieving a policy's objectives. Riant Nugroho stated that the implementation stage is the most challenging part, because in practice, problems often arise that were not identified

⁹ Surat Perintah Membayar UPT Asrama Haji Bekasi Tahun 2023, 2023, 2023.

¹⁰ Surat Perintah Membayar UPT Asrama Haji Bekasi Tahun 2024, 2024, 2024.

¹¹ Surat Perintah Membayar UPT Asrama Haji Bekasi Tahun 2025, 2025, 33.

in the conceptual planning.¹² The success of policy implementation is not only influenced by internal factors, but also by various external factors that can influence the identification of opportunities and challenges.

Figure 2. Situation of Using PESTLE Analysis



Source: PESTLE Analysis Strategy Skills¹³

The figure shows four main situations where PESTLE analysis can be used, one of which is when launching a new product or service. The PESTLE model can be used as a tool to analyze external factors to aid product development and more effective policy strategy adjustments.¹⁴ Thus, PESTLE analysis helps identify external factors that strengthen the success of policy implementation, especially in product development.

The PESTLE approach is used to analyze external factors that can influence the success of a policy or program. PESTLE is an acronym for Political, Economic, Social, Technological, Legal, and Environmental. The following explains each component:¹⁵

- 1) **Political (Political)** Political factors relate to government policies, regulations, and political conditions that influence the course of policy implementation.
- 2) **Economic (Economy)** Economic factors include financial conditions such as inflation, interest rates, and people's purchasing power which impact business costs and strategies.
- 3) **Social (Social)** Social factors include culture, habits, education, and lifestyle of society which influence consumer needs and behavior.
- 4) **Technological (Technology)** Technological factors include digital developments, innovation, and the use of new technologies that can help or hinder organizational activities.
- 5) **Legal (Law)** Legal factors include regulations that must be complied with, such as employment laws and consumer protection, to avoid violations.

¹² Riant Nugroho, *Public Policy Dinamika Kebijakan Publik Analisis Kebijakan Publik Manajemen Politik Kebijakan Publik Etika Kebijakan Publik*, in Jakarta: Elex Media Komputindo, 6th ed., vol. 1 (PT Elex Media Komputindo, 2017).

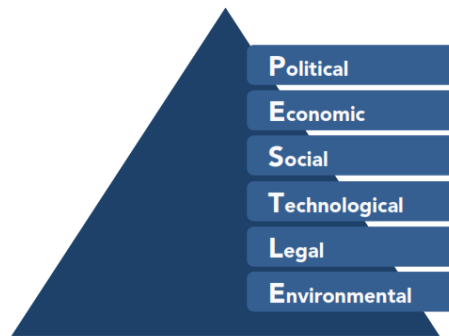
¹³ "PESTLE Analysis Strategy Skills," *The PESTLE Analysis*, 2013, 8.

¹⁴ Rob Paredes, *Using PESTLE Analysis in Strategic Business Planning*, 2024.

¹⁵ "PESTLE Analysis Strategy Skills," 12–20.

- 6) **Environmental (Environment)** Environmental factors relate to issues such as climate change, waste, and social responsibility towards nature and surrounding communities.

Figure 3. PESTLE Analysis Model



Source: PESTLE Analysis Strategy Skills¹⁶

RESEARCH METHODS

This research uses a qualitative approach with a constructivist paradigm. In this research, the theoretical/literature framework serves as a scientific guide for determining the research focus, analyzing data, grouping data based on theory, and identifying concepts and integrating them into a new theory.

Data collection in this study was conducted through interviews and document reviews. The research data sources consisted of (1) interviews with digital reservation application developers, reservation and accommodation officers at the Bekasi Hajj Dormitory, and users of the Bekasi Hajj Dormitory accommodation; (2) document reviews, in the form of reports on the use of the Bekasi Hajj Dormitory accommodation. The selection of informants was carried out selectively to obtain a comprehensive view regarding aspects relevant to the implementation of the digital reservation system at the Bekasi Hajj Dormitory.

To test the validity of the collected data, researchers used triangulation, which involves using the same method on multiple informants. The goal of triangulation is not to find a single truth, but rather to deepen the researcher's understanding of the data and facts obtained.

The data analysis method used in this study refers to Miles and Huberman,¹⁷ which consists of three main stages: (1) data reduction, namely the process of selecting, focusing, simplifying, and abstracting the raw data obtained; (2) data presentation (data display), namely arranging the reduced information in the form of narratives, matrices, or graphs to facilitate understanding; and (3) drawing conclusions, namely the process of interpreting the meaning of the data by connecting it to

¹⁶ "PESTLE Analysis Strategy Skills," 6.

¹⁷ *Qualitative Data Analysis A Method Sourcebook*, 3rd ed. (SAGE Publication, Inc, 2014).

the research context and relevant theories. All these stages are carried out simultaneously to ensure valid and credible analysis results.

RESULTS AND DISCUSSION

Political (Policy and Socialization)

The creation and implementation of an online reservation system through the SIASAH application reflects efforts to implement the principles of good governance, particularly in terms of effectiveness, efficiency, and transparency. This system is also based on regulations, namely Presidential Regulation of the Republic of Indonesia Number 59 of 2018 concerning Zoning, and Regulation of the Minister of Religious Affairs of the Republic of Indonesia Number 13 of 2023 concerning tariffs. This digitalization is considered to support more orderly management of non-tax state revenues (PNBP) and assets, facilitate the monitoring process, and strengthen the accountability of services provided by the Hajj Dormitory.

"Instructions related to Good Governance include Effectiveness, Efficiency and Transparency of Government Agency management through digitalization, especially in managing Agency operational documents, in this case documents on receipt and expenditure (deposit) of Agency income in the form of Non-Tax State Revenue (PNBP) as well as maximizing supervision of Agency management (Assets)."

"The information contained in the application is in accordance with and updated based on binding regulations in the work unit, such as Presidential Regulation of the Republic of Indonesia Number 59 of 2018 which regulates Zoning and Regulation of the Minister of Religious Affairs of the Republic of Indonesia Number 13 of 2023 which regulates the amount of fees."

Most users are unaware that the reservation system is now available digitally. One user stated:

"I usually make reservations in person or by phone. This is the first time I've tried using an online service. I didn't know what to do at first, but after explaining it, it turned out to be quite effective. If this were more widely publicized, it would definitely help a lot of people."

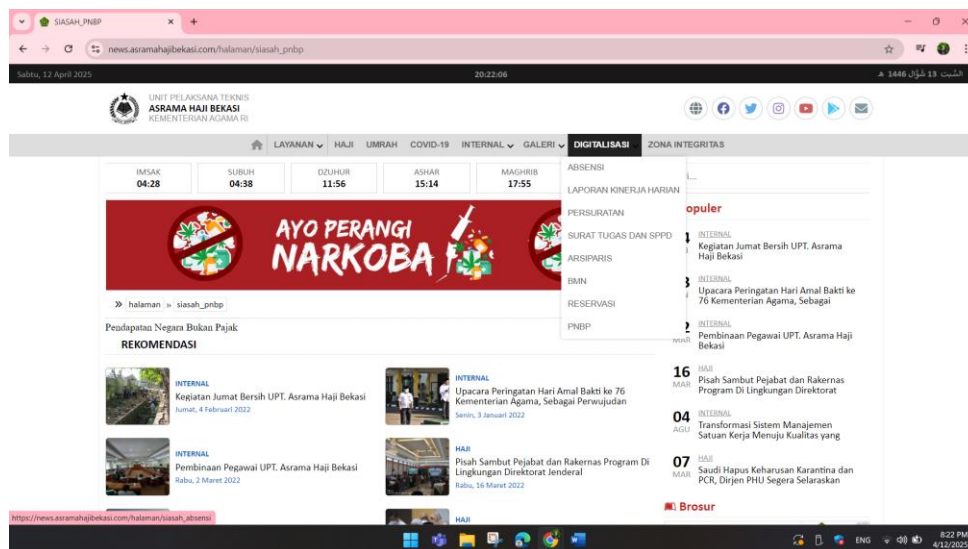
From the staff's perspective, information and accommodation officers have been provided with outreach and guidance from management through internal training. Management is also actively promoting the use of digital systems to replace manual methods. However, in emergency situations or when the system is experiencing problems, manual methods remain in place as a precaution.

In line with the spirit of utilizing digital reservations at the Hajj Dormitory, the Director of Domestic Hajj Services of the Ministry of Religious Affairs of the Republic of Indonesia is striving to build an application to improve the management of Hajj Dormitories throughout Indonesia as stated in the Letter of the Director General of Hajj and Umrah Organization Number: B-18024/Dj/Dt.II.II.3/HJ.06/09/2024 dated September 18, 2024 regarding the Update of the SIMAS Hajj Database and Submission of the SIMAS Hajj Guidebook.¹⁸ This application represents a strategic step by the government to digitally integrate the reservation systems of all Hajj dormitories in Indonesia. The implementation of this system will require a transition from each Hajj dormitory's internal reservation system to the integrated SIMAS Haji system.

If the SIMAS Haji application is implemented nationally, the SIAHAH application developed by the Bekasi Hajj Dormitory will still be possible as a support system for internal needs. The SIAHAH application has a more comprehensive range of functions, extending beyond reservation services to include personnel management, work unit information, State Property (BMN) asset management, reporting, and various other operational aspects.

"As for work units/agencies that currently have their own systems, they can continue to use their respective systems as long as they are integrated with SIMASHAJI, for example, the Bekasi Hajj Dormitory, which has SIAHAH (Hajj Dormitory Information and Administration System) because its scope is not only in reservation services, but covers almost all aspects starting from personnel, assets, reporting and plans for development, can continue to be used. and as long as its use can be accounted for."

Figure 4. Services in the SIAHAH Application



Source : <https://news.asramahajibekasi.com/halaman/siasah>

¹⁸ *Pemutakhiran Database SIMAS Haji Dan Penyampaian Buku Pedoman SIMAS Haji*, 2024.

Economic (Financial Efficiency and Transparency)

The app's creators stated that the SIASAH app was primarily designed as a management tool for non-tax state revenue (PNBP) at the Bekasi Hajj Dormitory. The app's primary focus isn't asset optimization or marketing, although it does include additional features like digital reservations by default. SIASAH's core function is to support the digitization of revenue recording and the issuance of transaction receipts, such as receipts, both electronically and in physical form.

"More about PNB management, not related to marketing management, although marketing features are also provided as standard through Search Engine Optimization SEO, the management in question is like the digitalization of recording receipts and issuing proof of receipts (receipts) where the evidence, both in data and physical form, can be managed optimally and can then be used as one of the agency's accountability documents."

Meanwhile, based on the user aspect, they feel that making reservations using a digital system simplifies the process because price information and room availability are immediately visible.

"It's more practical. Prices and room availability are immediately visible, so you don't have to ask any questions."

From the officer's perspective, this system has been very helpful in improving financial accountability. Payments are now made via transfer to the work unit's account, rather than cash.

"Clearly. This system represents a shift from cash receipts, which were still suspect. Now, the system allows direct transfers to work unit accounts. If users are carrying cash, we direct them to deposit it at the nearest bank. It's safer and clearer."

Social (User Convenience and Adaptation of Technology)

Some users admitted that they were not yet familiar with the digital system, but felt they could still follow the process with help or instructions, even though they still preferred to use the manual method.

"I'm not used to using online systems, but it turned out to be easy. As long as there are instructions, you can follow them step by step. But I still choose to order manually because the manasik service makes it easier to manage the flow."

Officers noted that some users found the survey helpful, but others still experienced difficulties. As an adaptation, officers continued to use the manual method, especially for prospective users who came to the survey in person.

"Users vary, of course. Some find the online system helpful for both reservations and payments. Others struggle because they're used to manual reservations and cash payments."

"We don't prohibit cash payments, but we encourage payments to be made to work unit accounts whenever possible for greater security. This eliminates the need for safes."

Typically, users make reservations by contacting staff via WhatsApp or visiting the facility in person. After completing this process, staff record and summarize the reservation data into the SIASAH system. This indicates that the use of digital systems remains semi-manual, with the initial process still relying on direct interaction between users and staff.

"For the time being, users are still registering manually, either on WA or coming directly for a survey. Later, officers will carry out the recap on the SIASAH application"

The application system maker stated that the Bekasi Hajj Dormitory digital reservation application is intended for two main groups: dormitory managers through the administrator module for recording transactions, and the general public through the public module for booking facilities.

"In the administrator module, this application is intended for the Hajj Dormitory to serve as a means of transaction for facility use, both in terms of recording receipts and issuing receipts. In the public module, this application is intended for all levels of society who intend to use the facilities at the Hajj Dormitory."

Technological (Infrastructure and System Usage)

The system creator designed the interface, especially in the public module, to be minimalist and user-friendly so that it can be accessed and used easily by all groups, including users who are not yet familiar with technology.

"Especially in the public module, the application is designed (UI/UX) to be as minimalist and user-friendly as possible so that the public can easily use this reservation facility."

This has been positively received by users, who find the digital reservation system accessible via mobile phone helpful. Ordering has become more convenient, and payments can now be made simply by bank transfer, eliminating the need to carry cash.

"I can book a room just by using my phone. Now, I just transfer money to pay, so I don't need to carry cash."

In the practical implementation of the service, officers stated that the infrastructure was quite adequate, however, due to the impact of major flooding which damaged several devices, it

was necessary to fulfill the needs again. Furthermore, the limited number of admins presents a challenge in managing the application. This system requires monitoring, ideally 24/7, while staff working hours adhere to government regulations, namely 7:30 AM to 4:00 PM. This creates a mismatch between the system's operational needs and the available resource capacity.

"The equipment for information and accommodation officers is sufficient to support this system. However, on March 4, 2025, after a major flood in the dormitory, some equipment was damaged. We are currently in the process of replacing it."

"Because this app is different from other online reservation apps, and we lack dedicated admins to manage it. The government mandates working hours from 7:30 AM to 4:00 PM, while admins are required to be available 24 hours a day. That's why there's a contradiction."

Legal (Data Security and User Consent)

Users stated that while using the digital reservation system, they felt their personal data was secure. The system provided clear information regarding booking details, fostering trust and comfort during transactions.

"So far, I feel my data is safe. The system also provides clear information about orders."

To ensure the security and responsibility of facility use, officers require prospective users to complete a reservation form and attach a photocopy of their ID card. This is to prevent risks such as users failing to make payment or damaging the facility. Regarding data protection, officers guarantee that they will not provide user identity information to external parties, except upon official request from an auditing agency such as the Inspectorate General or the Supreme Audit Agency (BPK). This policy is implemented in accordance with SOPs governing data protection and user privacy.

"We always ask prospective users to fill out a booking form and attach a photocopy of their ID card to prevent unforeseen incidents, such as non-payment or damage to facilities. For groups or travel agencies, we request data from the person in charge of the travel agency."

"User data protection. For example, if a vendor requests user data, we can't provide it, but we must protect their privacy. Except when requested by an auditing body, like the Inspectorate General and the Supreme Audit Agency (BPK) recently, I wouldn't dare do anything else because there are already SOPs."

Environmental (Environmentally Friendly and Reduced Physical Documents)

Users feel that this system is not completely environmentally friendly because they are still asked to fill out a manual form:

"I'm not entirely clear about the eco-friendliness aspect. But yesterday, we were still asked to fill out a form, so it's not truly paperless yet."

The officer confirmed that although While reservation data is recorded digitally, staff still make manual copies as backups. This is done to anticipate system disruptions or errors. Manual processes are still used, such as filling out reservation forms and printing receipts. Although available in PDF format for shipping purposes, physical archives are still created and stored. Therefore, paper usage has not been completely eliminated.

"It's actually the same. Although we input it into the app, we also make manual copies. We're worried about system errors, so we have manual backups. Paper is still used, as prospective users write on the order form and print the receipt. If someone requests a PDF, we provide it, but we still keep a copy."

CONCLUSION

Based on the PESTLE analysis, it can be concluded that the implementation of the accommodation reservation system through the SIASAH application at the Bekasi Hajj Dormitory as an effort to optimize PNPB has met most of the analyzed indicators. This application is the only digital reservation system implemented in the Hajj dormitory in Indonesia, built on the basis of applicable regulations, such as Presidential Regulation Number 59 of 2018 concerning Zoning and Minister of Religious Affairs Regulation Number 13 of 2023 concerning tariff amounts. This initiative reflects the application of Good Governance principles, by emphasizing effectiveness, efficiency, and transparency in facility management.

The SIASAH application is designed for use by work units in internal management and by the public as users of the reservation service. This application accelerates transaction processes and supports financial transparency through a cashless payment system. Its minimalist and user-friendly interface allows access via mobile phone, even for those unfamiliar with technology. In terms of security, user data is maintained according to SOPs and will only be disclosed when necessary for audits. However, its contribution to environmental aspects is still limited, as physical copies are still used as a precautionary measure in case the system experiences problems.

The obstacles to implementing the accommodation reservation system through the SIASAH application at the Bekasi Hajj Dormitory are:

- a. Community Resistance to Innovation in the Use of Technology: The majority of people who use accommodation at the Bekasi Hajj Dormitory still use a manual system, especially in

manasik activities, This is due to the need for more flexible arrangements regarding the number of participants and the flow of activities, which are considered easier to arrange directly than through the application.

- b. Resource Limitations: The management of the service system, which ideally requires 24-hour monitoring, is inconsistent with government-mandated working hours. This slows down the response to technical disruptions outside of business hours. Furthermore, the impact of the March 2025 floods necessitated the re-installation of infrastructure, such as computer equipment for accommodation staff.
- c. Suboptimal Utilization of Environmentally Friendly Technology: Although the system is digital, physical documents, such as copies of receipts, are still printed to prevent system disruptions. This indicates that the potential for paper efficiency has not been fully maximized.

SUGGESTION

Here are some suggestions that can be used to improve optimization onImplementation of the accommodation reservation system through the SIAHA application at the Bekasi Hajj Dormitory, namely:

- a. Marketing Using Social Media Platforms: Judging by the number of digital transactions reported year after year and the number of users accustomed to manual systems, especially regular customers of the Bekasi Hajj Dormitory, a broader promotional approach is needed. The official social media accounts of the Bekasi Hajj Dormitory can be used to disseminate informative and engaging content, such as the benefits of online reservations, the ease of use of the app, and step-by-step tutorials. This effort is expected to reach a wider audience, including potential users from outside the city and those who have never used the dormitory facilities before.
- b. Resource Enhancement: Given that accommodation services, like hotels, are ideally available 24/7, adjustments to the work patterns of administrative staff are necessary. Without having to increase staff, managers can implement a rotating shift system to ensure ongoing monitoring and response to technical issues outside of business hours. Furthermore, post-flood disaster support infrastructure, such as hardware and a stable internet connection, needs to be improved to ensure optimal application functionality. As a complement, utilizing technology such as chatbots to answer frequently asked questions (FAQs) can be an efficient solution to improve service responsiveness.
- c. Addition of Management Features to the SIAHA Application: Although the online reservation system will be integrated nationally through SIMAS Haji in the future, SIAHA

can still be used for internal purposes at the Bekasi Haji Dormitory, such as administrative and operational management. One suggested development is the addition of a digital archiving feature, which can reduce paper use and improve documentation order. From an economic perspective, managing annual domain payments and operational costs such as device and infrastructure maintenance needs to be designed efficiently to support the smooth and long-term sustainability of the system.

Research limitations and suggestions for further research: This study is limited in that it focuses solely on the online reservation aspect of the SIASAH application. Further research could comprehensively explore the application's implementation to support work unit governance through other features such as BMN recording, internal news publication, and performance reporting. Furthermore, further research could analyze the level of user satisfaction with the application, both from the general public and internal staff, to gain a more comprehensive picture of the system's overall effectiveness.

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