

Digitalizing *Sambang*: The Role of Leadership in Enhancing Service Quality in Islamic Educational Institutions

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ABSTRACT. This study aims to analyze the role of digital reservation platforms in improving the quality of *Sambang* services at *pesantren*. The research background is based on the challenges of conventional services, which still face long queues, limited information, and manual administrative burdens, all of which are prone to causing dissatisfaction among guardians. Using a descriptive qualitative approach, data were obtained through interviews, observations, and documentation. The results indicate that digital reservation platforms play a crucial role in enhancing service quality across four key aspects. First, visitation management efficiency increases with reduced waiting times and automatic notifications. Second, service transparency is achieved through real-time visibility into schedules and reservation statuses, which guardians can monitor. Third, administrative effectiveness is achieved through automated data recording, reduced information duplication, and accountability for reports. Fourth, user satisfaction increases due to flexible access, streamlined processes, and fewer complaints. These findings confirm that the digitalization of visitation not only enhances the technical aspects of service but also reinforces the principles of accountability, openness, and satisfaction as key indicators of service quality.

Keywords: *Service Quality, Digitalization of Sambang, Reservation Platform*

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INTRODUCTION

Digital transformation in the education and social services sectors has introduced a new paradigm in public service delivery, including within Islamic boarding schools (*pesantren*) (Anshari et al., 2023; Mukul & Büyüközkan, 2023). According to data from the Ministry of Religious Affairs of the Republic of Indonesia, there are more than 42,433 *pesantren* across Indonesia, serving millions of students within a faith-based educational ecosystem. In such a vast institutional landscape, service governance and leadership capacity become critical determinants of institutional quality. One important yet often overlooked service area is *Sambang*, a structured visitation system that allows guardians to visit students as part of relational engagement and student monitoring. Despite its importance, many *pesantren* continue to rely on conventional management methods, including manual registration, physical queues, and informal coordination (Suryana, 2024). These practices frequently lead to limited transparency, scheduling uncertainty, inefficiency, and declining service quality.

The urgency of this research is further clarified when linked to the Technology Acceptance Model (TAM) theory developed by Davis (1989). TAM emphasizes that technology acceptance is

determined by perceived usefulness and perceived ease of use (Bustaman et al., 2023; Nilashi & Abumalloh, 2025). In the context of Islamic boarding schools, implementing a reservation platform for visiting can increase perceptions of efficiency and convenience for both administrators and guardians. Furthermore, the Service Quality theory of Parasuraman, Zeithaml, & Berry (1988) is also relevant in explaining how digitalization can improve service quality dimensions, such as reliability, responsiveness, and assurance (Demirel, 2022; Shabani et al., 2022). Thus, digitizing *Sambang* services is not merely a technological trend but an academic and practical necessity to improve service quality in Islamic educational institutions.

The primary concern addressed in this research is the low quality of *Sambang* services in Islamic boarding schools, mainly due to the prevalence of ineffective conventional systems. Manual registration and traditional queuing systems often create uncertainty for guardians of students who wish to visit their children. This leads to dissatisfaction and even the potential for recurring minor conflicts within the Islamic boarding school environment. Furthermore, the limitations of these conventional systems hinder transparency and accountability in the management of visiting schedules. Conceptually, this reflects a service gap between guardians' expectations for modern services and the reality of manual services available in many Islamic boarding schools. Therefore, a scientific approach is needed to explore how digital reservation platforms can provide a concrete solution to address this problem.

Several recent studies demonstrate the relevance of digitalization in improving services. First, digital integration and service systems can improve service quality through real-time monitoring, predictive maintenance, and analytics. Second, research by Andriani (2025) highlights that online reservation systems can reduce no-shows and increase user satisfaction. Third, a study by Judijanto et al. (2023) examines how online systems affect user experience (including time certainty, accuracy, and convenience). Fourth, research by Latupeirissa et al. (2024) focuses on digital transformation initiatives in public services, including reservations and digital queuing systems, which have a positive impact on service quality. However, most previous research has focused on the contexts of formal education, healthcare, or public administration. At the same time, studies on the implementation of digital reservation platforms in Islamic boarding school (*pesantren*) ecosystems are still rare.

More importantly, prior studies rarely position leadership as a central driver of digital service quality improvement in religious educational institutions. The distinctive governance structure of *pesantren*—often characterized by charismatic, spiritual, and centralized leadership—makes the influence of leadership particularly significant. In such institutions, leaders are not only administrators but also moral authorities whose decisions shape organizational culture and stakeholder trust. Therefore, examining digital reservation platforms without integrating leadership variables would provide an incomplete understanding of service transformation in *pesantren*.

This research addresses this gap by integrating technology adoption theory, service quality theory, and leadership perspectives within the specific context of *Sambang* digitalization in Islamic boarding schools. The novelty of this study lies in its interdisciplinary approach and its emphasis on leadership as a strategic mediator between digital systems and service quality outcomes. It proposes that leadership functions as a catalyst that aligns technological innovation with institutional values, organizational readiness, and stakeholder expectations.

The primary objective of this research is to analyze the role of leadership in leveraging digital reservation platforms to enhance *Sambang* service quality in Islamic boarding schools. Specifically, this study investigates how leadership influences digital adoption, operational efficiency, transparency, and parental satisfaction. By positioning leadership as a central explanatory variable, this research offers both theoretical contributions to the literature on digital transformation in faith-based institutions and practical implications for *pesantren* leaders seeking to modernize service management while maintaining their religious and cultural identity. Ultimately, this study argues that

digitalizing Sambang services is not merely a technological initiative but a leadership-driven organizational transformation. The success of such transformation depends on visionary, transformational, and value-based leadership capable of harmonizing innovation with Islamic educational principles.

METHOD

This research employs a qualitative case study methodology to gain an in-depth understanding of the role of digital reservation platforms in enhancing the quality of *Sambang* services at Islamic boarding schools. This approach was chosen because it can reveal social and technological phenomena in context through an exploration of the processes, experiences, and interactions among stakeholders in a digital-based *Sambang* service system. This study was conducted at Nurul Jadid Islamic Boarding School, a pioneer in implementing a digital reservation system for parent visits, focusing on administrative efficiency, user convenience, and improved management of Islamic boarding school services.

Nurul Jadid Islamic Boarding School in Paiton, Probolinggo, East Java, was chosen as the research location because it has systematically implemented a digital system for *Sambang* services through an online reservation platform integrated with the school's management policies. Furthermore, this Islamic boarding school has a large number of students and guardians, as well as a complex service organizational structure, providing an opportunity for researchers to observe the dynamics of change from a manual to a digital system. This research focuses on understanding the factors that influence the effectiveness of digital reservation implementation from technical, managerial, and cultural perspectives, and how the system contributes to improving the quality of Islamic boarding school services.

The selection of informants was conducted through purposive sampling, based on their direct involvement in the implementation and use of digital Sambang services, as explained by Wilson et al.. The informants in this study numbered 15 people, consisting of the Islamic Boarding School Leaders as strategic policy makers, the IT System Management Team as developers and technical managers of digital platforms, Islamic Boarding School Administrators who play a role in supervising and coordinating activities, *Sambang* Service Staff as operational implementers in the field, and Student Guardians as service users who provide direct experience perspectives.

Table 1. Informant Data

Informant	Gender	Background Education	Total
Leader	Male	S2	1 person
IT System Management Team	Male	Bachelor of Informatics Engineering	3 persons
Administrators	Male, Female	Bachelor of Islamic Education	4 persons
Guardian of the Students	Male, Female	Bachelor's and High School	3 persons
<i>Sambang</i> Service Staff	Female	D3 & S1 Administration	4 persons

Data collection techniques included observation, in-depth interviews, and documentation. Observations were conducted to directly examine how the digital reservation system operates in practice, including interactions between managers and service users (Badawy et al., 2022). In-depth interviews were conducted to explore experiences, perceptions, and challenges encountered during the implementation of the digital system. Meanwhile, secondary data was obtained from documents such as service SOP, reservation data, system evaluation reports, and internal policy archives related to the digitalization of *Sambang*.

Data analysis was conducted interactively using the Miles & Huberman (1994) model, which includes data reduction, data presentation, and conclusion verification (Cahyanto, 2025). Data were grouped into key themes: system effectiveness, user satisfaction, administrative efficiency, and cultural values in service delivery. The analysis results were visualized in tables and narratives to

strengthen the interpretation of the findings. Data validity was maintained through the triangulation of sources and methods, as well as member checking, to ensure the consistency of interpretation (Meydan & Akkaş, 2024). This approach is expected to provide a comprehensive understanding of how digital reservation platforms can serve as a strategic tool to sustainably enhance the quality of *Sambang* services at Islamic boarding schools.




RESULT AND DISCUSSION


Result

Efficiency of Student Visit Management

The research results show that the efficiency of student visit management has significantly improved after the implementation of a digital reservation platform. This system can expedite the reservation process, eliminate manual queues, and minimize the risk of concurrent visitor congestion. Field data shows that wait times for visits have decreased by more than a third compared to traditional mechanisms, while the level of schedule certainty has consistently increased. Furthermore, the automatic notification feature helps administrators organize visit schedules according to the Islamic boarding school's capacity, resulting in more organized and measurable service. This is presented in the following Table:

Table 2. Indicators of Student Visit Management Efficiency

Indicator	Informant Statement	Informant	Evidence
Speed of the visit reservation process	<i>"With the app, I do not have to wait in long lines like before. Just click and schedule an appointment."</i>	Guardian of Student 1	
Automation in visit management	<i>"With the reservation system, the records are automatically entered into the database, and we only need to monitor them. Our workload is much lighter."</i>	Sambang Service Staff	
User satisfaction	<i>"I feel more at ease because I'm not afraid of scheduling conflicts. Everything is clear in the app."</i>	Guardian of Student 2	

<p>Visit ratio to capacity</p>	<p>"With this system, we can regulate the number of visitors so that it does not exceed the capacity of the Islamic boarding school."</p>	<p>Islamic Boarding School Leader</p>	
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Based on Table 2, the implementation of a visit reservation platform at Islamic boarding schools has significantly impacted the efficiency of student visit management. The reservation process, which previously required manual recording, can now be completed in just minutes through the digital system, reducing queues and accelerating data verification. Furthermore, the manual administrative burden is significantly reduced because recording and archiving no longer require a guest book; instead, they are automatically stored in the system, simplifying data retrieval. From the user perspective, parents of students experience convenience and comfort, eliminating the need to queue for long periods and allowing them to monitor their children's visit schedules more regularly, as reflected in the satisfaction questionnaire results. Furthermore, the system can control the visit ratio based on room capacity, thus avoiding crowding and creating a more orderly, conducive visit atmosphere. Therefore, digitalization through a reservation platform not only improves the work efficiency of Islamic boarding school administrators but also enhances service quality in terms of comfort, security, and user satisfaction.

The implementation of a digital reservation platform has led to significant changes in the management of visits to Islamic boarding schools. Field evidence shows that waiting times have decreased drastically, the manual queuing system is no longer a significant source of complaints, and schedule management has become more measurable thanks to the automatic notification feature. Interviews with students' guardians confirmed an increased sense of comfort and certainty during visits. At the same time, administrators stated that the manual administrative burden has been significantly reduced because record-keeping has been integrated into the system. These facts demonstrate that digitalization can address the fundamental weaknesses of conventional systems, namely, limited transparency, accountability, and service certainty.

Furthermore, the findings of this study confirm that digital systems not only provide practical benefits but also enhance the quality of service directly experienced by users. Islamic boarding school administrators can control visitor capacity in accordance with internal regulations, thereby avoiding overcrowding. At the same time, parents feel more at ease because they are free from the worry of scheduling conflicts. This situation marks the creation of a more orderly, efficient, and conducive service, which was previously difficult to achieve through manual mechanisms. Thus, the existence of digital reservation platforms in Islamic boarding schools is not merely an administrative innovation, but rather empirical evidence that technology can be effectively integrated into a religious community-based service system without compromising the family values characteristic of Islamic boarding schools.

Increased Service Transparency

Research findings indicate that transparency in visiting services at Islamic boarding schools has increased significantly following the implementation of a digital reservation platform. This system provides parents with open access to real-time reservation status, reducing uncertainty and the potential for misunderstandings. According to one parent, *"Now the visit schedule can be seen directly in the app, so there's no more doubt about whether my turn has been taken."* This quote demonstrates that the transparency of information about visiting schedules has provided certainty previously unavailable

with the manual system. Another informant, a parent of a different parent, stated, "We can check the reservation status to see whether it has been approved or is still pending. This makes it easier for us to plan our time more reliably." This statement aligns with field data showing that approximately 85% of parents actively use the reservation status monitoring feature. Meanwhile, a staff member of the visiting service stated, "With the digital log, we know who registered, when the schedule was made, and the reasons for any changes." This statement emphasizes that the digital system not only provides transparency but also ensures accountability through a thoroughly documented track record.

Research findings indicate that implementing a digital reservation platform has led to significant changes in the management of visitation services at Islamic boarding schools. Transparency regarding visitation schedules provides certainty for guardians, eliminating anxiety or confusion regarding their turn to visit. The ease of directly monitoring reservation status also increases user engagement, as guardians feel they have more control over visitation access, which was previously determined solely by the Islamic boarding school. Furthermore, the digitally recorded activity log demonstrates that the visitation management process is now more measurable and accountable. This not only makes it easier for administrators to manage schedules but also provides users with a sense of security, as all activities are clearly recorded. Thus, the digitalization of visitation not only improves technical services but also builds mutual trust between administrators and guardians through transparency and accountability.

The increased transparency of the visitation service is evident through the open access to information provided by the digital reservation platform. Parents can monitor the reservation status in real time, from the application process to schedule approval, reducing the uncertainty that has been a weakness of the manual system. Interview excerpts indicating that parents can immediately obtain the visitation schedule without waiting for information from the Islamic boarding school confirm a significant shift in service communication practices. This is also reflected in field data, which shows that more than 80% of parents use the status monitoring feature, indicating high adoption and trust in the digital system.

From a management perspective, a digitally documented activity log strengthens service accountability. Every reservation process, schedule change, and adjustment reason is systematically recorded, minimizing the potential for misunderstandings. This transparency not only provides certainty for guardians but also facilitates the Islamic boarding school's evaluation and improvement of its services. Thus, the implementation of a digital reservation platform is not merely a technical tool to expedite the visit process, but also a means to build a more open and trusting relationship between administrators and guardians, a previously difficult feat achieved through manual mechanisms.

More Effective Administrative Management

The research results show that the administrative management of visiting services at Islamic boarding schools has become more effective after the implementation of a digital reservation platform. This system can automatically record data, eliminating the need for repetitive manual input prone to error. According to a visiting service staff member, "With this system, all visit data is recorded automatically, so we no longer need to retype it in separate books or files. The process is much easier." This



Figure 2. Total Statistics Dashboard of All Visits

statement illustrates that the availability of automated reservation data reduces the administrative burden that was previously handled manually.

Meanwhile, the Islamic boarding school principal said, "Now the recording is neater, there are almost no errors or duplicate data, and we can easily audit reports. All reservation activities clearly show who registered and when." This statement suggests that increased accuracy and administrative accountability are genuine benefits of the digital system. These two findings confirm that implementing a reservation platform not only simplifies recording but also improves clarity and reliability in administrative management.

Based on Figure 2, it can be seen that the digitalization of *Sambang* not only impacts service quality but also significantly impacts the effectiveness of Islamic boarding school administration. Automated data recording makes it easier for staff to manage information without the tedious manual input process. This directly reduces the risk of human error and speeds up the workflow. Higher recording accuracy also demonstrates that the digital system can maintain data quality, ensuring reliable stored information for planning and evaluation. Furthermore, the transparency enabled by digital records ensures accountability, as every reservation activity can be clearly tracked by management. This situation strengthens internal trust and confirms that digital-based administration can deliver both efficiency and order. Thus, effective administrative management through a digital reservation platform not only reduces staff workload but also enhances the reliability of the *Sambang* management system at Islamic boarding schools.

The effectiveness of *Sambang* administration has become increasingly evident since the implementation of a digital reservation platform, as evidenced by testimonies from Islamic boarding school staff and managers. Automated recording simplifies and accurately manages administrative processes, minimizing the potential for manual input errors. Field evidence shows that visit reports are now presented more quickly and neatly, with virtually no risk of duplicate or missed data. This confirms that digitalization not only improves service efficiency for guardians but also provides a more reliable and standardized administrative management system.

Furthermore, a well-documented digital footprint strengthens accountability throughout the reservation process. Islamic boarding school leaders can monitor all reservation activities, including who registered, when, and the reasons for schedule changes, without having to navigate through time-consuming manual filing. This not only increases internal transparency but also makes the administration of the visit easier to audit. Thus, digitalization provides added value in the form of more effective, efficient, and reliable administrative governance, while also providing evidence that digital reservation platforms can overcome the limitations of manual systems, which have been a significant obstacle to Islamic boarding school *Sambang's* services.

Increased User Satisfaction

The research results show that parents' satisfaction with the *Sambang* service has increased following the introduction of a digital reservation platform. This system enables users to enjoy a more convenient service, as the booking process is available without time or location restrictions. According to one parent, "I can make reservations anytime via mobile phone, so I don't have to come directly to the Islamic boarding school just to register. It's very convenient." This statement confirms that ease of access and use are essential factors in increasing satisfaction. Another informant also said, "Now I feel more comfortable because visits run according to schedule and there are no longer long crowds like before. In addition, my complaints about late visits are rare." This statement indicates that users are increasingly experiencing service comfort, confirming the system's increased reliability and leading to a decrease in complaints. These two findings demonstrate that the digitalization of visit services has improved the experience for parents, in terms of ease of access, convenience of the process, and increased trust in service management.

The data obtained shows that the digitalization of *Sambang* has successfully created a more satisfying service experience for guardians. The ease of access on the reservation platform allows users to schedule visits according to their needs without complicated procedures. This provides a sense of freedom and reduces the administrative burden that was previously often difficult. Furthermore, the convenience of *Sambang* (visiting) is increasingly felt because the predetermined schedule reduces crowds and minimizes potential delays. This makes guardians feel their time is more valued and fosters a sense of calm when interacting with the Islamic boarding school's management. The decrease in complaints indicates the reliability of the implemented digital system, thereby strengthening trust in the service. From these findings, user satisfaction is not only determined by service speed but also by certainty, convenience, and consistent quality assurance throughout each *Sambang* process.

Research findings indicate that implementing a digital reservation platform not only enhances administrative effectiveness but also significantly increases satisfaction among guardians as service users. Field evidence suggests that the flexibility of access, specifically the ability to make reservations at any time on personal devices, is a key driver of satisfaction. Testimonials from guardians reinforce this, emphasizing that digital services make the reservation process more practical and reduce the burden of previously time-consuming procedures. This situation aligns with the principle of technology-based services, which prioritizes ease of access as a key factor in building user satisfaction.

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Discussion

The digitalization of student visits via a reservation platform has been shown to increase the efficiency of managing them (Saura et al., 2024). The reservation process, which was previously manual, is now faster, more transparent, and more accessible, resulting in significantly reduced wait times. This finding is consistent with the study by Cui et al. (2024) on queue optimization, which showed that online booking can accelerate service flow by reducing administrative burdens and shortening waiting times. The reservation application includes automation features, such as notifications and scheduled cancellations, that help reduce no-shows and streamline the use of visit schedules. With this system, managers can focus more on improving the quality of core services rather than on repetitive administrative work.

Furthermore, digital reservations play a crucial role in increasing user satisfaction while maintaining attendance ratios within available capacity. Research on online queuing systems in Indonesian public services shows that users are more satisfied with digital-based services due to their fast and flexible access (Ingsih et al., 2024). This satisfaction can be measured using benchmarks such as the Customer Satisfaction Score (CSAT), Net Promoter Score (NPS), or System Usability Scale (SUS), which are commonly used in digital service assessments (Kargas et al., 2024). In terms of capacity, implementing capacity-based scheduling helps Islamic boarding schools avoid overcrowding by only opening appointments within the facility's capacity. This practice balances attendance ratios with available facilities, ensuring orderly and comfortable visits while maintaining compliance with the school's internal regulations.

On a reservation platform, service transparency increases because key information is published and tracked in real time (Barua & Kaiser, 2024; Gosela & Encarnacion, 2024). Open schedules and visit quotas reduce information asymmetry, allowing parents to view available slots and plan visits in advance. This aligns with findings from online appointment systems that reduce no-shows and increase satisfaction by clearly displaying available time to users (Ostadmohammadi et al., 2025). Easy and accurate data access is supported by data quality governance (standards, validation procedures, and data correction), making the visit history more reliable than manual recording. At the policy level, digital government has been identified as accelerating processes and expanding transparency of service information, thereby strengthening schedule and quota transparency indicators (Djatkiko et al., 2025).

Transparency is increased through user engagement and access rights. A monitorable reservation status (approved/pending/rejected) and a data verification mechanism established by student guardians enable participatory control. Qualitative studies on e-appointments emphasize the importance of feedback and a transparent process for stakeholders (Ostadmohammadi et al., 2025). Process accountability is also strengthened through digital footprints/logs, schedule change notifications, and regular reports, enabling transparency of information and data quality, fostering both satisfaction and trust. Research indicates that the quality of public information and transparency are positively correlated with citizen trust, while the implementation of a digital appointment system is associated with a more positive service experience (Chan et al., 2021; Pandey, 2023).

Implementing a reservation platform in the visit system at Islamic boarding schools not only increases transparency but also enhances the effectiveness of administrative management (Altinay et al., 2024). This effectiveness is evident in the reduction of manual workload previously required by administrative staff, such as recording visits in a ledger, manually setting schedules, and verifying visitor data. Through digitization, all these processes can be automated and stored in an integrated system, thereby minimizing input errors, data loss, and information duplication. Studies in the public sector have shown that the use of e-government and online service applications significantly improves administrative efficiency, particularly by reducing work time, operational costs, and increasing data accuracy (Al-Hussein et al., 2023). This also aligns with the findings of Ostadmohammadi et al. (2025), who explained that electronic reservation systems can shorten lengthy administrative procedures and facilitate direct tracking of visit data. Thus, the digital visit system at Islamic boarding schools can be an example of a more streamlined, efficient, and accountable administrative transformation.

Furthermore, administrative effectiveness is achieved through improved coordination among units within the Islamic boarding school. With a digital reservation system, dormitory administrators, security officers, and service personnel can access the same data simultaneously and accurately, thereby minimizing miscommunication and misunderstandings regarding visitation schedules. This system also enables automated reporting that can be accessed periodically, making it easier for Islamic boarding school leaders to make data-driven decisions. Research conducted by Rahaman et al. (2024) and Nudurupati et al. (2024) shows that a digital data-based management system can improve organizational coordination and accelerate decision-making. At the user satisfaction level, regularity and clarity of administration also increase guardians' trust in Islamic boarding school governance. With auditable digital records and accessible reports, Islamic boarding school administration is not only more effective but also meets the principles of accountability and good governance. Thus, digitizing administration through a reservation platform is not only a technical innovation but also a modern governance strategy that supports service quality in Islamic boarding schools.

The digitalization of visits via reservation platforms has significantly increased user satisfaction, particularly among guardians of students. Online reservation systems offer easy access, transparent information, and the flexibility to schedule visits based on available time, making users

feel more valued and involved in the service process. Furthermore, increased user satisfaction not only impacts positive perceptions of the system but also boosts trust in Islamic boarding school governance. Transparency and efficiency of online services are closely correlated with user satisfaction and loyalty. In the context of Islamic boarding schools, guardians who are satisfied with the openness and fairness of the reservation system tend to provide positive testimonials, re-entrust their children to the system, and support the digital innovations implemented. The principles of transparency and accountability are crucial for building public trust, which in turn directly enhances user satisfaction (Hartanto et al., 2021; Sofyani et al., 2022). Thus, reservation platforms are not merely technical tools but also strategic instruments that foster harmonious relationships between Islamic boarding schools and guardians through fair, transparent, and reliable service.

CONCLUSION

This study confirms that the digitalization of on-site services through reservation platforms has a significant impact on Islamic boarding school governance, affecting efficiency, transparency, administrative effectiveness, and user satisfaction. A key lesson learned is that integrating technology with Islamic boarding school institutional values not only simplifies service processes but also fosters a culture of orderly, transparent service and a focus on students' and guardians' comfort and trust. Therefore, the implementation of a digital reservation system in Islamic boarding schools is not merely an adaptation to technological advances, but also a managerial strategy grounded in the principles of accountability and sustainable quality of service.

This research's scientific contribution lies in updating the perspective on the digitalization of services in religious educational institutions, particularly Islamic boarding schools (pesantren). These findings broaden the scope of e-government and online reservation systems studies into the context of tradition-based institutions, which have previously been understudied by academic research. Through a qualitative approach supported by digital data, this study enriches the understanding of how efficiency, transparency, and user satisfaction can be contextually operationalized within Islamic boarding schools (pesantren). Thus, the results of this study not only provide empirical evidence on the effectiveness of digital reservation platforms but also offer theoretical contributions to the development of a digital governance model that harmonizes technological innovation and the cultural values of Islamic boarding schools in Indonesia.

BIBLIOGRAPHY

- Al-Hussein, M. A.-H. A., Alabdallat, W. I. M., Abu, M. A., Rumman, O. J., & Ali, B. J. (2023). Impact of e-government applications on reducing administrative burden in delivering public service. *Information Sciences Letters*, 12(3), 1663–1671. <https://doi.org/10.18576/isl/120350>
- Altinay, Z., Arslan, R. U., & Sharma, R. C. (2024). Assessing student satisfaction and institutional efficiency in dormitory management: A qualitative analysis based on student perspectives. *Sustainability (2071-1050)*, 16(20). <https://doi.org/10.3390/su16208823>
- Andriani, D. (2025). Impact of web-based reservation implementation on patient no-show mediated by waiting time. *Jurnal Ilmiah Manajemen Kesatuan*, 13(5), 3803–3814. <https://doi.org/10.37641/jimkes.v13i5.3799>
- Anshari, I., Zulfikar, T., Tihalimah, T., Abdullah, I., & Mujiburrahman, M. (2023). Understanding "service learning" in a traditional Islamic boarding schools in Aceh, Indonesia. *Qualitative Report*, 28(7). <https://doi.org/10.46743/2160-3715/2023.5808>
- Badawy, A., Solberg, M., Obstfelder, A. U., & Alnes, R. E. (2022). Improvised use of a digital tool for social interaction in a Norwegian care facility during the COVID-19 pandemic: an

- exploratory study. *BMC Health Services Research*, 22(1), 136. <https://doi.org/10.1186/s12913-022-07526-0>
- Barua, B., & Kaiser, M. S. (2024). Blockchain-based trust and transparency in airline reservation systems using microservices architecture. *ArXiv Preprint ArXiv:2410.14518*.
- Bustaman, M. K., Aprianingsih, A., Hidayat, M., & Dasuki, R. E. (2023). The impact of trust, perceived usefulness, perceived ease of use, and customer intentions on customer attitudes toward the use of technology. *Almana: Jurnal Manajemen Dan Bisnis*, 7(2), 230–241. <https://doi.org/10.36555/almana.v7i2.2133>
- Cahyanto, B. (2025). Deep learning and application in elementary schools: An exploration of learning practices. *GHANCARAN: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 7(1), 219–235. <https://doi.org/10.19105/ghancaran.v7i1.18892>
- Chan, F. K. Y., Thong, J. Y. L., Brown, S. A., & Venkatesh, V. (2021). Service design and citizen satisfaction with e-government services: a multidimensional perspective. *Public Administration Review*, 81(5), 874–894. <https://doi.org/10.1111/puar.13308>
- Cui, R., Lu, Z., Sun, T., & Golden, J. M. (2024). Sooner or later? Promising delivery speed in online retail. *Manufacturing & Service Operations Management*, 26(1), 233–251. <https://doi.org/10.1287/msom.2021.0174>
- Demirel, D. (2022). The effect of service quality on customer satisfaction in digital age: customer satisfaction based examination of digital CRM. *Journal of Business Economics and Management*, 23(3), 507–531. <https://doi.org/10.3846/jbem.2022.15328>
- Djarmiko, G. H., Sinaga, O., & Pawirosumarto, S. (2025). Digital transformation and social inclusion in public services: A qualitative analysis of e-government adoption for marginalized communities in sustainable governance. *Sustainability*, 17(7), 2908. <https://doi.org/10.3390/su17072908>
- Gosela, R. R. U., & Encarnacion, R. E. (2024). Booking and reservation system: A unified application using location-based services for sustainable tourism networks. *Networks*, 4(2).
- Gupta, S. K., Singh, H., Joshi, M. C., & Sharma, A. (2023). Digital dashboards with paradata can improve data quality where disease surveillance relies on real-time data collection. *Digital Health*, 9, 20552076231164096. <https://doi.org/10.1177/20552076231164098>
- Hartanto, D., Dalle, J., Akrim, A., & Anisah, H. U. (2021). Perceived effectiveness of e-governance as an underlying mechanism between good governance and public trust: a case of Indonesia. *Digital Policy, Regulation and Governance*, 23(6), 598–616. <https://doi.org/10.1108/DPRG-03-2021-0046>
- Ingsih, K., Astuti, S. D., & Riyanto, F. (2024). The role of digital competence in improving service quality and employee performance. *SA Journal of Human Resource Management*, 22, 2689. <https://doi.org/10.4102/sajhrm.v22i0.2689>
- Judijanto, L., Mohammad, W., Purnamasari, E., & Muthmainah, H. N. (2023). Analysis of reliability, transaction speed, and user experience on information system integration in e-commerce business in Indonesia. *West Science Information System and Technology*, 1(02), 80–89. <https://doi.org/10.58812/wsist.v1i02.478>
- Kargas, A., Gkika, E. C., & Drosos, D. (2024). Digital app's effectiveness in Greek cultural context: evaluating users' satisfaction with Net Promoter Score (NPS). *International Conference of the International Association of Cultural and Digital Tourism*, 173–187. https://doi.org/10.1007/978-3-031-87019-4_12
- Latupéirissa, J. J. P., Dewi, N. L. Y., Prayana, I. K. R., Srikandi, M. B., Ramadiansyah, S. A., & Pramana, I. B. G. A. Y. (2024). Transforming public service delivery: A comprehensive review of digitization initiatives. *Sustainability*, 16(7), 2818. <https://doi.org/10.3390/su16072818>
- Meydan, C. H., & Akkaş, H. (2024). The role of triangulation in qualitative research: Converging perspectives. In *Principles of conducting qualitative research in multicultural settings* (pp. 98–129). IGI Global. <https://doi.org/10.4018/979-8-3693-3306-8.ch006>

- Mukul, E., & Büyüközkan, G. (2023). Digital transformation in education: A systematic review of education 4.0. *Technological Forecasting and Social Change*, 194, 122664. <https://doi.org/10.1016/j.techfore.2023.122664>
- Nilashi, M., & Abumalloh, R. A. (2025). i-TAM: A model for immersive technology acceptance. *Education and Information Technologies*, 30(6), 7689–7717. <https://doi.org/10.1007/s10639-024-13080-5>
- Nudurupati, S. S., Tebboune, S., Garengo, P., Daley, R., & Hardman, J. (2024). Performance measurement in data intensive organisations: resources and capabilities for decision-making process. *Production Planning & Control*, 35(4), 373–393. <https://doi.org/10.1080/09537287.2022.2084468>
- Nusantara, G. L., Andrian, R., & Abdulmajid, N. W. (2025). Implementation of a web-based student and teacher attendance system with QR code integration using the RAD. *INOVTEK Polbeng-Seri Informatika*, 10(1), 99–110. <https://doi.org/10.35314/f2qvfs64>
- Ostadmohammadi, F., Nabovati, E., Jeddi, F. R., & Arani, L. S. (2025). Stakeholders' experiences, perceptions and satisfaction with an electronic appointment system: a qualitative content analysis. *BMC Health Services Research*, 25(1), 220. <https://doi.org/10.1186/s12913-025-12289-5>
- Pandey, J. K. (2023). Public trust and collaborative e-governance performance: a study on government institutions and services. *Transforming Government: People, Process and Policy*, 17(4), 510–531. <https://doi.org/10.1108/TG-08-2023-0113>
- Rahaman, M. A., Rozony, F. Z., Mazumder, M. S. A., Haque, M. N., & Rauf, M. A. (2024). Big data-driven decision making in project management: A comparative analysis. *Academic Journal on Science, Technology, Engineering & Mathematics Education*, 4(03), 44–62. <https://doi.org/10.69593/ajsteme.v4i03.88>
- Saura, J. R., Ribeiro-Soriano, D., & Palacios-Marqués, D. (2024). Adopting digital reservation systems to enable circular economy in entrepreneurship. *Management Decision*, 62(8), 2388–2408. <https://doi.org/10.1108/MD-02-2022-0190>
- Shabani, L., Behluli, A., Qerimi, F., Pula, F., & Dalloshi, P. (2022). The effect of digitalization on the quality of service and customer loyalty. *Emerging Science Journal*, 6(6), 1274–1289. <https://doi.org/10.28991/ESJ-2022-06-06-04>
- Sofyani, H., Pratolo, S., & Saleh, Z. (2022). Do accountability and transparency promote community trust? Evidence from village government in Indonesia. *Journal of Accounting & Organizational Change*, 18(3), 397–418. <https://doi.org/10.1108/JAOC-06-2020-0070>
- Suryana, A. T. (2024). Implementation of Islamic human resource management in Islamic boarding schools: Case study in modern Islamic boarding schools. *SYAMIL: Jurnal Pendidikan Agama Islam (Journal of Islamic Education)*, 12(1), 27–40. <https://doi.org/10.21093/sy.v12i1.8651>
- Wilson, D. R., Haas, S., Van Gelder, S., & Hitimana, R. (2023). Digital financial services for health in support of universal health coverage: qualitative programmatic case studies from Kenya and Rwanda. *BMC Health Services Research*, 23(1), 1036. <https://doi.org/10.1186/s12913-023-09893-8>