

E-Buddy Application, Innovation in Public Administration in the Government of Sidoarjo District

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Abstract

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E-Buddy is an application owned by the Sidoarjo Regency Government, a public administration innovation. It adopts e-government principles to support bureaucratic reform, efficiency, transparency, and accountability. Socialization of the E-Buddy application is necessary to ensure optimal use by all levels of society who need it, raise awareness of the benefits of efficiency, transparency, and convenience in public services and government administration, and facilitate the use of new features and discussions related to the application. Socialization is also important. For push digitalization government, speed up work processes, save costs, and increase ASN productivity. The E-Buddy socialization implementation method includes Internal Socialization for government employees. The results of the discussion show that the E-Buddy Application represents Innovation in Public Administration, this is due to: Technology Adoption (E-Government), Increased Efficiency and Effectiveness, Integrated Apparatus Management, Supporting Bureaucratic Reform, and Electronic Official Document Management.



1. Introduction

The rapid advancement of global information technology across various sectors is deeply intertwined with its fundamental role in creating, storing, communicating, and disseminating information. The widespread use of electronic devices such as televisions, computers, and mobile phones has significantly increased the demand for information technology among the general public. This development has brought convenience and efficiency to human life, particularly in accessing information and conducting business. Technology continues to evolve rapidly in multiple fields including government, education, and commerce, among others. One of the most dynamic areas of progress is within government administration.¹ The scope of government operations has become one of the most critical sectors utilizing technology, where computers and digital systems are essential for solving various administrative and operational problems.

The Government of Sidoarjo Regency has taken a proactive step by issuing Regulation of the Regent Number 46 of 2018 concerning Technology Governance, which focuses on the development of E-Government within the Sidoarjo Regency government system. This regulation, officially enacted on July 2, 2018, serves as a strategic policy aimed at organizing and developing Information and Communication Technology (ICT) in Sidoarjo Regency with the ultimate goal of realizing a Smart City. In essence, this regulation governs aspects related to the

¹ Ghasan Fahim Huseien and Kwok Wei Shah. "A review on 5G technology for smart energy management and smart buildings in Singapore." *Energy and AI* 7 (2022): 100116.

evaluation of ICT governance structures, ICT development, utilization, and implementation, particularly within government institutions in Sidoarjo Regency.

As part of the implementation of this policy, the government introduced the E-Buddy application, a digital platform owned and managed by the Sidoarjo Regency Government. The application focuses on the management of official correspondence within regional government agencies. E-Buddy represents a concrete effort toward achieving good governance, promoting efficiency and transparency in administrative processes. It plays a vital role in supporting bureaucratic reform by fostering a government free from corruption, collusion, and nepotism (*Korupsi, Kolusi dan Nepotisme/KKN*), while also providing public services that are fast, effective, efficient, and consistent. The existence of such a digital tool reflects the government's commitment to building an accountable bureaucracy that meets modern demands and public expectations.²

Through e-government initiatives like E-Buddy, government institutions are expected to operate optimally, enhancing both performance and service quality. However, achieving this objective requires a serious commitment from all parties involved to embrace innovation within the bureaucracy. The implementation of the E-Buddy system demonstrates a tangible move toward administrative modernization and serves as a model for other regions aiming to integrate ICT into public governance. To ensure the successful adoption of E-Buddy, socialization of the application among government employees is essential. Proper dissemination and

² Amanda Clarke. "Digital government units: what are they, and what do they mean for digital era public management renewal?." *International Public Management Journal* 23, no. 3 (2020): 358-379.

training will help ensure that all personnel within the Sidoarjo Regency Government understand the application's features, functionality, and benefits. This process will increase awareness of the efficiency, transparency, and convenience offered by the digital system, while also facilitating its integration into daily administrative routines.

Moreover, effective socialization supports the broader agenda of digitalizing government processes, accelerating work procedures, reducing operational costs, and enhancing the productivity of civil servants (ASN). The introduction of the E-Buddy application and the enforcement of Regulation Number 46 of 2018 mark significant milestones in the journey toward building a smart, transparent, and technology-driven government in Sidoarjo Regency. These initiatives exemplify the region's dedication to implementing e-government principles, optimizing technological resources, and providing high-quality public services aligned with the vision of a modern and accountable bureaucracy.

2. Literature Review

2.1 Digital Governance and Innovation in Public Administration

In the past decade, public administration across many countries has undergone rapid transformation due to digitalization. E-government has evolved into digital government, where technology is no longer merely a tool but an integral part of the governance system (UN DESA, 2020–2024). Studies show that digitalization accelerates service delivery, enhances accountability, and reduces

operational costs.³ Governments now require user-oriented, collaborative, and real-time digital systems to support modern public services. Furthermore, the use of proven internal applications commonly known as back-office systems has been shown to significantly improve the quality of public management.

In this context, the E-Buddy application developed by the Sidoarjo Regency Government can be positioned within the framework of New Public Management (NPM) and digital governance, emphasizing both efficiency and innovation. According to scholars such as Lips,⁴ digital innovation serves as a driving force for public administration improvement. Key principles of this transformation include automation to increase speed and minimize manual errors, data-driven transparency to enhance accountability, and system integration to improve inter-unit coordination. Additionally, mobile-based applications enable civil servants (ASN) to perform their duties flexibly and efficiently. E-Buddy embodies these principles by transforming administrative processes into a digital system that is faster, more accurate, and transparent aligning with Indonesia's broader e-government agenda and the Smart City initiative in Sidoarjo.

2.2 Implementation Challenges and Digital Collaboration

From 2018 to 2025, many regional and central governments in Indonesia have begun developing internal digital applications such as personnel management

³ Qasim Ali Nisar, Nadia Nasir, Samia Jamshed, Shumaila Naz, Mubashar Ali, and Shahzad Ali. "Big data management and environmental performance: role of big data decision-making capabilities and decision-making quality." *Journal of Enterprise Information Management* 34, no. 4 (2021): 1061-1096.

⁴ Miriam Lips. "Digital transformation in the public sector." In *Collaborating for digital transformation*, pp. 13-30. Edward Elgar Publishing, 2024.

systems, digital attendance platforms, electronic correspondence systems, and performance monitoring tools. Research shows that such applications enhance efficiency, coordination, and organizational data integrity.⁵ The success of these innovations depends largely on user adoption, training, and top-level management support.⁶ Governments that actively drive digital innovation also demonstrate stronger performance in bureaucratic reform.

In this regard, E-Buddy must function as a collaborative digital platform that enhances communication across bureaucratic divisions. Studies on digital collaboration in public services (2017–2024) highlight that such systems foster faster, more transparent, and responsive work environments. E-Buddy can serve as an essential tool to connect inter-departmental units, accelerate administrative coordination, provide performance dashboards, and unify organizational data. However, the implementation of E-Buddy also faces several key challenges, including resistance to change among ASN, unequal digital competencies, suboptimal network infrastructure, limited socialization and training, and the absence of cross-application integration. Overcoming these challenges is crucial to ensuring E-Buddy's success as a sustainable public administration innovation that supports Indonesia's Digital Government Transformation (*Sistem Pemerintahan Berbasis Elektronik/SPBE*) and the 2020–2025 Bureaucratic Reform (*Reformasi Birokrasi/RB*) agenda.

⁵ Eka Puspitasari and Rr Sri Pancawati Martiningsih. "Implementation of local government information system: evidence from BPKAD in West Sumbawa Regency." *International Journal of Applied Finance and Business Studies* 11, no. 1 (2023): 12-21.

⁶ Miriam Lips. "Digital transformation in the public sector." In *Collaborating for digital transformation*, pp. 13-30. Edward Elgar Publishing, 2024.

3. Methods

The socialization of the E-Buddy application is carried out through a combination of structured training, digital communication platforms, and direct practice within the daily activities of regional and village governments. The primary method involves training and technical guidance (*Bimbingan Teknis/Bimtek*), which introduces government employees from the regency to the village level to the application's functions and objectives. During these sessions, users receive simulations and demonstrations that guide them step by step in accessing and utilizing various features, such as attendance management, letter approval, and official correspondence handling. The socialization materials provided include explanations of newly added features, updates, and instructions for efficient operation, ensuring that employees stay informed about system developments.

Supporting the implementation process, each civil servant (ASN) and village official is provided with a personal E-Buddy account, enabling them to manage documents and correspondence digitally. After the socialization activities, evaluation and monitoring are conducted to measure the level of understanding and identify potential challenges in application use. Furthermore, technical support is continuously available to assist users facing operational or network difficulties. To maximize outreach, online platforms such as Zoom Meetings and YouTube are also utilized to disseminate training materials effectively. Altogether, these socialization strategies aim to ensure that E-Buddy is optimally used to enhance efficiency, accountability, and transparency in public administration across Sidoarjo Regency.

4. Results

The E-Buddy application is a government information system developed by the Sidoarjo Regency Government as a major innovation in public administration, adopting the principles of e-government to support bureaucratic reform, efficiency, transparency, and accountability. The establishment of this system aligns with Indonesia's commitment to realizing a digital government that prioritizes effective governance, responsive public services, and data-based decision-making. Through E-Buddy, the Sidoarjo Regency Government seeks to transform conventional administrative processes into digital workflows that are faster, more accurate, and transparent. The application facilitates the management of various aspects of the work of State Civil Apparatus (ASN), ranging from attendance, activities, and meetings to the electronic management of official correspondence.⁷ Additionally, it integrates diverse data into a single dashboard that enables leaders and staff to monitor productivity, assess performance, and ensure transparency across all levels of government service.

E-Buddy represents a tangible embodiment of innovation in public administration. It demonstrates the adoption of technology in line with the e-government concept, where digital tools are employed to enhance organizational performance and the quality of public services. The implementation of this application reflects the modernization of bureaucratic systems, ensuring that administrative processes that were once manual and time-consuming are now

⁷ R. Taqwaty Firdausijah. "Management of State Civil Apparatus Human Resources in An Effort to Realize Good Governance." *Jurnal Ekonomi* 11, no. 02 (2022): 1651-1655.

executed efficiently through online mechanisms. The result is a government that operates more effectively, communicates more rapidly, and serves the public with greater consistency.⁸ Moreover, by digitizing correspondence and centralizing information, E-Buddy strengthens transparency and accountability, allowing every step in administrative workflows to be traceable and verifiable. This digital documentation structure enhances the accountability of civil servants by automatically recording all activities, decisions, and correspondence within the system.

Another defining feature of E-Buddy is its integrated civil servant management function. The application acts as a comprehensive platform where different aspects of ASN work are coordinated, including attendance records, meeting schedules, mail disposition, and internal communications. This integration streamlines inter-departmental coordination, reduces administrative redundancy, and ensures that all data remains consistent and accessible across government units. As part of broader bureaucratic reform efforts, E-Buddy supports the transition from conventional governance models toward a digital governance ecosystem where innovation and efficiency become the core values. This aligns with Indonesia's Smart City framework and the national agenda for Electronic-Based Government Systems (SPBE), which emphasize transparent, technology-driven governance.⁹

⁸ Bernadette Hyland-Wood, John Gardner, Julie Leask, and Ullrich KH Ecker. "Toward effective government communication strategies in the era of COVID-19." *Humanities and Social Sciences Communications* 8, no. 1 (2021).

⁹ Rio Yusri Maulana, Usman Usman, Moh Arief Rakhman, Alva Beriansyah, Anry Firmansyah, Mitja Decman, and Arissy Jorgi Sutan. "Smart Governance Transformation in Indonesian Local Administration." In *Iapa Proceedings Conference*, 2024. 201-231.

In addition to improving administrative management, E-Buddy also functions as an electronic official document system (e-document system) that replaces traditional paper-based correspondence with digital document management. This not only accelerates the flow of official communications but also contributes to environmental sustainability and cost efficiency by reducing paper usage and administrative expenses. The shift toward electronic correspondence strengthens the government's digital ecosystem, ensuring faster decision-making and improved service delivery to the public.

Given its critical role in transforming local governance, the socialization of the E-Buddy application is an essential process to ensure its successful implementation. Socialization aims to improve understanding and technical skills among government employees so they can use the application effectively in their daily tasks. Training and outreach programs enable users to understand how E-Buddy operates, what features are available, and how they can be applied to administrative activities such as correspondence, attendance, and meeting coordination. Through structured training and technical guidance sessions, both at the regency and village levels, government employees are encouraged to adopt the system confidently.

Socialization also serves to expand user adoption, especially among individuals who may not yet be familiar with digital tools. By increasing awareness and user competency, the government ensures that the benefits of E-Buddy such as efficiency, transparency, and accountability are fully realized across all departments. Moreover, this outreach supports the broader goal of efficiency and effectiveness in

government operations. When properly implemented, E-Buddy reduces bureaucratic delays, minimizes administrative errors, and enhances productivity, allowing employees to focus on more strategic and impactful tasks.

Another important objective of E-Buddy socialization is to encourage transparency and accountability in government processes. Through its integrated digital dashboard, stakeholders can view and monitor activities and events more transparently. This not only fosters public trust but also strengthens internal oversight mechanisms. The application makes it possible to track work progress, correspondence, and performance metrics in real time, ensuring that public administration operates in a manner consistent with principles of good governance. Furthermore, the use of E-Buddy contributes to bureaucratic reform, as it directly supports the government's digitalization efforts and aligns with national strategies to modernize public services.

The implementation of E-Buddy also has tangible economic and operational benefits. By digitizing correspondence and administrative documentation, the government can significantly save costs and resources, reducing the reliance on paper and manual processes. This contributes to overall cost efficiency and promotes environmentally responsible governance. Additionally, E-Buddy increases service accessibility, allowing administrative work to be performed anytime and anywhere as long as there is an internet connection, ensuring flexibility and continuity of operations. Socialization activities also include the establishment of discussion forums where employees and the public can ask questions, provide

feedback, and share suggestions for improvement.¹⁰ These discussions play an important role in optimizing the application's functionality and ensuring it continues to meet user needs effectively.

Ultimately, the objectives of the E-Buddy socialization initiative are to increase administrative efficiency, enhance transparency, and support the digital transformation of government services. By accelerating correspondence management, improving data accessibility, and fostering collaboration, the Sidoarjo Regency Government is setting a model for how local governments can leverage technology to deliver faster, more transparent, and more accountable governance in the digital era.

5. Discussion

The implementation of the E-Buddy application within the Sidoarjo Regency Government demonstrates how digital technology can transform bureaucratic work patterns to become more efficient, transparent, and integrated. This application is a concrete manifestation of e-government implementation, particularly in the transformation of previously manual-based administrative management. By digitizing correspondence, attendance, and ASN activity management, E-Buddy makes a significant contribution to accelerating workflows and reducing the potential for errors and data duplication, thus supporting the realization of modern governance.

¹⁰ Amelia Sri Rizki, Rafi Aurelian, Ela Liana, Nur Afifah Fadhilah, and Raniasari Bimanti Esthi. "Berbagi Pengetahuan mengenai Berbicara Perubahan dalam Organisasi melalui Webinar Pengabdian kepada Masyarakat." *Jurnal Pengabdian Kepada Masyarakat Tunas Membangun* 4, no. 1 (2024): 35-42.

Furthermore, E-Buddy also serves as an internal innovation that supports cross-unit coordination through an integrated system. The available dashboard allows leaders to monitor activities in real time, increasing accountability for staff performance, and streamlining the decision-making process. However, the success of the application's implementation is determined not only by technology but also by the readiness of human resources. In practice, challenges such as resistance to change, digital competency gaps, and a lack of understanding of the application's features remain, resulting in suboptimal utilization across all levels of government, particularly at the village level.¹¹

Socialization and training are crucial factors in ensuring the comprehensive and sustainable adoption of E-Buddy. Through technical guidance, mentoring, and discussion forums, users can improve their skills and understanding of how to operate the application. These outreach efforts not only help expand adoption but also foster a more transparent, efficient, and accountable digital work culture. With management support and enhanced application features, E-Buddy has the potential to become an increasingly strategic public administration innovation in driving successful bureaucratic reform and accelerating government digitalization.

6. Conclusion

Innovation in public administration and policy is crucial for addressing the challenges of the times. The E-Buddy application is a public administration

¹¹ Andre Ariesmansyah, Mona Indrianie, Rifqi Khairul Arifin, and Reni Lastari. *Dinamika Digital Governance: Antara Teori dan Praktek di Era 4.0*. PT. Sonpedia Publishing Indonesia, 2024.

innovation that has successfully transformed work processes within the Sidoarjo Regency Government, making them more efficient, faster, more transparent, and accountable, particularly in the management of official letters and civil servant attendance. Although implementation in some villages still faces challenges related to technical understanding and consistent use, concrete examples demonstrate the benefits of innovation for public services. However, this application is not yet fully optimized in all areas due to obstacles such as a lack of technical understanding and a lack of consistent technical guidance. Therefore, the success of innovation requires collaboration, commitment, and continuous adaptation. Suggestions for developing the E-Buddy application as a public administration innovation include improving the electronic signature feature, integrating with other applications, improving the data transfer feature, developing a more intuitive interface, providing comprehensive user training, and developing an ASN discipline module.

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