

IMPLEMENTATION OF VILLAGE INFORMATION SYSTEM (SID) IN IMPROVING SERVICES TO THE COMMUNITY IN NORTH MILANGODAA VILLAGE, TOMINI DISTRICT, SOUTH BOLAANG MONGONDOW REGENCY

Yuyan Daliwa¹, William Indra S Mooduto², Karlina Napu³, Tri Setiawati Maulana⁴

(^{1,2,3,4})Universitas Bina Mandiri Gorontalo

Email⁽¹⁾: yuyandaliwa@gmail.com

ABSTRACT

This study aims to evaluate the implementation of the Village Information System (SID) as a strategic effort to digitize village documents. The primary objective of this system is to transition traditional paper-based administration into a secure digital format, thereby enhancing data management and accessibility within the village office. The research follows a qualitative descriptive methodology. Data collection was conducted through field observations, in-depth interviews, and documentation studies. This approach allows for a comprehensive understanding of the system's integration into daily administrative routines. The findings indicate that the Village Information System (SID) significantly improves public service delivery in North Milangodaa Village, Tomini District, South Bolaang Mongondow Regency. As a specialized application, SID assists the village government in documenting and managing administrative data more efficiently, which ultimately facilitates a more streamlined public service process and faster data retrieval.

Keywords: North Milangodaa, Public Service, Village Information System (SID)

INTRODUCTION

Public service is a fundamental obligation of government institutions, aimed at fulfilling the basic rights of the community through the provision of goods and services (Law No. 25/2009). In a broad sense, administration is defined as a collective activity carried out by a group of people to achieve specific goals through systematic data collection and information management [1]. Effective office management—encompassing planning, organizing, and supervising—is essential to ensure that these administrative functions run smoothly [2].

In the era of decentralization, the Village Government acts as the frontline of public empowerment. According to Law No. 6 of 2014, villages are legal societies authorized to manage their own household affairs [3]. To fulfill this mandate, high-quality Human Resources (HR) are required. HR represents the integrated physical and intellectual potential of individuals within an organization [4]. The quality of HR, which includes technical competence and leadership, is the primary determinant of an institution's success in achieving its vision and mission [5].

The rapid advancement of Information and Communication Technology (ICT) has introduced the Village Information System (SID) as a transformative tool. SID is an application-based set of procedures designed to manage village data, including population statistics, financial reports, and development plans [6]. Historically developed to improve village profiles, SID serves as a medium for transparency and

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efficiency. By digitizing paper-based documents into secure digital formats, SID minimizes the time required for data retrieval and enhances the accuracy of public services, such as the issuance of Identity Cards (KTP) and Family Cards (KK) [7].

1. Problem Statement

Despite the theoretical benefits of digital governance, the implementation in North Milangodaa Village, Tomini District, remains suboptimal. Preliminary observations reveal several critical gaps:

- a. Infrastructure Limitations: Inadequate internet networks and substandard hardware facilities hinder digital operations.
- b. Competency Gaps: There is a low capacity among village officials to operate the SID application, leading to a continued reliance on manual data management.
- c. Process Inefficiency: Manual administration often results in slow service delivery and difficulties in data synchronization at the sub-district or district levels.

These obstacles create a significant disparity between the ideal standards of public service and the current administrative reality in North Milangodaa.

2. Research Question

Based on the identified gaps, this study addresses the following question: *"How does the implementation of the Village Information System (SID) improve the quality of public services in North Milangodaa Village, Tomini District, South Bolaang Mongondow Regency?"*

3. Objectives of the Study

The primary objective of this research is to evaluate the role and impact of SID in streamlining administrative processes and enhancing the delivery of services to the community in North Milangodaa Village.

4. Significance of the Study

a. Theoretical Significance

This study contributes to the field of public administration by providing empirical evidence on the challenges and benefits of digital transformation in rural settings. It serves as a reference for academic discussions regarding the integration of technology in village-level governance.

b. Practical Significance

- 1) For the Village Government: Provides strategic recommendations for overcoming technical and human resource barriers in digital administration.
- 2) For Stakeholders: Offers insights for the South Bolaang Mongondow Regency Government (PMD and Kominfo Offices) in supporting village-scale ICT programs.
- 3) For Future Researchers: Acts as a foundational study for further research on the long-term sustainability of information systems in developing rural areas.

RESEARCH METHODS

1. Research Design

This study employs a Qualitative Descriptive research design [8]. This method is chosen to provide a comprehensive and systematic description of the "Implementation of the Village Information System (SID)" in improving public services. The qualitative approach allows the researcher to understand the social phenomena, challenges, and actual conditions occurring at the research site through an in-depth analysis of the data collected from the field.

2. Research Location and Time

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The research was conducted in North Milangodaa Village, Tomini District, South Bolaang Mongondow Regency. The study took place over a period of three months, from March to June 2022. This location was selected due to the specific administrative challenges and the ongoing digital transformation efforts within the village government.

3. Data Sources

The data for this research consist of:

- a. Primary Data: Information obtained directly from the source through field observations and interviews with key informants, including the Village Head (Sangadi), village officials (Kaur/Kasi), and community representatives.
- b. Secondary Data: Supporting data obtained from existing documents, such as Village Regulations, population statistics, administrative archives, and previous reports related to the implementation of SID.

4. Data Collection Techniques

To ensure the validity and reliability of the findings, three data collection techniques were utilized:

- a. Observation: Direct and systematic observation of the administrative activities at the North Milangodaa Village office. This focused on how village officials operate the SID application and the flow of public service delivery.
- b. In-depth Interview: Conducting semi-structured interviews with selected informants to gain insights into the effectiveness of SID, the technical obstacles faced, and the level of community satisfaction.
- c. Documentation: Collecting and analyzing written records, photographs, and digital data from the SID application to provide empirical evidence of the system's role in village administration.

5. Data Analysis Method

The collected data were analyzed using the Miles and Huberman interactive model [9], which consists of three concurrent flows of activity:

- a. Data Reduction: Selecting, focusing, and simplifying the raw data obtained from the field to identify the most relevant information.
- b. Data Display: Organizing the information into a narrative or descriptive format to allow for easy conclusion drawing.
- c. Conclusion Drawing/Verification: Developing initial conclusions based on the patterns found in the data and verifying them through continuous reflection during the research process.

6. Research Informants

The researchers involved several stakeholders to provide a multifaceted perspective on the implementation of SID:

- a. Village Government Officials: To provide technical information regarding the system's operation and administrative benefits.
- b. Local Government Agencies (PMD & Kominfo): To understand the broader policy and technical support provided to the village.
- c. Community Members: To evaluate the actual impact of the system on the speed and quality of the services they receive.

RESEARCH RESULT

1. Implementation of Village Information System (SID) in North Milangodaa

Based on the research conducted between March and June 2022, the implementation of the Village Information System (SID) in North Milangodaa

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Village is a strategic response to the digital transformation mandated by Law No. 6 of 2014. The system is designed to transition traditional paper-based administration into an integrated digital database.

The findings indicate that SID has been introduced to manage various types of village data, including:

- a. Demographic Data: Managing Family Cards (KK) and Identity Cards (NIK) digitally to ensure faster retrieval.
- b. Administrative Services: Automating the issuance of village certificates and correspondence.
- c. Financial and Development Mapping: Utilizing data for village planning (RPJM Desa) and potential resource mapping.

2. Impact on Public Service Delivery

The integration of SID has significantly altered the flow of public services in North Milangodaa. Prior to its implementation, services were conducted manually, leading to longer processing times and risks of data duplication. The current system offers several improvements:

- a. Speed and Efficiency: The time required to process population-based documents has been reduced. Village officials can now query data directly through the application rather than searching through physical archives.
- b. Data Accuracy: By using a centralized digital database, the village government can provide more precise information to the sub-district and district levels.
- c. Transparency: Digital records allow for better monitoring of administrative tasks and facilitate the village's obligation to provide open information to its residents.

3. Challenges and Inhibiting Factors

Despite the theoretical benefits, the field research identified several critical obstacles that prevent the SID from operating at its full potential in North Milangodaa Village:

a. Human Resource Competency

There is a notable gap in the technical skills of village officials. Many staff members are not yet proficient in operating the SID software, which results in a continued reliance on manual backups and occasional errors in data entry.

b. Infrastructure and Connectivity

As a village located in the Tomini District, North Milangodaa faces significant infrastructure hurdles:

- 1) Internet Connectivity: The local network is often unstable, causing delays in synchronization with district-level servers.
- 2) Hardware Limitations: The availability of modern computer devices and supporting office facilities does not yet meet the standard required for a fully digitized office environment.

c. Operational Support

The research found that although the program involves collaboration with the South Bolaang Mongondow Regency Government (PMD and Kominfo Offices), the frequency of technical training and system updates remains insufficient to keep pace with the village's needs.

4. Strategic Collaborative Efforts

To address these challenges, the North Milangodaa Village government has initiated collaborations with several parties, including:

- a. The South Bolaang Mongondow Regency Government: For policy guidance and regulatory support.

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- b. External Consultants (e.g., CV Global Mandiri): To assist in the initial setup and technical troubleshooting of the SID application.

DISCUSSION

The research question driving this study asks: *"How does the implementation of the Village Information System (SID) improve the quality of public services in North Milangodaa Village, Tomini District, South Bolaang Mongondow Regency?"* Based on the findings, the discussion focuses on how the transition from traditional, paper-based administration to a digitized, integrated system creates a "staging area" for modern village governance while simultaneously highlighting the friction between technological idealism and rural reality.

1. The Paradigm Shift: Village as a Subject of Development

The implementation of SID in North Milangodaa represents a fundamental shift in the village's status. As noted in the results, the village is no longer merely an "object" of central development but has become an active "subject" capable of regulating its own administrative affairs [3]. By adopting Information and Communication Technology (ICT), the North Milangodaa Village government is aligning itself with the mandates of Law No. 6 of 2014.

However, a critical distinction arises in the nature of the services provided. Unlike the private sector, which focuses on profit-oriented commercial services [10], the village government's implementation of SID is strictly non-commercial and service-oriented. The primary objective is to fulfill the basic rights of the community through the provision of accurate data [7]. Despite this noble goal, the research suggests that the "Indonesian management system" at the village level still struggles to keep pace with rapid ICT developments. Many village officials (*perangkat desa*) in North Milangodaa initially failed to recognize the necessity of a Management Information System (SIM), leading to a "transparency gap" where information dissemination was viewed as a burden rather than a duty.

2. Analysis of Implementation Stages

The improvement of public services through SID in North Milangodaa occurred through a structured, albeit challenging, four-stage process:

a. Preparatory Stage: Infrastructure and Socialization

The success of any digital system relies on the readiness of the "hardware" and the "mindset" [11]. In North Milangodaa, this stage involved network infrastructure assessment and UI/UX design (interface design for admins and users).

- 1) Informant Insights: The Village Head (AI) and the Head of Government Section (SLL) emphasized that socialization was the most vital component. It was necessary to transform the internal culture of the village office before the software could be utilized.

- 2) Practical Improvement: As noted by the General Kaur (IL), storing data in an application made the service process "younger" (simpler and faster). This confirms that the *availability* of data is the first step toward improving service quality.

b. Implementation Stage: The Digital Transition

At this stage, the village moved from offline to online systems. The implementation of Offline SID provided a safety net for daily use without internet dependency, while Online SID allowed for broader transparency via a public-facing website.

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Technological Empowerment By using open-source licenses, North Milangodaa gained the flexibility to modify the system to meet local needs. However, as SLL pointed out, the implementation was hampered by "syntax errors" and "human errors," indicating that the software is only as effective as the person operating it.

c. Assistance and Training Stage: Bridging the Competency Gap

Public service quality is inextricably linked to Human Resource (HR) quality [12]. The research found that the team provided three layers of technical guidance: general socialization, website operational training, and content management (news, images, and video).

The Domain Transition: A significant milestone was the transition of the website domain to the control of the village government and the Ministry of Communications and Informatics (Kominfo). This ensures that the village "owns" its data, which is a core principle of digital sovereignty.

d. Evaluation and Maintenance Stage

The final stage focused on troubleshooting. In a rural setting like Tomini District, system errors (logic errors or human errors) are frequent. The ongoing evaluation ensures that the "logic" of the program matches the "logic" of the village's administrative needs.

3. Synthesizing the Improvement in Public Service Quality

To answer the research question directly, SID improves the quality of public services in North Milangodaa through three specific mechanisms:

- a. Speed and Accessibility: By digitizing Family Cards (KK) and population data, the time required to issue certificates is drastically reduced. Residents no longer have to wait for officials to manually browse through dusty archives.
- b. Data Integrity and Accuracy: SID minimizes the "disbursement process" hurdles by ensuring that the data sent to the district level is synchronized and valid. This reduces administrative friction between different levels of government.
- c. Transparency as a Service: The online component of SID allows residents to monitor village plans and budgets. This accountability is a form of "meta-service" that builds community trust.

4. Addressing the Obstacles

Despite these improvements, the discussion must acknowledge that the "Implementation" is currently not yet optimal. The recurring themes of unstable internet networks, inadequate hardware, and low HR competency suggest that while the software is ready, the environment is still catching up. The finding that "some village devices have not yet qualified as operators" is a critical bottleneck. If the human element (the operator) cannot handle software "errors," the system's ability to improve service quality is capped.

CONCLUSION

Based on the results and discussion regarding the "Implementation of Village Information System (SID) in Improving Public Services in North Milangodaa Village," several key conclusions can be drawn:

1. System Integration: The implementation of SID in North Milangodaa Village has successfully transitioned traditional paper-based administration into a digitized framework. The system effectively manages population data, correspondence, and village mapping, aligning with the mandates of Law No. 6 of 2014.

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2. **Service Efficiency:** The use of SID has fundamentally improved the quality of public services by increasing the speed and accuracy of administrative processes. The digitalization of Family Cards (KK) and Identity Numbers (NIK) allows village officials to provide services more efficiently, reducing manual errors and data duplication.
3. **Transparency and Accessibility:** Through both offline and online platforms, SID serves as a vital medium for transparency. It allows the village government to document and disseminate information regarding development plans and budgets more openly to the community and higher-level government agencies.
4. **Persistent Barriers:** Despite the progress made, the implementation is not yet optimal. The primary obstacles include a significant gap in Human Resource (HR) competence, where not all village officials are proficient in operating modern technology. Additionally, infrastructure limitations, such as unstable internet connectivity and inadequate hardware, remain the main technical bottlenecks in Tomini District.

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