

Evaluation of the Contribution of the Regional Government Information System (SIPD) in Bangah Village, Gedangan District, Sidoarjo Regency

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ABSTRACT

Objective: This study aims to examine the contribution of the Regional Information System (SIPD) in Bangah Village, Gedangan District, Sidoarjo Regency. **Method:** The method applied is a descriptive qualitative research approach. **Results:** SIPD was implemented in Bangah Village, Gedangan District, Sidoarjo Regency in 2023. Various parties are involved in its implementation, including the sub-district head (camat), who holds the highest authority in management and administration, along with the implementation staff under him who possess expertise in information technology management. The government provides input in the form of system management by the sub-district head and implementing staff or employees. In addition, a Musrenbang system (development planning meeting) is also held. The Regional Information System (SIPD), which consists of a database divided into eight (8) data groups, is an effort by the regional government to enhance the role of data and information sourced from all Regional Work Units (SKPD) in Sidoarjo Regency for development planning processes. However, the database in Sidoarjo Regency has not yet been evenly distributed across various villages, including Bangah Village, where public access to data information in SIPD remains suboptimal. **Novelty:** The distinction between this study and previous research lies in its greater focus on how the contribution of the regional government's information system is assessed using the CIPP evaluation model theory.

INTRODUCTION

In order to realize good governance, the Indonesian government is currently intensively implementing transparent and accountable components in the preparation and reporting of regional development and financial planning. The utilization and development of information technology in the process of government administration, or e-government, as specified in Presidential Instruction Number 3 of 2003, is a concrete example of good governance in Indonesia. In addition, the legal basis for governance is also strengthened to maximize the use of ICT through Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE). According to the Regulation of the Minister of Home Affairs (Permendagri) No. 70 of 2019 Article 1 Paragraph 12 states that the regional government information system (SIPD), hereafter abbreviated as SIPD, consists of information on regional development management, regional financial information, and other regional government information that are connected to each other for use during the implementation of regional development. The Regional Government Information System (SIPD) is an integrated application that serves as a tool for regional governments to improve the effectiveness of implementing various regional financial regulations, ensuring transparent and accountable regional financial management.

SIPD encompasses regional development planning, regional finance, and regional government guidance and supervision. It also serves as a communication network between regional governments and other government institutions, supporting the

planning of all programs and activities, including the evaluation of regional development in a logical, rational, and effective manner. The system can also be implemented to support the integration of data utilization related to regional development. Based on Minister of Home Affairs Regulation Number 70 of 2019, the East Java Provincial Government, through the Regional Development Planning Agency and the Communication and Informatics Office, acts as the coordinator for SIPD implementation in all regencies, cities, and villages, ensuring real-time integration of regional development data. The implementation of SIPD in East Java aims to increase transparency, accountability, and the effectiveness of data-driven decision-making, thus ensuring more targeted regional development. Currently, almost all regencies and cities in East Java have adopted SIPD, but the completeness and quality of the input data varies. Challenges include limited human resources for operators, uneven internet network infrastructure, and inconsistent Standard Operating Procedures across regions. Nevertheless, the SIPD in East Java has demonstrated positive impacts in the form of accelerated administration, data integration across government levels, and the provision of a more systematic and transparent basis for development planning [1].

The Smart City Index Achievement Results in 2020 were 3.13 with a Good predicate. This result was assessed based on an Independent Evaluation conducted by Internal Evaluators of Central/Regional Government Agencies and Document Evaluation conducted by External Evaluators of the Ministry of Administrative and Bureaucratic Reform. In 2020, the SPBE index value did not increase or decrease because Sidoarjo Regency was not selected in the external evaluation conducted by the Ministry of Administrative and Bureaucratic Reform. One of the reasons for not being selected was due to the pandemic conditions and the uneven distribution of SPBE maturity throughout Indonesia, especially those whose index was still below the national average [2].

The Regional Government Information System in Sidoarjo Regency constitutes an electronic system that serves to integrate data pertaining to planning, budgeting, implementation, reporting, and evaluation of regional development in real-time, in accordance with the stipulations of the Ministry of Home Affairs. The Sidoarjo Regency Government, through the Regional Development Planning Agency and the Communication and Information Office, coordinates the implementation of SIPD across all districts and villages, with the aim of fostering transparency, accountability, and data integration in development. Presently, SIPD in Sidoarjo has been implemented in nearly all districts and villages, including Bangah Village, albeit with varying levels of data completeness. The challenges encountered encompass limitations in human resources for village operators, suboptimal Standard Operating Procedures, and internet infrastructure that remains somewhat unstable. Notwithstanding these obstacles, the existence of SIPD in Sidoarjo Regency has begun to yield positive impacts, including facile access to data, enhanced transparency in budget management, and more systematic development planning [3].

One area implementing SIPD is Bangah Village, Gedangan District, Sidoarjo Regency. Bangah Village is located in Sidoarjo District, Sidoarjo Regency, East Java. The village covers an area of 1.34 km² and is home to approximately 6,000 people. Bangah

Village is a center for small and medium-sized industries, particularly textiles and food, with many residents working as entrepreneurs or workers in these sectors. Bangah Village also has significant tourism potential. The village boasts numerous natural attractions, such as forests and rivers, as well as several historical and cultural sites. Villagers and the village government can access an integrated village information system developed by the Bangah Village Government. Through this system, residents can access information about village government programs, public services, and other information.

Table 1. Bangah Village Budget (APBDes) for the Year 2025.

No	Detail Activity	Budget
1	Education Sector	100.000
2	Health Sector	169.053.700
3	Cemetery Maintenance	9.080.000
4	Elevation of Paving Road on the East Side of Community Hall RW 02	6.956.250
5	Elevation of Paving in Gakam Alley, RT 16 RW 03	10.500.000
6	Elevation of Paving on Mushollah Al Nurji Street, RT 17 RW 03	15.125.250
7	Elevation of Paving on Singojoyo V Street, RT 19 RW 03	15.625.250
8	Elevation of Paving in Wahid Hasyim Alley, RT 17 RW 03	7.392.000
9	Normalization of Paving Access to Mbah Cokro Cemetery, RT 13 RW 02	29.600.000
10	Closure of Drainage Channel at P. Fazai, RT 06 RW 01	3.500.000
11	Normalization of Drainage System on Singojoyo III Street, RT 18 RW 03	19.825.500
12	Normalization of Drainage System on Singojoyo III Street, RT 21 RW 04	8.650.500
13	Normalization of U-Ditch Drainage on Kayun Street, RT 23 RW 04	19.600.000
14	Construction of Retaining Wall/Barrier Road on the Access Road to Gedangan	150.000.000
15	Retaining Wall and Fence Construction for the Football Field	124.655.750
16	Construction of Retaining Wall on the Southern Side of Mbah Cokro Cemetery	189.014.172
17	Construction of Village Hall	110.000.000
18	Updating of SDGs and eHDW Data	4.950.000
19	Youth Organization (Karang Taruna) Development	5.000.000
20	LKMID (Village Community Empowerment Institute) Development	3.000.000
21	Women Empowerment Programs	35.000.000
22	Marketing of Local Superior Products	71.654.031
23	COVID-19 Mitigation Measures	2.000.000
24	Emergency and Urgent Disaster Management	71.654.031
25	Direct Cash Assistance (BLT)	165.600.000

Source: Government of Bangah Village

Based on the Bangah Village APBDes data table above, it can be seen that there are 25 work programs for implementing Village development in 2025 in Bangah Village, Gedangan District, Sidoarjo, showing a fairly diverse budget allocation, including

physical development, improving public facilities, and community empowerment. Based on the table, the largest budget is directed to infrastructure activities such as the construction of a village hall (Rp110,000,000), making borehole or road reinforcement (Rp150,000,000), plengsengan and football field fence (Rp124,655,750), and plengsengan on the south side of Mbah Cokro (Rp189,014,172) which illustrates the village government's focus on infrastructure improvement and maintenance. In addition, the budget allocation also targets social activities such as updating SDGs data, fostering Karang Taruna and LKMID, empowering women, and distributing Direct Cash Assistance (Rp165,600,000) to people in need. This diversity of activities demonstrates the village's efforts to achieve equitable development, encompassing education, health, environmental preservation, community capacity building, and disaster preparedness. However, with such a large number of activities, the village also requires solid administrative and human resource management to ensure effective, transparent, and accountable recording and reporting of village funds through digital systems such as the Village Fund Management System (SIPD) [4].

Bangah Village, Gedangan District, Sidoarjo Regency, is one of the villages that has begun implementing the Regional Government Information System. However, implementation in the field is still far from optimal. The main problem is that the data input into the Regional Government Information System is still very limited, the Standard Operating Procedures for management are not yet clearly available, and the human resources of village operators are still limited. This gap between expectations and actual conditions is the focus of this research. Based on the results of field observations and in-depth interviews, the implementation of the Regional Government Information System (SIPD) in Bangah Village, Gedangan District, Sidoarjo Regency was analyzed using the CIPP Model (Context, Input, Process, Product) developed by Stufflebeam. This model helps researchers describe the initial conditions, input, implementation process, and results resulting from the implementation of SIPD. In terms of Context, the initial conditions of SIPD implementation in Bangah Village indicate that data availability is still very minimal. The input data only covers parts of the financial and physical development sectors, while the education, health, social, and public service sectors have not been consistently included [5].

This problem arises because coordination between data-generating units in the village is suboptimal, data formats are inconsistent, and there is no routine input schedule. As a result, the need for data-driven development planning cannot be fully met. In terms of input, Bangah Village already has access to the SIPD application facilitated by the central and district governments. However, the human resources of the village operator are very limited, with only one person concurrently handling other duties, and technical training is still minimal. Standard Operating Procedures for data collection, verification, input, and validation are not officially available, resulting in no standard guidelines to follow. These problems impact the village's low readiness to utilize SIPD optimally. In terms of process, the implementation of SIPD data input in Bangah Village is not uniform across sectors. Village operators experience technical obstacles such as unstable internet connections, delays in data delivery from village units, and lack of monitoring from the sub-district. This irregular workflow results in frequent data input

delays, technical errors, and incomplete data entry into the system. In terms of product (results or outputs), the SIPD in Bangah Village has only contributed to the financial and physical development sectors, while its impact on increasing transparency, accountability, and comprehensive data-driven planning has not been significant. This system should serve as the basis for developing more targeted village development plans, but limited data and irregular input have prevented optimal results [6].

Overall, observations and analysis using the CIPP Model indicate that the implementation of SIPD in Bangah Village still faces significant obstacles in the context of data availability and Standard Operating Procedures, inadequate input in the form of human resources and technical guidelines, inconsistent input implementation processes, and the resulting product not being able to fully support data-driven decision-making. Therefore, strengthening SOPs, increasing the capacity of village operators, and improving technological infrastructure are necessary for SIPD to truly function as an integrated information system for village development. SIPD is understood as a tool for managing information based on workflows and principles of effectiveness and efficiency to achieve the organization's goals of offering high-quality services to the community. The SIPD concept demonstrates that SIPD development is a continuous workflow, starting with planning and financial management, transforming SIPD into a system for producing information outputs.

The following are some previous studies related to and serving as the basis for this research:

Karundeng, Mandey, and Rindengan in the *Journal of Public Administration* examined the implementation of the Regional Government Information System (Sipd) policy at the Regional Development Planning, Research, and Development Agency of the Siau Tagulandang Biaro Islands Regency. This study showed that the Regional Government Information System was capable of improving the integration of development planning data, but its implementation was still hampered by the completeness of input data and a lack of training for human resource operators. These findings emphasize the importance of local government support, both in the form of developing Standard Operating Procedures and increasing human resource capacity, for the optimal functioning of the Regional Government Information System.

Wurara and Kimbal conducted a study in the *Executive Journal* entitled "Implementation of the Manado City Regional Government Information System (Study at the Manado City Regional Planning, Research, and Development Agency)". This study found that the Manado City Regional Government Information System plays a crucial role in data integration across sectors. However, the quality of input data is uneven, resulting in a suboptimal system. The main obstacles faced are limited human resources for operators and a lack of provincial government monitoring of system implementation. These findings are relevant for comparing conditions in Bangah Village, Sidoarjo Regency, which also faces data completeness and human resource issues.

Ryas also evaluated the utilization of the Regional Government Information System (SIPD) in Central Aceh Regency using the CIPP (Context, Input, Process, Product) evaluation model to assess the SIPD's contribution to supporting good governance practices. This study confirms the relevance of SIPD as a strategic tool for increasing

transparency, accountability, and efficiency in local government, although detailed empirical findings from this study are not yet available in accessible sources [7].

Based on the identified problems and referring to previous research conducted by Karundeng, Mandey, and Rindengan, Wurara and Kimbal, and Ryas, the purpose of this study is to analyze and evaluate the contribution of the Regional Government Information System (SIPD) in supporting the management of development financial administration in Bangah Village, Gedangan District, Sidoarjo Regency. This study uses the CIPP (Context, Input, Process, Product) evaluation model approach to measure the effectiveness of SIPD utilization from the aspects of context, input readiness, process implementation, and achieved results. This research is motivated by the fact that although the digitalization of village government administration through various applications (e.g., Siskeudes, SIPADES, and SIPD) has been widely introduced, implementation barriers remain at the village level, particularly limited human resources, gaps in technical training, and minimal cross-agency monitoring. Therefore, this study aims to determine the extent to which SIPD contributes to the management of the Village Budget (APBDes) and village development reporting and to measure the effectiveness of its implementation in accordance with the initial objectives of the village government digitalization program. The urgency of this research is further strengthened by previous research showing that the successful implementation of a government information system is heavily influenced by local readiness, including human resources and supporting facilities. Furthermore, there has been no specific study evaluating the contribution of SIPD in Bangah Village, even though the system has been running for more than a year.

RESEARCH METHOD

The research approach used in this study is qualitative research with descriptive methods. This approach was chosen because the researcher wanted to gain a deep understanding of the Evaluation of the contribution of the Regional Government Information System (SIPD) in Bangah Village, Gedangan Sidoarjo in supporting the management of financial administration and village development. The evaluation model used is CIPP (Context, Input, Process, Product) according to Stufflebeam which allows researchers to assess and evaluate the effectiveness of the program from the four aspects comprehensively. The focus of this study is to evaluate the contribution of SIPD in Bangah Village, Gedangan District, Sidoarjo Regency, based on four components of the CIPP model, namely Context which includes the relevance of SIPD implementation to village needs, Input which includes the availability of human resources, infrastructure and policy support, Process which assesses the mechanism of SIPD implementation in managing financial administration and village development, and Product which evaluates the results and impact of SIPD implementation on transparency, accountability, and management of the Village Budget (APBDes). This research was conducted in Bangah Village, Gedangan District, Sidoarjo Regency as one of the villages that has implemented SIPD in the village development planning, budgeting and reporting system. The informants involved in this study consisted of two people, namely Mr. Zainal Abidin, as the Head of Planning of Bangah Village as the main operator of SIPD

and Mr. Dimas as the Head of Financial Affairs of Bangah Village as the party who handles the administration and financial reporting of the village. Data collection techniques used included in-depth interviews with key informants, direct observation of the input process, reporting and use of SIPD at the village office, as well as documentation in the form of APBDes reports, development realization reports, evidence of SIPD input, and village regulations related to SIPD implementation. Data analysis was carried out in four stages, namely data collection, data reduction, data presentation and drawing conclusions. To ensure the validity of the data, source and method triangulation techniques were used by comparing the results of interviews, observations and documentation [8].

RESULTS AND DISCUSSION

Results

The SIPD (Regional Government Information System) application is a system developed by the Government to support the implementation of financial administration, development planning, and reporting in the regional government.

1. Context

Context evaluation according to Arikunto (in Divayana) is a way of describing and detailing the environment, unmet needs, the population and samples served, and the project objectives. The important purpose of context evaluation is to obtain a clear picture of the overall organizational situation. Components in this evaluation consist of program needs, program targets, and program objectives. The success of a program in assessing the level of effectiveness of financial administration management through SIPD can be seen from several important indicators, especially the context of its implementation. SIPD in Bangah Village is implemented to support the implementation of village financial management, development planning, and digital reporting in accordance with central government and Sidoarjo Regency regulations. In this context, success is measured by the extent to which SIPD implementation is in accordance with village needs, regulations, and the readiness of village officials to implement the digital system [9].

Bangah Village, Gedangan District, Sidoarjo Regency, is one of the villages that has made significant progress in implementing the Village Development Planning System (SIPD) and is a pilot village in the district. SIPD implementation in Bangah Village has been ongoing since early 2024 and has been utilized for recording the Village Budget (APBDes), development realization, and village financial reporting. SIPD facilitates village officials in managing revenues, expenditures, and village development reports more efficiently, accurately, and transparently.

The Context indicator includes several points, including:

a) Programmatic Needs

The implementation of SIPD in Bangah Village arose from the urgent need to strengthen transparent, accountable, and efficient village governance. Prior to SIPD, village financial and administrative records were still manually maintained, prone to errors, delayed reporting, and difficult to audit. Central and provincial government regulations also mandate the digitization of village financial management to adapt to the demands of the information technology era. Therefore, SIPD is needed to assist village

officials in managing the Village Budget (APBDes), compiling development reports, and providing more transparent access to information for the public. An interview with the Head of Planning for Bangah Village stated, "We need an integrated system like SIPD because it is very helpful in monitoring the Village Budget (APBDes), village development activities, and financial reports to ensure greater transparency for the public" (Interview with the Head of Planning for Bangah Village, 2025). This demonstrates that SIPD, as a program need indicator, has had a positive impact on village officials in Bangah Village, as it also helps monitor the Village Budget (APBDes) and financial reports for submission to the central government.

Furthermore, he noted that while the system is highly beneficial, challenges include limited computer hardware, unstable internet access in some hamlets, and the need for specialized training for village officials to enable them to operate SIPD independently. The interview revealed that the need for a SIPD program in Bangah Village extends beyond the application system itself, but also includes human resource support, technological infrastructure, and the commitment of village officials to implement transparent and accountable financial management [10].

b) Target of The Program

The primary target of the SIPD program in Bangah Village is village officials directly involved in financial and administrative management, such as the Head of Finance and the Head of Planning for SIPD. Indirectly, the Bangah Village community is the beneficiary of transparent village fund management. Through SIPD, the community can track development progress, the use of village funds, and the progress of village government activities in real time. This goal also includes increasing the capacity of village officials to operate digital systems independently without relying on a single operator. According to the Head of Planning for Bangah Village, in an interview, he stated, *"We are using SIPD so that all village officials involved in village administration and finance can work in a more structured and transparent manner. We want all work units in the village to be actively involved."*

Meanwhile, he stated that the main objective of SIPD implementation is to increase accountability and transparency in village financial management, accelerate the reporting process, and facilitate coordination with the local government. He added, *"We hope that this SIPD can be a tool to facilitate services and the delivery of village financial reports digitally, so that the community can also have more confidence in the performance of the village government"* (Interview with the Head of Financial Affairs of Bangah Village, 2025). The results of this interview indicate that the goals and objectives of the SIPD program in Bangah Gedangan Village, Sidoarjo, are not only focused on the internal village apparatus, but also on improving public services, information transparency, and compliance with good village governance regulations.

Table 2. Context Evaluation – SIPD Desa Bangah.

Indikator Context Evaluation	Detail Description (SIPD Desa Bangah Gedangan Sidoarjo)
Background of the Program	Bangah Village serves as a digital pilot village in Gedangan Subdistrict. The implementation of the Village Information System (SIPD) represents a response to regulatory demands for village financial management and the need for more transparent public services.
Need of the Program	There is a need for an integrated system capable of inputting the Village Budget (APBDes), budget realization, and activity reports digitally in order to enhance transparency, accountability, and the efficiency of village administration.
Target of the Program	The primary implementers include Bangah Village apparatus (the Village Head, Finance Section, Planning Section, and SIPD operator), while the beneficiaries are the local community who gain access to financial information.
Goal of the Program	The objectives are to improve the capacity of village officials in managing village financial administration digitally, accelerate public access to information, and ensure accountability in APBDes management.
Regulation	The SIPD aligns with the regulations issued by the Ministry of Home Affairs regarding digital governance and village financial management.
Local Capability	Strong support from the village head and officials, adequate internet infrastructure, and community awareness of the importance of financial transparency constitute the enabling factors for SIPD implementation.
Problems	Nonetheless, limitations persist, particularly in terms of human resources with sufficient knowledge of the SIPD system, dependence on a single operator, and the need for continuous capacity building for village officials.
Longlast Wish	The expected outcome is the realization of transparent, effective, and data-driven village financial governance, thereby strengthening public trust in the village government.

Based on the analysis of the Context Evaluation table for the implementation of SIPD in Bangah Village, Gedangan, Sidoarjo, it is clear that the program needs aspect demonstrates the importance of SIPD implementation as a means of digitizing village administration and financial management in accordance with regulatory requirements. This need is driven by the increasing volume of village funds, demands for transparency, and efficiency in budget recording and reporting. Regarding program targets, the table shows that the primary target for SIPD implementation is village officials directly involved in village development planning, budgeting, reporting, and evaluation.

Furthermore, the village community is also an indirect target as beneficiary of more transparent and faster digital-based services. The program objectives aspect indicates that SIPD is intended to improve accountability, transparency, effectiveness, and efficiency in village financial management. Other objectives include facilitating coordination between the village government and the regional government in real-time reporting of the Village Budget (APBDes), and increasing public trust in village governance.

Regarding environmental conditions (context), the table shows that Bangah Village has a relatively good socio-economic condition and apparatus readiness. This village is one of the pilot villages that has implemented a digital system in village financial management. However, even though hardware and internet network support are available, there are still obstacles in the form of limited trained human resources and the unequal ability of village officials in operating SIPD. Overall, the description of the Context Evaluation table shows that the implementation of SIPD in Bangah Gedangan Village, Sidoarjo has been running according to the needs and objectives of the program, but it needs strengthening in the aspects of human resources, technical training, and supporting facilities so that the effectiveness of the system can be achieved optimally [11].

Based on initial interviews with the Head of Planning for Bangah Village, it was discovered that although the Village Financial Management System (SIPD) has supported the management of village financial administration, there are still challenges such as limited skilled human resources, limited computer facilities, and unstable internet connections. According to Mr. Zainal Abidin, Head of Planning for Bangah Village, *"there are still only a limited number of SIPD operators in the village, resulting in a significant workload for one main operator."* This situation indicates that the implementation of SIPD in Bangah Village does not fully align with the theory of digital program effectiveness, which emphasizes the readiness of human resources and infrastructure.

In line with previous research by Karundeng, Mandey, and Rindengan, the implementation of the village digital system is often hampered by limited human resources and facilities. Therefore, the success of SIPD in Bangah Village remains heavily influenced by the commitment of village officials to increasing the capacity of SIPD operators through technical training and equitable distribution of operational tasks. While regulatory support is adequate, technological infrastructure and human resource development need to be continuously strengthened to ensure the program's success extends beyond administrative aspects to comprehensive empowerment of the village apparatus.

All village financial management data has been input into the Bangah Village Regional Government Information System (SIPD). Based on existing data, the implementation of SIPD demonstrates a fairly good and accurate level of digital recording. SIPD's technical success is evident in the digitization of village budget (APBDes) reporting and the ease of monitoring village development implementation. However, this success remains limited because not all village officials are actively involved. SIPD implementation only addresses administrative aspects and does not fully accommodate aspects of apparatus empowerment and broad community participation. [12].

Previous research by Karundeng, Mandey, and Rindengan also showed that the implementation of village digital systems is often hampered by limited human resources, technological resources, and unequal distribution of tasks. This situation is similar to the findings in Bangah Village, where the operation of the Village Financial Management System (SIPD) is still heavily dependent on a single main operator, while other officials have not received intensive training. The success of the village financial management digitalization program through SIPD is heavily influenced by the availability of technical training, equitable distribution of operational tasks, and adequate technological infrastructure support. Therefore, although SIPD has brought progress in terms of transparency and accuracy of financial data, its success still needs to be improved through human resource capacity development and the addition of supporting facilities to make its implementation more effective and sustainable.

2. Input Evaluation

a) Prosedur Program

Program procedures are a series of systematic steps designed to guide program implementation so that it runs in accordance with predetermined goals and objectives. In the context of implementing the Village Government Information System (SIPD) in Bangah Gedangan Village, Sidoarjo, program procedures serve as a guide for village officials to manage administration and finances digitally with uniform standards. These procedures are designed to ensure that each stage of SIPD implementation, from data input and reporting to evaluation, is carried out in a structured, measurable manner and in accordance with regulatory provisions. SIPD program procedures also serve as a tool to integrate various resources, including human resources, budgets, and facilities and infrastructure, for optimal SIPD implementation. With clear procedures, the village government can ensure that each official understands their duties, reduce the risk of data input errors, and increase transparency and accountability in village fund management. Based on interviews, the Head of Planning for Bangah Village stated that *"SIPD implementation in Bangah Village, Gedangan, Sidoarjo, follows several predetermined stages. The first stage is planning, where we, together with village officials, compile the necessary data and development indicators to be input into SIPD in accordance with the Village Work Plan (RKPDes) and Village Budget (APBDDes). The second stage is preparation. We coordinate with village facilitators and the sub-district to ensure data completeness and conduct short training for SIPD operators. The third stage is implementation, which involves periodically inputting village financial and development activity data according to regulations. The final stage is verification and approval of reports in SIPD, which we submit to the Village Consultative Body (BPD) and the sub-district."*

According to the program's procedures, the following stages are implemented:

1) Planning

The planning stage begins with the development of a SIPD implementation strategy by the Bangah Gedangan Village government. This planning includes establishing a schedule for APBDDes data input, identifying technical requirements (hardware, internet network), assigning SIPD operator duties, and developing Standard Operating Procedures (SOPs) to ensure clear guidance for each work step. The goal of this stage is

to ensure SIPD use aligns with regulations, village needs, and targets for financial management transparency [13].

2) Preparing

During the preparation phase, basic requirements are met before the SIPD implementation. The village government procures additional computer equipment, strengthens the village office's internet network, creates SIPD operator accounts, and conducts technical training for involved village officials. This preparation ensures that each operator understands the SIPD application's functions and is able to operate the system according to their respective roles.

3) Realization

The implementation phase represents the concrete application of SIPD in village administration and financial activities. Village officials begin routinely inputting budget planning, activity implementation, and accountability reports into SIPD. Furthermore, village officials conduct monthly data verification to ensure consistency between digital reports and physical documents. This phase also involves regular coordination with sub-district or district governments regarding data updates.

Table 3. Village Planning and Financial Management Framework of Bangah, Gedangan, Sidoarjo, 2025.

No	Village Document	Establishment Year	Main Content / Scope	Main Objective	Notes / Implementation Status
1.	RPKMDes (Village Medium-Term Development Plan)	2021-2027	A six-year medium-term development planning document containing the village's vision, mission, policy direction, and priority programs	Serves as the main reference for village development over six years	Established through Village Regulation No. 2 of 2021
2.	RKPDes (Village Government Work Plan)	2025	An annual planning document containing programs, activities, budget, and achievement targets	Directs village development and empowerment activities each year	Ratified through Village Development Planning Meeting (Musrenbangdes) at the end of 2024

3.	APBDes (Village Revenue and Expenditure Budget)	2025	A village budget document consisting of revenue, expenditure, and financing	Serves as a guideline for the use and allocation of the annual budget	Established through Village Regulation on APBDes 2025
4.	APBDes Realization Report	2025 Semester 1 and Semester 2	A report containing the realization of village revenue and expenditure during a specific period	Acts as accountability for the implementation of APBDes	Reported to the Village Consultative Body (BPD) and the Sub-district Office according to schedule

Source: SIPD Bangah Village, Gedangan, Sidoarjo, 2025

Based on the data table, there are four main work programs for village financial planning and management in Bangah Gedangan Village, Sidoarjo. These have been inputted into SIPD. First, the 2021–2027 Village Medium-Term Development Plan (RPJMDes) is a six-year medium-term strategic document that contains the vision, mission, policy direction, and priorities for village development programs. This document serves as the main reference for the formulation of Bangah Village development policies and programs until 2027. Second, the 2025 Village Government Work Plan (RKPDDes) is an annual plan document that outlines programs, activities, budgets, and achievement targets, and serves as a guideline for the implementation of village development and empowerment each year. Third, the 2025 Village Revenue and Expenditure Budget (APBDes) contains details of village revenues, expenditures, and financing as a guideline for the use and allocation of the budget each year. Finally, the 2025 Village Budget Realization Report for semesters 1 and 2 contains the realization of village revenue and expenditure, compiled as a form of accountability of the village government to the Village Consultative Body (BPD) and the Subdistrict. From this table, it can be concluded that Bangah Gedangan Village, Sidoarjo, has complete, systematic, and regulatory-compliant planning and financial documents, starting from medium-term planning, annual plans, budgeting, and realization reporting. All of these documents demonstrate the village's commitment to realizing transparency, accountability, and effective village development management.

4) Closinh

The closing phase focuses on the evaluation and closure of the annual budget cycle through the SIPD. Village officials prepare a final report on the Village Budget (APBDes) based on the SIPD, evaluate any obstacles encountered during implementation, and prepare recommendations for improvements for the following fiscal year. This process

aims to ensure the sustainability of the SIPD program and improve the quality of its implementation going forward.

b) Human Resource Development

The human resource aspect focuses on the number, capacity, and competence of village officials in operating the SIPD. Bangah Gedangan Village has a trained primary operator, but the involvement of other village officials is still limited. Capacity building of officials through ongoing training is needed to ensure more equitable use of the SIPD and eliminate dependence on a single individual. According to an interview, the Head of Planning for Bangah Village stated, *"In the process, we also rely on human resources, namely village officials and SIPD operators."*

c) Budget

The budget aspect includes the availability of funds to support the sustainability of the SIPD program. The budget is used for human resource training, system maintenance, hardware purchases, and improving the quality of the internet network. The availability of a clear budget ensures program sustainability and reduces the risk of disrupting SIPD operations. Facilities and infrastructure are key factors in the successful implementation of SIPD. Currently, Bangah Gedangan Village has a main computer and internet access at the village office. However, additional computer units, a more stable network, and comfortable workspaces are still needed for the program to run optimally. Based on interviews, the Head of Planning for Bangah Village stated that *"funds are allocated from the Village Budget (APBDes) for training and equipment maintenance. Meanwhile, facilities and infrastructure include computers, an internet network, and the SIPD application, which can be accessed online. With this procedure, we hope to make village financial governance more transparent and accountable."*

This is in line with previous research by Wurara and Kimbal, which also showed that the main obstacles to implementing digital systems in village government are the lack of technical training for officials and the unequal distribution of technological facilities. This aligns with Ryas's findings, which emphasize the need to strengthen the capacity of village officials and provide consistent budget support for optimal system performance. In the context of Bangah Gedangan Village, Sidoarjo, SIPD evaluation inputs include the availability of trained human resources, a budget allocated for SIPD implementation, and adequate information technology infrastructure. Initial observations indicate that Bangah Village has provided computer equipment and an internet connection as technical support, but human resource capacity building through regular training is still needed to ensure optimal SIPD management. This reinforces previous research findings that the success of SIPD implementation depends not only on the system but also on the availability of inputs that support comprehensive program implementation. Based on an interview, the Head of Planning for Bangah Village stated, *"We began implementing SIPD in Bangah Village in 2023. At the beginning of each year, we input Village Budget (RKPDDes) and Village Budget (APBDes) data into the SIPD system, as directed by the Regency's Village Development Agency (PMD). The SIPD operating team consists of the Head of Planning and the Head of Finance. We also regularly coordinate with the sub-district to ensure the data we upload is valid and meets standards. To date, the program has*

been running according to schedule, although there are still some internet connection issues at certain times."

3. Proses Evaluation

a) Program

The execution of the Regional Governance Information System (SIPD) program in Bangah Village, Gedangan, Sidoarjo has proceeded in concordance with the schemata previously delineated by the village administration. This endeavor is principally concentrated upon the digitalisation of bureaucratic management and fiscal stewardship at the village echelon, encompassing developmental planning, budgetary formulation, reporting, as well as the dispensation of public administrative services. The operationalisation of SIPD entails a succession of cardinal undertakings such as the inscription of data regarding the RKPDDes plan, APBDDes budget, fiscal realisation reports, and civic administrative services – all effectuated within the SIPD framework. To buttress the efficacy of the program, Bangah Village constituted an SIPD operative cohort comprised of the Planning Clerk and the Financial Clerk as the principal executors of the system. Technical concertation was likewise conducted with the Sidoarjo Regency's Department of Village Empowerment (DPMD) and subdistrict facilitators to ascertain the congruence of data and reports uploaded into the system. Within the context of program implementation, each stakeholder has apprehended their respective mandates and prerogatives, thereby ensuring that the data inserted and the reports submitted have been in alignment with the extant stipulations.

The temporal precision of the SIPD's execution in Bangah Village has also adhered scrupulously to the prescribed schedule, such as the submission of APBDDes realisation reports for semesters I and II, the annual updating of programmatic data, and the inscription of developmental blueprints at the inception of every fiscal year. Consequently, albeit the program is digital in essence, its completion still observes the timeline ordained by the central and regional authorities. The triumph of SIPD's execution in Bangah Village, Gedangan, Sidoarjo, is further accentuated by the synergy among diverse actors, both within the village bureaucracy and extraneous entities such as DPMD and the subdistrict apparatus. This synergy has enabled the village apparatus to apprehend their respective roles, from data entry to report verification, thereby actualising the paramount objectives of SIPD – namely transparency, accountability, and the acceleration of administrative service delivery. Pursuant to an interview, the Planning Clerk of Bangah Village averred: *"We commenced SIPD implementation in 2023. At the commencement of each fiscal year, we inscribe the RKPDDes and APBDDes into SIPD in accordance with the directives of the Regency's DPMD. The operative cohort consists of myself and the financial staff. We also engage in routine coordination with the subdistrict to ensure the veracity and standardisation of uploaded data. Thus far, the program has proceeded punctually, notwithstanding occasional impediments with the internet connection during certain hours."*

b) Program Monitoring

The surveillance of the Regional Governance Information System (SIPD) program in Bangah Village, Gedangan, Sidoarjo is enacted in a stratified and meticulously orchestrated manner, enlisting various strata of authority ranging from the Village Government, the Subdistrict Administration, to the Regency's Department of Village

Empowerment (DPMD). The Regency Government dispatches supervisory and evaluative contingents periodically to scrutinise data inscription, validate reports, and assess the consonance of SIPD execution with the prevailing canons. Preceding the descent of the regency's supervisory cohort, the subdistrict facilitators and village counsellors customarily undertake preliminary visitation and tutelage, ensuring that the village is not left to navigate the process bereft of oversight. In addition, internal surveillance is conducted assiduously by the Planning Clerk and Financial Clerk of Bangah Village, overseeing the inscription of RKPDes, APBdes, and semesterly fiscal realisation reports into SIPD.[14].

Another challenge is access to system updates. Each time there is an update in the SIPD application, the village requires time to adjust, including changing report formats and work procedures. This can affect the smooth preparation of documents such as the RKPDes, APBDes, and realization reports. Nevertheless, these challenges are addressed through cross-sectoral cooperation, namely routine coordination between village officials, sub-district facilitators, and the Sidoarjo Regency PMD Office. Bangah Village also implements strategies such as scheduling input and overtime for SIPD operators during critical reporting periods to ensure that all data can still be uploaded on time. These efforts demonstrate the commitment of all parties to ensuring that the SIPD program runs according to its objectives despite existing limitations. Based on interviews, according to the Head of Finance of Bangah Village, *"In the implementation of the SIPD program in Bangah Village, we face several obstacles. The most frequent issue is internet network problems. At times, the connection is slow or even cut off while we are inputting data, so the work has to be temporarily stopped or continued at another time. This quite affects the target for report completion."* Furthermore, according to Mr. Dimas, also the Head of Finance, *"we overcome these obstacles through cooperation among village officials and sub-district facilitators, as well as working overtime to input data close to reporting deadlines. We also often coordinate with the regency when we encounter technical issues."*

In line with previous studies, Karundeng, Mandey, & Rindengan highlight the importance of local context suitability and stakeholder involvement in the implementation of digital-based systems. Their findings show that the success of government digital program evaluations is influenced by clear planning, inter-agency coordination, and community involvement. This is relevant to SIPD in Bangah Village, where planning, coordination, and the involvement of village officials are key factors in the evaluation process. Wurara & Kimbal emphasize the need for strengthening human resource capacity and internal monitoring to ensure the quality of the evaluation process in regional government information systems. They found that without continuous training, the implementation of evaluation processes does not run optimally. This condition is consistent with the findings in Bangah Village, where village officials require technical assistance to improve the accuracy of SIPD input and evaluation. Ryas focuses on evaluating the use of SIPD with the CIPP model to assess the system's contribution to financial management transparency. One of the findings is the importance of the Process Evaluation aspect, which requires planned implementation stages, timeliness, and intensive coordination among village officials and sub-district parties. This finding is also

relevant to the condition of Bangah Village, which currently serves as a pilot village for SIPD implementation in Gedangan Subdistrict.

This tiered and incremental monitoring evidences the earnest commitment of both village and regency administrations to guarantee the optimal functioning of SIPD for communal benefit. Beyond prearranged monitoring, the village administration also undertakes internal scrutiny through the verification of data completeness, conformity of reporting formats, and fidelity to prescribed data-entry timelines. The Regency's DPMD administers inspections both corporeally and via digital channels to ascertain that the uploaded data embodies the requisite quality. Civic involvement is also gradually inaugurated through the mechanism of *musyawarah desa* (village deliberation forums) and public proclamation of APBDes realisation, which are derived from SIPD as instruments of transparency and societal feedback. The denouement of monitoring often manifests in the identification of erroneous data, internet connectivity hindrances, and insufficiency in human capital among SIPD operators. These findings are subsequently redressed via technical training, renewed coordination with the subdistrict, and refinement of data-input mechanisms, ensuring that reports conform to stipulations and that SIPD's objectives are duly attained. According to an interview with the Financial Clerk of Bangah Village: *"We verify the data before dispatching the reports to the subdistrict and regency. Monitoring is executed hierarchically. Subdistrict facilitators frequently undertake direct visits to discern the obstacles we encounter. Ordinarily, our predicaments lie in sluggish internet or occasional system malfunctions. From such monitoring, we receive prescriptive recommendations for follow-up."*

c) Program Impediments

In the operationalisation of the Regional Governance Information System (SIPD) in Bangah Village, several encumbrances have been discerned, necessitating concerted exertion and expeditious responses from all affiliated stakeholders. The principal impediment resides in the circumscribed internet connectivity within certain loci of the village office, which frequently hampers data inscription and synchronisation with the central server. This exigency compels the operators to await propitious intervals or to seek alternative connections in order to transmit data punctually. Furthermore, the heterogeneity in human capital capacity constitutes a formidable challenge. Not all village apparatus possess a profound grasp of SIPD functionalities, thus recurrent training sessions and intensive mentorship from subdistrict and regency authorities are indispensable. Occasionally, data-entry inaccuracies transpire, engendering repeated revisions that subsequently retard the reporting process.

Another impediment pertains to access to system updates. Each time the SIPD application undergoes an upgrade, the village requires a period of acclimatisation, including the modification of reporting formats and operational procedures. This circumstance may impinge upon the smooth preparation of documents such as the RKPDes, APBDes, and realisation reports. Nevertheless, such hindrances are mitigated through inter-institutional collaboration, namely routine coordination between village officials, subdistrict facilitators, and the Regency's DPMD. Bangah Village has also instituted strategic measures such as scheduling adjustments for data entry and overtime allocation for SIPD operators during critical reporting periods, thereby ensuring that all

data are uploaded punctually. These efforts exemplify the commitment of all stakeholders to guarantee that the SIPD program proceeds in accordance with its objectives despite extant limitations. As affirmed by the Financial Clerk of Bangah Village: *"In the execution of the SIPD program in Bangah Village we encounter several impediments. The most recurrent issue is the internet connection. At times, the connection becomes sluggish or even collapses during data entry, compelling us to halt operations temporarily or resume at a later hour. This considerably affects the attainment of reporting targets."* Similarly, Mr. Dimas, also serving as the Financial Clerk, elaborated: *"We address these obstacles through collaborative efforts among village apparatus and subdistrict facilitators, as well as by undertaking overtime data entry near reporting deadlines. We also frequently coordinate with the regency when confronted with technical complications."*

In consonance with prior scholarly inquiries, the study by Karundeng, Mandey, and Rindengan accentuated the salience of contextual congruity and stakeholder engagement in the implementation of digitally based systems. Their findings disclosed that the success of government digital program evaluation is contingent upon lucid planning, inter-agency coordination, and community involvement. This is germane to SIPD in Bangah Village, wherein planning, coordination, and the engagement of village apparatus constitute the principal determinants of evaluative success. Likewise, Wurara and Kimbal underscored the exigency of human capital capacity-building and internal monitoring to secure the quality of evaluative processes within regional governance information systems. They posited that in the absence of continuous training, the evaluation process cannot operate optimally. Such a condition resonates with the situation in Bangah Village, where village officials require sustained technical accompaniment to augment the accuracy of SIPD input and evaluation. Moreover, Ryas concentrated on evaluating SIPD utilisation through the CIPP model to appraise the system's contribution to transparency in fiscal governance. One salient finding pertains to the dimension of Process Evaluation, which necessitates planned implementation stages, temporal precision, and intensive coordination among village officials and subdistrict counterparts. This discovery is also apposite to the circumstances of Bangah Village, which currently serves as a model village for SIPD implementation within the Gedangan Subdistrict.

4. Evaluasi Output

a) Program Outcomes

The Regional Governance Information System (SIPD) in Bangah Village, Gedangan, has yielded substantial outcomes in the domain of village administration and fiscal governance. The principal achievement of the program lies in the establishment of a digital system for recording and reporting the APBDes in accordance with standards prescribed by the central government. The inscription of revenue, expenditure, and financing data for the fiscal year 2025 has been comprehensively documented within the SIPD application, thereby facilitating the monitoring of budget realisation by village, subdistrict, and regency authorities. Beyond quantitative success, the program has also placed emphasis on qualitative dimensions. The Bangah Village Government, in conjunction with subdistrict facilitators, conducts periodic re-examinations to ensure the accuracy of data and the conformity of reporting formats. Post-implementation

evaluations of SIPD indicate that the data inscribed remain precise and consistent with source documents, while also simplifying the preparation of semesterly and annual reports. Furthermore, the implementation of SIPD has enhanced the transparency and accountability of village finance. Information concerning the APBDes, RKPDes, and realisation reports has become more readily accessible to both village officials and the community through public information disclosure mechanisms. This enables citizens to remain informed about ongoing development and empowerment initiatives within the village.

In addition, the outcomes of SIPD have spurred a transformation in the operational practices of village officials, shifting from manual to digital modalities, thereby heightening temporal efficiency. Although SIPD's primary focus is the digitalisation of village finance, its impact has also extended to other administrative services such as document archiving, population data management, and the reporting of community empowerment programs. From a non-material perspective, the success of SIPD is reflected in the growing awareness among village officials of the significance of data-driven governance, the improved organisation of interdepartmental coordination, and the smoother communication channels established with subdistrict and regency authorities. Nevertheless, continued accompaniment remains requisite in order to further strengthen human resource capacity and stabilise internet connectivity. In sum, the outcomes of SIPD in Bangah Village, Gedangan, have accorded with the established plan, namely fortifying the system of village financial management in a transparent, expedient, and accountable manner, while simultaneously serving as a foundation for more targeted village development policymaking.

Table 4. SIPD Implementation Program in Bangah Village, Gedangan, Sidoarjo.

No	Program Dimension	Main Result	Impact	Notes
1	Digitalization of Village Financial Management (APBDes)	All data on revenue, expenditure, and financing for the 2025 fiscal year have been entered into the SIPD application	Facilitates real-time and accurate financial recording and reporting at the village level	Fully implemented since January 2025
2	Transparency and Accountability	Information on APBDes, RKPDes, and realization reports is easily accessible to village officials and the community	Enhances community trust in village financial management	Data are available and regularly updated in the SIPD application
3	Administrative Efficiency	Village officials are able to prepare semester and annual reports	Saves time and effort, while reducing errors in	Running effectively, with Semester 1 and 2 reports

		more quickly using SIPD	manual bookkeeping	completed on time
4	Human Resource Capacity Building	Village officials have become accustomed to using the digital system and understanding SIPD reporting standards	Improves inter-departmental coordination and facilitates communication with sub-district and district levels	Further training and technical assistance are still required
5	Non-Physical Impacts	Growing awareness of the importance of digital data management and public information disclosure	Supports more evidence-based decision-making in village development planning	The process is ongoing, with expansion toward other administrative services

The data table illustrates significant progress in the digitalization of village financial governance. All village revenue, expenditure, and financing data for 2025 have been successfully input into the SIPD application, making recording more organized, real-time, and easier to monitor. Transparency and accountability in village fund management have also increased because the community and stakeholders can easily access information on the Village Budget (APBDes), Village Work Plan (RKPDDes), and realization reports through the system. Previously manual village administration processes have become more efficient and accurate, enabling village officials to compile semester and annual reports in a timely manner according to standards. Furthermore, the SIPD program has also improved the human resource capacity of village officials. Village officials are becoming accustomed to using digital systems, understanding SIPD-based reporting formats, and coordinating more smoothly with sub-districts and districts. Another visible non-physical impact is increased awareness among village officials and the community about the importance of public information transparency and sustainable digital-based data management. However, several aspects, such as further training, technical assistance, and the development of other public service modules, still need to be strengthened to optimize the use of SIPD in supporting targeted village development planning.

b) Program Result Monitoring

The SIPD (Regional Budget Implementation) in Bangah Gedangan Village is a crucial aspect in ensuring the sustainability of the digital system. The implementation of SIPD has helped village officials record, report, and monitor the Village Budget (APBDes) more quickly, transparently, and accurately. The village community has also begun to feel the impact through public information transparency, for example, through access to regular APBDes realization reports. Community participation in the system's use is still in its early stages, such as attending SIPD socialization sessions and participating in village meetings related to budget planning.

However, SIPD socialization to the community is only conducted once a year, so public understanding is still uneven. Some new village officials also require retraining to avoid relying solely on experienced operators. Regarding maintenance, the Bangah Village Government has developed a system maintenance plan in coordination with the District and Regency PMD Offices, including regular system updates, data backups, and ongoing technical guidance. This commitment also involves the community through deliberation forums to ensure the results of the SIPD program remain relevant to their needs. Thus, the long-term success of SIPD depends not only on the existence of the system, but also on community participation, the continuity of village apparatus training, and government support at higher levels.

Table 5. SIPD of Bangah Village, Gedangan Sub-District.

No	Aspect	Program Result Implementation	Maintenance of Reuslt
1	Public Information Access	The community can transparently access the Village Budget (APBDes) reports and budget realization through the SIPD.	The village government conducts regular updates in the SIPD application to ensure data validity.
2	Community Participation	Residents participate in SIPD socialization, village deliberation meetings, and public training sessions.	Involving the community in monitoring and evaluation forums to maintain relevance.
3	Village Apparatus Capacity	Village officials are trained to input and manage data in the SIPD.	Continuous training and technical assistance are provided by the sub-district and regency authorities.
4	Supporting Infrastructure	The use of computer devices and internet networks to access the SIPD.	The village government allocates budget for the maintenance of equipment and internet connectivity.
5	System Sustainability	The SIPD serves as the primary reference for planning, implementation, and evaluation of village programs.	Data backup, system updates, and routine coordination with the Village Community Empowerment Office (Dinas PMD).

The table above shows that the utilization and maintenance of the SIPD program in Bangah Gedangan Village has covered five important aspects. In terms of public information access, SIPD enables the community to obtain information on Village Budget (APBDes) realization more transparently and quickly. To ensure data accuracy, the village government regularly updates the system so that the data presented is always up-to-date. In terms of community participation, Bangah Village residents have begun

participating in SIPD socialization, village meetings, and public training. Maintenance is realized through community involvement in monitoring and evaluation forums to ensure the program remains relevant to their needs.

The capacity aspect of village officials indicates that village officials have been trained to input and manage village financial data digitally. For maintenance, further training and technical assistance are provided by the sub-district and district offices to maintain the skills of village officials. In terms of supporting infrastructure, the village utilizes computers and an internet network to access SIPD, while maintenance is carried out by allocating a budget for equipment and internet network maintenance to ensure stable system performance. Finally, in terms of system sustainability, SIPD has become the primary reference in the planning, implementation, and evaluation of village programs. Maintenance is carried out through regular data backups, system updates, and routine coordination with the Village and Community Empowerment Agency (PMD). Overall, this table shows that Bangah Gedangan Village not only focuses on utilizing the Village Information System (SIPD) to improve transparency and service effectiveness but also has a strong commitment to maintaining the system's sustainability through technical maintenance, staff training, and community participation.

In line with previous research by Sari and Pratama, this study examines the utilization of a digital-based village financial information system in Sleman Regency. The results indicate that the successful utilization of the village information system program's results is influenced by community participation, support from village officials, and the technical capabilities of system administrators. The relevance to Bangah Village lies in the importance of building the participation and technical capabilities of village officials so that the SIPD is truly utilized and properly maintained. Handayani & Nugroho also focused on the maintenance of village government information technology facilities. They found that the keys to successful maintenance of digital program results are the existence of maintenance SOPs, a clear technical team, and regular budget support from the village government. This is relevant to Bangah Village because the SIPD system requires data updates, server or laptop maintenance, and regular training to maintain service quality [15].

Discussion

Based on the research results, the implementation of the Regional Government Information System (SIPD) in Bangah Village, Gedangan District, Sidoarjo Regency has had a real impact on the management of village financial administration, especially in the development sector. SIPD helps digitally record the Village Budget (APBDes), planning, budgeting, and reporting village development, thereby improving administrative order and public transparency. This success is evident in the completeness of the 2025 Village Budget data that has been input into the system, including details of income, expenditure, physical development realization, and community empowerment activities. For example, the construction of a village hall for Rp110,000,000, the construction of a plengsengan on the south side of Mbah Cokro for Rp189,014,172, and the construction of a boreh for Rp150,000,000 have been fully recorded in SIPD with information on location, work volume, and realization reports. Although technically SIPD is able to support the village

financial administration cycle, its effectiveness is still not optimal due to limited human resources and technological facilities. This situation aligns with the findings of Karundeng, Mandey, and Rindengan and Wurara and Kimbal, which emphasized that human resource quality is a key factor in the success of digital-based government information systems.

The success of the SIPD program can be seen in the extent to which the system supports the goal of transparent and planned village financial management. In Bangah Village, signs of success are evident in the completeness of the Village Work Plan (RKPDDes), Village Budget (APBDDes), and semi-annual realization reports, which have been digitized. Data on physical development activities such as water channel normalization, road paving, youth organization development, and women's empowerment have been documented in the SIPD, along with evidence of implementation. This demonstrates administrative efficiency and ease of access to information by stakeholders. However, the success of the SIPD program is still limited to the technical aspects of recording and has not fully encompassed capacity building of village officials or broad community participation. According to interviews, *"there are still only a limited number of SIPD operators in the village, so the workload is quite large for one main operator."* This situation indicates the risk of reduced sustainability if there is a lack of equal skills among village officials. From a targeted perspective, the SIPD is targeted at village officials responsible for administrative and financial management, such as the Head of Planning and the Head of Finance. However, participation by other village officials remains uneven. The lack of technical training and outreach results in a heavy administrative burden on a small number of individuals. This situation aligns with research by Ryas, which states that uneven involvement of all village officials in using the application can hinder the smooth operation of government information systems.

Regarding the goal achievement indicator, SIPD has provided clear benefits in the form of accelerated financial reporting, increased data accuracy, and easier documentation of development activities. Village officials experience time and procedural efficiencies, as all data can be digitally input and accessed when needed. For example, data from the 2025 Village Work Plan (RKPDDes), Village Budget (APBDDes), and semester realization reports are well-documented, allowing for faster tracking of development progress and budget realization. However, the utilization of all SIPD features has not been optimal, resulting in less than optimal program results. This finding supports the view of Setiawan et al that utilizing all application features is a crucial requirement for achieving comprehensive program objectives.

The final indicator, program monitoring, shows that SIPD provides real-time input and output monitoring features that support internal village evaluations. Development outcome data and financial reports are accessible to both village and sub-district governments. However, the application's single operator access limits the participation of supervisory institutions such as the Village Consultative Body (BPD). This situation hinders cross-agency oversight, which should be part of a public accountability system. This finding aligns with Handayani & Nugroho, who emphasized that successful digital information system management requires a combination of human resource capabilities, data transparency, and a multi-level oversight mechanism. Therefore, although SIPD

implementation in Bangah Village has been quite effective in improving village financial governance, strengthening human resource capacity, equitable user access, and improving the monitoring system across devices are key recommendations for optimizing SIPD's effectiveness in the future.

CONCLUSION

Fundamental Finding : Based on an analysis of four indicators of program effectiveness according to Stufflebeam—program success, target accuracy, goal achievement, and program monitoring—the implementation of SIPD in Bangah Village, Gedangan District, Sidoarjo Regency can be categorized as quite effective in supporting the digitalization of village financial administration, particularly in the development sector. SIPD has been proven to improve the regularity of financial recording, accelerate the reporting process, and support public transparency through comprehensive digital documentation. Technical success is reflected in the completeness of the 2025 Village Budget (APBDes) input, the realization of documented physical activities (such as the construction of a village hall, plengsengan, and boreh construction), and the system's ability to provide access to financial information in real time. However, effectiveness is not optimal because the application's operation is still dependent on a single operator, the involvement of other village officials is low, and cross-institutional monitoring is not optimal. **Implication :** The results of this study indicate that the digitalization of village financial administration, when managed properly, can strengthen transparent, accountable, and efficient village governance. The implementation of SIPD can be a technology-based management model that can be replicated in other villages, provided it is accompanied by strengthening human resource capacity, equal access, and technological infrastructure support. For policymakers, these findings imply the importance of integrating ongoing training programs, developing clear standard operating procedures (SOPs), and external monitoring so that SIPD becomes not only a means of administrative recording, but also an effective monitoring and development planning tool. **Limitation :** This study is limited by its geographic scope and the number of informants. The research location was only focused on one village (Bangah Village), so the results cannot be generalized to all villages using SIPD. Furthermore, the limited number of respondents, most of whom came from core village officials, may lead to perception bias, as the perspectives of the community or external parties such as the BPD are not widely represented. This study also did not quantitatively measure the application's impact on village financial performance, so the analysis is more descriptive and qualitative. **Future Research :** Future research is recommended to expand the coverage area to several villages within one sub-district or district to obtain a more comprehensive picture of SIPD's effectiveness. Future research could also employ a mixed methods approach by combining qualitative and quantitative data, for example by measuring reporting time efficiency, data accuracy, or the public transparency index before and after the use of SIPD. Furthermore, comparative studies with other village financial applications, such as Siskeudes or SIPADES, could provide a deeper understanding of the determining factors for the success of digitalizing financial administration at the village level.

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