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Effectiveness of the Village Financial Information System in Supporting Village Financial Governance in Werot Village, North Minahasa Regency, Indonesia

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ABSTRACT

The study addresses the growing demand for transparent, accountable, orderly, and digitally supported village financial governance. Using a qualitative descriptive design, the article collected data through interviews, observation, and documentation involving village officials, financial operators, planning actors, village assistants, and subdistrict officials. The findings indicate that Siskeudes has supported a more structured and standardized financial administration process, but it has not yet operated with full effectiveness. Delayed data entry, errors in administration, repeated report corrections, late submission, limited public transparency, and dependence on a few technical users continue to constrain the system. The main inhibiting factors include uneven human resource capacity, inadequate technological infrastructure, weak administrative discipline, limited internal coordination, insufficient contextual guidance and supervision, and difficulty adapting to regulatory changes. The article argues that Siskeudes should be understood as a socio-technical governance system rather than merely a software application. Its effectiveness depends on the alignment of people, procedures, technology, data, leadership, and accountability culture. The article proposes an integrated strengthening strategy consisting of continuous capacity building, infrastructure improvement, workflow discipline, collective coordination, contextual supervision, and citizen-friendly transparency. The study contributes to public administration literature by demonstrating that digital village financial governance requires not only regulatory compliance but also organizational learning and institutional readiness.

Keywords: Digital Governance, Public Administration, Siskeudes, Village Financial Information System, Village Financial Governance, Werot Village.

INTRODUCTION

Village government in Indonesia has become one of the most important arenas of public administration reform. Since the enactment of the Village Law, villages have been granted broader authority to plan development, manage public resources, and deliver services close to citizens. This decentralization has created both opportunity and risk. On the one hand, village funds allow local governments to respond more directly to community needs. On the other hand, the growing volume of village finance requires a more reliable administrative system so that planning, budgeting, spending, reporting, and accountability are not carried out merely as routine paperwork, but as a coherent governance process.

The research examines the effectiveness of the Village Financial Information System, commonly referred to as SIKD or Siskeudes, in supporting village financial management. The study begins from an empirical tension: the system has been introduced to encourage transparent, accountable, orderly, and disciplined financial administration, yet its implementation in Werot Village has not been fully effective. Delayed data entry, errors in administration, late financial reporting, dependence on a limited number of operators, and unstable supporting infrastructure continue to shape everyday practice.

The argument developed here is that Siskeudes in Werot Village has produced meaningful administrative improvement compared with manual procedures, but its effectiveness remains partial because digital governance depends not only on software availability. It depends on human resource capacity, work discipline, supporting technology, guidance and supervision, internal coordination, and the ability of village institutions to adapt to regulatory change.

The case of Werot Village is important because it demonstrates a common problem in local digitalization. Many public sector information systems are formally adopted before organizational readiness has fully developed. The application may be available, regulations may mandate its use, and reports may be generated through the system, yet actual effectiveness is still shaped by the capacity of users and the quality of administrative routines. In this sense, the problem is not merely technical. It is a public administration problem concerning the interaction between system design, institutional behavior, learning capacity, and accountability.

The wider policy context also gives urgency to this study. Village financial management is regulated by national and regional norms, including the principle that village finances must be managed transparently, accountably, participatively, and with budget discipline. Siskeudes was designed to support these principles by standardizing financial records and making reports easier to generate and verify. However, standardization can only become effective when village officials understand the logic of the system, prepare documents on time, coordinate among offices, and receive consistent technical assistance from higher levels of government.

Werot Village has a relatively small demographic scale but a complex administrative task. The village must connect annual development planning, APBDes budgeting, evidence of transactions, reporting, and public accountability. The article describes Werot as a village with an established local government structure, community institutions, development priorities, and reliance on transfer funds. These characteristics make financial governance a central issue. If the financial information system works well, the village can strengthen accountability and planning accuracy. If it works weakly, delays and errors can affect development implementation and public trust.

The study therefore contributes to public administration literature in three ways. First, it provides a village-level case of digital financial governance. Second, it shows that effectiveness is

multidimensional: technical ease, accuracy, timeliness, accountability, transparency, and institutional learning must be considered together. Third, it demonstrates that the success of Siskeudes is not simply the responsibility of the operator; it is a collective responsibility involving the village head, secretary, financial officer, planning officer, village assistant, subdistrict officials, and district-level supervisors.

This article has three objectives. It analyzes the extent to which SIKD/Siskeudes has supported financial management in Werot Village. It identifies the major inhibiting factors that prevent the system from operating effectively. It also proposes a strengthening strategy grounded in management theory, public service quality, management information systems, and village financial governance. The article is organized into theoretical framework, method, findings, discussion, proposed strategy, conclusion, and references, following the academic structure of the Sammy journal model.

THEORETICAL FRAMEWORK

The theoretical foundation of this article begins with management theory. Management is commonly understood as a process of planning, organizing, actuating, and controlling organizational resources to achieve predetermined objectives effectively and efficiently (Terry, 2011). In the context of village financial governance, these functions are visible in the entire budget cycle. Planning is represented by the preparation of RKPDes and APBDes. Organizing is reflected in the division of tasks among the village head, secretary, financial officer, planning officer, and operator. Actuating appears in daily budget execution and transaction recording. Controlling is realized through verification, reporting, supervision, and accountability mechanisms.

Koontz and O'Donnell emphasize that management is an effort to achieve goals through the activities of other people (Koontz & O'Donnell, 2006). This view is relevant because Siskeudes cannot be operated effectively by software alone. The application becomes useful only when village officials work together. The article shows that dependence on one operator weakens institutional effectiveness because the system becomes individual-centered rather than organization-centered. From a management perspective, the issue is not only whether a person can use the application, but whether the organization has distributed knowledge, clear responsibility, and reliable coordination.

The study also draws on the concept of public service. Public service refers to activities undertaken by government institutions to fulfill citizen needs in accordance with legal norms and service standards (UU No. 25 Tahun 2009). In the village context, financial administration is not a service in the narrow sense of issuing documents to citizens, but it is a core enabling service. Accurate and timely financial management supports development programs, social assistance, infrastructure activities, and community empowerment. When the system is ineffective, the quality of public service may decline because programs can be delayed, reporting can be corrected repeatedly, and public transparency can be weakened.

Service quality theory is useful for interpreting the administrative effects of Siskeudes. Parasuraman, Zeithaml, and Berry identify five dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 2014). Tangibles refer to physical and technological support such as computers, printers, and internet access. Reliability refers to the ability to produce accurate reports. Responsiveness concerns the speed of data input and correction. Assurance concerns public confidence that financial information is valid. Empathy concerns the

willingness of village officials to provide understandable information to the community. These dimensions show why information systems are closely connected to public service quality.

Management information system theory provides a second foundation. O'Brien and Marakas define a management information system as a set of people, procedures, software, hardware, data, and networks that work together to collect, process, store, and distribute information for decision making (O'Brien & Marakas, 2010). This definition is important because it prevents an overly narrow view of Siskeudes as a computer application. Siskeudes is a socio-technical system. Its effectiveness depends on the interaction among people, procedures, technology, data, and organizational control.

Laudon and Laudon explain that information systems consist of interrelated components that collect, process, store, and distribute information to support decision making and control in an organization (Laudon & Laudon, 2019). Applying this theory to Werot Village, the financial information system should support not only the production of reports but also managerial control. It should help identify whether transactions are complete, whether spending is consistent with budget allocations, whether supporting evidence is available, and whether reporting deadlines can be met. When these functions are not consistently achieved, the system is present but not yet fully effective.

Systems theory further strengthens the analysis. Bertalanffy describes a system as a set of interconnected elements oriented toward a common purpose (Bertalanffy, 1968). Siskeudes effectiveness therefore cannot be assessed by isolating the operator from the wider village organization. Input data depends on planning documents, spending evidence, decisions of the village head, administrative discipline of sections, verification from the secretary, and guidance from external actors. A weakness in one element can disturb the entire system. The article findings illustrate this interdependence clearly: delayed supporting documents create delayed input; unstable internet creates delayed synchronization; weak coordination creates repeated correction.

Decision-making theory is also relevant. Simon explains that decision making includes intelligence, design, and choice stages (Simon, 1977). In village finance, information systems should help officials identify financial problems, design administrative responses, and choose appropriate corrective actions. If the system is used only at the end of the reporting period, its potential as a decision-support instrument is lost. The article indicates that Siskeudes in Werot Village has not yet been fully used as a continuous monitoring tool. It is still often treated as a reporting obligation rather than a managerial instrument for daily control.

The Technology Acceptance Model provides another useful lens. Davis argues that the use of information technology is influenced by perceived usefulness and perceived ease of use (Davis, 1989). In the Werot case, village officials recognize that Siskeudes is useful for standardized reporting. However, difficulties in understanding menu structure, codes, transaction logic, and regulatory changes can reduce perceived ease of use. If users experience the system as complicated and dependent on one technically capable person, organizational adoption remains shallow.

The concept of good governance is central to village financial information systems. Osborne and Gaebler argue that modern public administration should be more result-oriented, responsive, and capable of using information to improve performance (Osborne & Gaebler, 1992). In village governance, this means financial information should not be hidden in files or understood only by technical officers. It should inform decision making, facilitate supervision, and support public accountability. Siskeudes is therefore not merely a digital bookkeeping tool; it is a potential instrument of good village governance.

Regulatory theory is also important because village finance is highly rule-bound. Permendagri No. 20 of 2018 requires village financial management to follow principles of transparency, accountability, participation, orderliness, and budget discipline. Peraturan Bupati Minahasa Utara No. 18 of 2019 provides a local technical framework for village financial management. These rules create the formal mandate for standardized administration. However, as the article suggests, regulatory mandates do not automatically produce effective implementation. Officials must understand rules, translate them into documents, and adjust quickly when policies change.

Finally, the article draws on organizational readiness and change theory. Lewin's logic of change emphasizes that organizations must unfreeze old habits, move toward new practices, and refreeze the new routines into stable behavior (Lewin, 1951). Werot Village is still in a transitional stage. Manual habits have not completely disappeared, while digital routines have not fully stabilized. This transitional condition explains why the system can be used but still require repeated manual verification, external assistance, and corrections. Effectiveness will improve when digital financial governance becomes a shared organizational culture, not merely a technical task assigned to one operator.

METHOD

This article is based on a qualitative descriptive article conducted in Werot Village, South Likupang District, North Minahasa Regency. The qualitative approach was appropriate because the research sought to understand how SIKD/Siskeudes is used in actual administrative practice, how village officials interpret the system, what problems they encounter, and why the system has not yet produced full effectiveness. The focus was not to test statistical relationships, but to produce a detailed interpretation of implementation realities.

The research site was Werot Village, a village with formal administrative structures, community institutions, development priorities, and dependence on village financial transfers. The object of study was the use of SIKD/Siskeudes in the cycle of village financial management, including planning, implementation, administration, reporting, and accountability. The study also examined the inhibiting factors affecting system effectiveness, especially human resources, technology infrastructure, administrative discipline, coordination, supervision, and regulatory adaptation.

Data were collected through interviews, observation, and documentation. Interview informants included the village head, village secretary, financial officer, Siskeudes operator, planning officer, village assistants, and subdistrict officials responsible for village development and verification. Observation focused on administrative routines and the use of financial documents. Documentation included village profiles, financial administration materials, regulatory references, and field documentation. These data sources allowed the researcher to compare formal procedures with actual practices.

Data analysis followed the interactive model of Miles, Huberman, and Saldana, consisting of data condensation or reduction, data display, and conclusion drawing (Miles et al., 2014). Interview materials and documents were reduced into themes concerning effectiveness and inhibiting factors. The data were then displayed through tables, thematic summaries, and interpretive matrices. Conclusions were drawn iteratively by comparing statements from different actors and relating empirical patterns to theory.

Validity was strengthened through triangulation. The article used source triangulation by comparing the perspectives of village officials, operators, assistants, and subdistrict actors. It also used method triangulation by comparing interviews with observation and documentation. In this article, the findings are reorganized into a journal format, while preserving the substantive empirical meaning of the original study. Tables and figures are adapted from the article materials and field documentation to make the findings and discussion more transparent. See table 1.

Table 1. Research informants involved in this study

No.	Informant category	Role in village financial governance	Reason for selection	Technique
1	Village Head	Policy direction and internal control	Responsible for village financial governance and approval	In-depth interview
2	Village Secretary	Administrative coordinator	Coordinates documents, reporting, and verification	Interview and observation
3	Financial Officer / Siskeudes Operator	Main technical user	Inputs transactions and prepares Siskeudes reports	Interview and direct observation
4	Planning Officer	RKPDes and APBDes planning	Prepares planning data entered into system	Interview
5	Village Assistant	Technical guidance actor	Assists village in financial administration and compliance	Interview and documentation
6	Local Village Assistant	Daily technical support	Understands routine operator difficulties	Interview
7	Subdistrict PMD official	Verifier and supervisor	Reviews report quality and village compliance	Interview and document study
8	Treasurer / related finance actor	Cash and evidence management	Provides transaction evidence and coordinates finance	Interview

RESULTS AND DISCUSSION

The findings show that the implementation of SIKD/Siskeudes in Werot Village has generated visible administrative improvement but has not yet achieved full effectiveness. Compared with manual practices, the application helps create a more structured financial workflow. It provides standardized formats for planning, budgeting, transaction recording, reporting, and accountability. It also makes financial data easier to trace when documents are complete and when the operator can input data correctly. This means that Siskeudes has functional value and should not be viewed as a failed innovation.

However, the system has not yet operated as an integrated village governance instrument. The article indicates that delays in data entry still occur because supporting documents are not always prepared on time. Errors in administration remain because not all users understand the logic of budget codes, transaction classification, and supporting evidence. Reporting can still be late because the operator must wait for data from other village officials or must revise documents after

verification. These problems demonstrate that digitalization has not fully solved the underlying weaknesses of administrative discipline.

From the perspective of effectiveness, the strongest aspect of Siskeudes in Werot Village is standardization. The system provides a clear framework that guides officials in preparing financial documents. It reduces the risk of completely unstructured reporting and helps village finance follow a more uniform pattern. The existence of menus for planning, administration, and reporting provides a reference point for operators and supervisors. Nevertheless, standardization does not automatically guarantee accuracy. If input data are late, incomplete, or misunderstood, the output remains vulnerable to correction. See table 2.

Table 2. Effectiveness profile of SIKD/Siskeudes implementation in Werot Village.

Dimension	Positive contribution	Observed weakness	Interpretation	Required improvement
Standardization	Provides uniform formats for budget and reports	Output still depends on correct input	Moderately effective	Strengthen technical checking
Timeliness	Creates report workflow and deadlines	Data entry and reporting still delayed	Weak indicator	Set internal deadlines and document flow
Accuracy	Reduces manual format errors	Wrong codes and incomplete evidence require correction	Partial accuracy	Train users using real cases
Transparency	Produces information that can be shared	Public explanation remains limited	Procedural transparency	Simplify public financial information
Accountability	Improves traceability of transactions	Accountability still operator-centered	Formal accountability	Build collective responsibility

The second aspect is timeliness. The article shows that timeliness remains one of the weakest indicators. Reports are not always completed on schedule because data collection, evidence verification, and internal coordination require additional time. The operator frequently becomes the final point of pressure, even though the causes of delay are distributed across several actors. This indicates that the problem is organizational rather than merely individual. Timeliness will improve only when every official involved in financial management understands their responsibility to provide data and evidence before the reporting deadline.

The third aspect is accuracy. Siskeudes is designed to improve accuracy by providing standardized input fields and automatic report formats. In practice, accuracy still depends heavily on the competence of the user and the quality of documents. If an expenditure is entered under an incorrect code or if supporting evidence is inconsistent, the report must be corrected. The article identifies repeated corrections as evidence that system use has not yet become fully mature. Accuracy therefore requires both technical training and administrative discipline.

The fourth aspect is transparency. The system can support transparency because it produces structured information that can be communicated to the public. Yet the article suggests that transparency has not been fully optimized. Financial information may be available, but public understanding and participation remain limited. Reports are not always translated into simple

explanations for the community. As a result, the system contributes more strongly to vertical accountability to higher government levels than to horizontal accountability to citizens.

The fifth aspect is accountability. Siskeudes strengthens accountability by making financial records more traceable. It can link budget plans, expenditure realization, and reports. However, accountability is still constrained by document completeness, weak internal verification, and dependence on the operator. If the application is used primarily to satisfy reporting obligations, its accountability function remains procedural. A stronger accountability culture would require regular internal review, open explanation to the community, and early correction before the end of the fiscal period.

Human resource capacity emerges as the most central inhibiting factor. The article shows that knowledge of Siskeudes is not evenly distributed among village officials. The operator and financial officer hold the strongest technical understanding, while other officials often depend on them. This creates vulnerability because the continuity of the system depends on a small number of people. When the operator is unavailable, overloaded, or confused by regulatory changes, the entire administrative process can slow down.

Technology infrastructure is the second major factor. Siskeudes requires functioning devices, data storage, printers, and stable internet access, particularly for reporting, synchronization, updates, and communication with higher government levels. In Werot Village, available infrastructure is not always sufficient to support smooth work. Internet instability can delay online processes, while limited devices can concentrate work on one workstation. Infrastructure problems therefore affect not only convenience but the actual rhythm of financial administration.

Administrative discipline is the third factor. The article identifies delays in supporting documents, incomplete evidence, and the need for repeated verification. These problems cannot be solved by the application alone. A system can process data, but it cannot produce valid data when administrative actors fail to prepare documents on time. In this sense, Siskeudes effectiveness requires document discipline before digital entry. The village must treat every transaction as part of a continuous accountability chain.

Internal coordination is the fourth factor. Siskeudes connects planning, budgeting, spending, administration, and reporting. Therefore, the operator cannot work effectively without timely information from planning officials, activity implementers, the secretary, and the village head. The article shows that coordination still needs strengthening because financial data sometimes arrive late or require correction. This makes the operator responsible for problems that actually originate from collective workflow weaknesses.

Regulatory adaptation is the fifth factor. Village financial management is affected by changing national and regional policies. New priorities, budget classifications, and reporting requirements can require adjustments in Siskeudes input. The article shows that regulatory change is difficult when training and guidance are not equally available. Operators and village officials need practical explanations, not only general socialization. They need to know which documents change, which menu must be adjusted, and what consequences arise if data are entered incorrectly.

Guidance and supervision from subdistrict and district actors also influence effectiveness. The article indicates that assistance exists, but it needs to become more intensive, practical, and contextual. Villages do not only need lectures about regulations; they need direct support when technical errors appear, when reports must be corrected, and when new rules are introduced. Supervision should also be preventive, not merely corrective at the end of the reporting period. See table 3.

Table 3. Inhibiting factors affecting Siskeudes effectiveness

Factor	Empirical indication	Administrative effect	Theoretical linkage	Policy implication
Human resources	Technical skill uneven and concentrated in operator	System depends on individual capacity	People component in MIS (Laudon & Laudon, 2019)	Continuous training for all officials
Technology infrastructure	Devices and internet not always reliable	Input, sync, printing, and reporting can be delayed	Tangibles in service quality (Parasuraman et al., 2014)	Minimum infrastructure standards
Administrative discipline	Evidence and documents often late	Data entry becomes delayed or corrected	Control function (Terry, 2011)	Internal document deadlines
Internal coordination	Planning, finance, and activity data not always synchronized	Operator carries excessive burden	Systems theory (Bertalanffy, 1968)	Routine financial coordination meetings
Regulatory adaptation	Changing rules require menu and document adjustment	Errors appear when guidance is unclear	Change theory (Lewin, 1951)	Operational guidance after every rule change

Field documentation reinforces the qualitative nature of the findings. The article includes photographs of interviews and discussions with village and supporting actors. These images show that the research was grounded in direct interaction with informants and that financial system effectiveness is embedded in everyday administrative relationships. The photographs are included in this article as article-based evidence to strengthen the findings section.

The findings can be interpreted as evidence of partial digital governance capacity. Werot Village has adopted Siskeudes and has experienced administrative benefits, but the organization has not yet fully transformed its work culture into a digitally integrated financial governance model. From the perspective of management theory, the weakness appears across the four management functions. Planning is present, but financial data are not always integrated early. Organizing exists, but role distribution is still uneven. Actuating occurs through system use, but the process is often delayed. Controlling is available through verification and reporting, but it remains more corrective than preventive.

Terry's management framework helps explain why the system is not fully effective (Terry, 2011). A digital application can support planning and control only when the organization has clear procedures and disciplined execution. In Werot Village, Siskeudes becomes a tool for structuring work, but the underlying management process still requires improvement. The finding that the operator carries a dominant burden shows that organizing has not fully distributed responsibility. This is a common problem in local digitalization, where technology is introduced faster than organizational capability develops.

From the view of management information systems, Siskeudes effectiveness depends on the alignment of people, process, technology, and data (Laudon & Laudon, 2019). The Werot case shows misalignment among these elements. The application is available, but people have varied

competence. Procedures exist, but are not always followed consistently. Technology exists, but internet and devices are not always reliable. Data are required, but supporting documents are sometimes late. The result is a system that works but requires repeated manual correction. See figure 1.

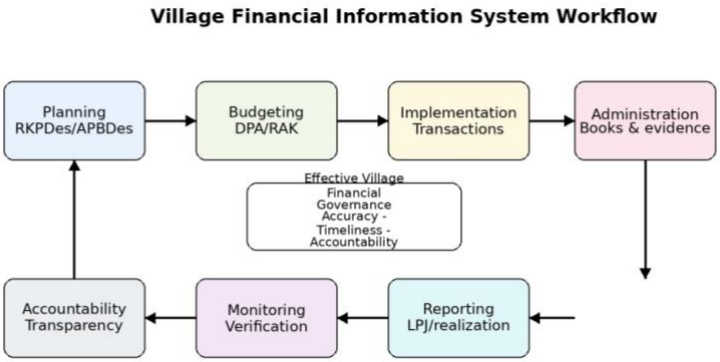

Figure 1. Village financial information system workflow adapted for the Werot Village case.

The Technology Acceptance Model also provides insight. Users may perceive Siskeudes as useful because it produces required reports and supports standardized administration. However, perceived ease of use is weakened by complex financial codes, regulatory adjustments, and limited technical competence (Davis, 1989). When a system is experienced as difficult, officials tend to depend on one operator rather than develop collective understanding. This explains why institutional effectiveness remains limited even when the application is formally used.

The findings also demonstrate that transparency is not automatic. Digital reports do not become public accountability unless they are communicated in accessible ways. Public service theory reminds us that citizens judge government not only by internal compliance but by clarity, openness, and responsiveness (Parasuraman et al., 2014). If financial information remains technical and difficult for villagers to understand, the transparency function of Siskeudes will remain limited. Werot Village therefore needs to translate system outputs into public information that is simple, timely, and linked to village development outcomes.

The role of infrastructure should not be underestimated. Tangible resources are part of service quality and also part of information system capacity. Computers, printers, data storage, electricity, and internet connectivity are not secondary facilities; they are operational foundations for digital governance. In a village context, unstable internet can create serious administrative consequences because reporting and coordination depend on timely data transfer. Therefore, investment in infrastructure should be considered part of accountability reform, not merely office modernization.

Human resource limitations require a long-term capacity-building response. Training should not be treated as a one-time event. Operators and village officials need continuous learning, mentoring, peer discussion, and simulation using real village financial cases. Adult learning theory suggests that learning is more effective when directly connected to practical problems. Therefore, capacity building should use actual APBDes documents, real transaction evidence, and common error cases from Werot Village rather than abstract examples.

The article also shows that weak internal coordination reduces system effectiveness. Siskeudes is often perceived as the operator's responsibility, whereas the application actually depends on the entire financial cycle. Planning officials must prepare program data. Activity

implementers must submit evidence. The financial officer must record transactions. The secretary must verify administrative completeness. The village head must provide policy direction and control. If these roles are not synchronized, the application becomes a bottleneck rather than an integrator.

Regulatory change is another central issue. Village financial governance is dynamic because national development priorities and budget rules change regularly. The ability to adapt to new regulation is part of organizational readiness. Lewin's change model suggests that an organization must move from old habits to new routines and stabilize those routines (Lewin, 1951). Werot Village has entered the movement stage but has not fully stabilized digital financial governance. Changes in rules can therefore disrupt work because knowledge and procedures are not yet institutionalized.

The discussion also points to the importance of external supervision. Subdistrict and district actors should not only evaluate final reports but support villages during the process. Preventive supervision can detect errors earlier and reduce end-of-period correction pressure. This aligns with the idea of control in management theory, where monitoring should compare actual performance with standards and initiate corrective action before problems become larger. In Werot Village, more routine and contextual assistance would help transform Siskeudes from a reporting tool into a continuous control instrument.

Another implication concerns accountability culture. An application can generate reports, but accountability is ultimately a social and institutional practice. It requires honesty, discipline, openness, and willingness to be reviewed. The article indicates that Siskeudes has improved formal accountability but has not fully created a collective accountability culture. This is why strengthening must include leadership commitment, administrative discipline, community communication, and regular reflection among village officials.

The adapted determinant model presented in this article synthesizes the findings. It shows that Siskeudes effectiveness is influenced by six interconnected dimensions: human resource capacity, technology infrastructure, administrative discipline, internal coordination, guidance and supervision, and regulatory adaptation. These dimensions are not separate checklists. They reinforce one another. Improved training without better coordination will not solve delays. Better internet without document discipline will not ensure accurate reporting. Strong supervision without local learning will create dependence. Therefore, the solution must be integrated. See figure 2 and table 4.

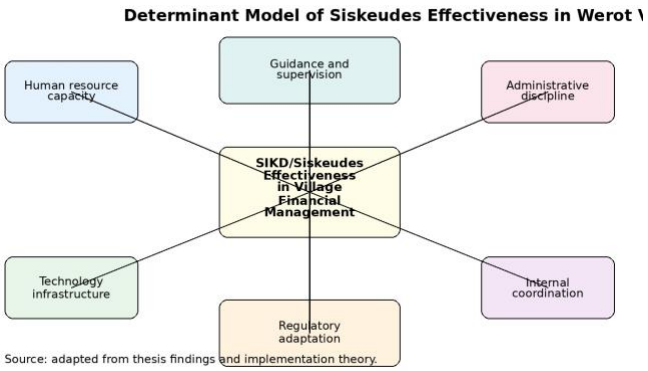

Figure 2. Determinant model of Siskeudes effectiveness based on article findings.

Table 4. Discussion matrix linking findings, theory, and implications

Finding	Interpretive theory	Meaning for Werot Village	Strengthening direction
Software is used but effectiveness is partial	Socio-technical MIS (OBrien & Marakas, 2010)	Digital tool exists, but organizational readiness is incomplete	Align people, procedures, technology, and data
Operator-centered practice	Management and systems theory	Knowledge is not yet institutionalized	Distribute roles and train multiple users
Late reports and repeated corrections	Control function (Terry, 2011)	Monitoring is more corrective than preventive	Periodic internal verification
Transparency not fully public-facing	Public service quality theory	Reports are available but not always understandable	Prepare citizen-friendly financial summaries
Difficulty adapting to new rules	Organizational change (Lewin, 1951)	New routines are not yet stabilized	Create regulatory update notes and mentoring

The findings also have broader relevance beyond Werot Village. Many Indonesian villages face similar challenges in adopting digital financial systems. The problem is not resistance to technology alone, but a gap between regulatory expectations and local capacity. Villages are expected to implement standardized systems, but their human resources, infrastructure, and administrative culture vary widely. The Werot case shows why digital village governance should be supported by differentiated assistance based on local conditions.

A final discussion point concerns the meaning of effectiveness itself. Effectiveness should not be measured only by whether the application is installed or whether reports can be printed. It should be measured by whether the system improves timeliness, accuracy, transparency, accountability, coordination, and decision making. By this broader standard, Siskeudes in Werot Village is moderately effective but not yet optimal. It has created a foundation for better governance, but additional institutional strengthening is required before it can function as a mature digital governance system.

Proposed Strengthening Strategy

Based on the findings and discussion, an integrated strengthening strategy is proposed. The first pillar is continuous capacity building. Werot Village should develop a practical learning agenda for all officials involved in financial management. Training should include not only the operator but also the village head, secretary, planning officer, activity implementers, and financial officer. The objective is to reduce dependence on one person and build shared understanding of the financial cycle.

The second pillar is infrastructure strengthening. The village should ensure that computers, printers, data storage, and internet access meet minimum operational standards. Backup procedures should be established so that data are not lost and reporting can continue when technical problems occur. The district government can support this pillar by mapping infrastructure gaps across villages and prioritizing digital governance support for villages with unstable connectivity.

The third pillar is administrative discipline and workflow redesign. Every transaction should have a clear document pathway from activity implementation to financial entry. The village should

set internal deadlines before official deadlines. Supporting evidence should be submitted immediately after activities are completed. The secretary should conduct periodic internal verification so that errors are not accumulated at the end of the reporting period.

The fourth pillar is stronger coordination. Siskeudes should be understood as a collective governance system. Monthly coordination meetings can be used to review budget realization, pending documents, input problems, and regulatory updates. These meetings should not be ceremonial; they should produce action lists that assign responsibility to specific officials.

The fifth pillar is contextual guidance and supervision. Subdistrict and district actors should provide hands-on assistance using real Werot Village data. Mentoring should focus on the most frequent errors, changes in regulation, report correction, and transparency practices. Assistance should be preventive and developmental, not only evaluative and punitive.

The sixth pillar is public transparency. Reports generated through Siskeudes should be simplified into citizen-friendly information boards or village meeting presentations. The community needs to understand not only how much money was spent, but what programs were funded, what benefits were produced, and what challenges remain. This will help connect digital financial administration with participatory village governance. See table 5.

Table 5. Integrated strengthening strategy for SIKD/Siskeudes effectiveness

Pillar	Main action	Responsible actors	Expected output	Expected outcome
Capacity building	Regular practical training using real Werot data	Village government, district, assistants	More officials able to use and understand Siskeudes	Reduced dependence on one operator
Infrastructure	Improve computer, printer, backup, internet access	Village and district government	Stable technical environment	Faster input and reporting
Workflow discipline	Set internal deadlines and document checklist	Village secretary and finance team	Complete evidence before input	Fewer corrections
Coordination	Monthly financial governance meeting	Village head and all financial actors	Shared problem list and follow-up	Collective accountability
Supervision	Hands-on mentoring and preventive verification	Subdistrict, district, assistants	Early error detection	More timely reports
Transparency	Simplified public financial information	Village government and BPD	Information boards and community explanation	Higher public trust

Research Contribution and Practical Implications

The research has an important conceptual implication for the study of digital governance in small local institutions. It shows that the effectiveness of a public sector information system should not be reduced to technical availability or formal compliance. In many village administrations, the

application may already exist and reports may be generated, but institutional effectiveness remains weak when the system is not embedded in daily routines. Therefore, future studies of village digitalization should examine the relationship between technology adoption, organizational learning, and accountability culture.

For public administration theory, the Werot Village case confirms that information systems function as administrative infrastructure. They are comparable to roads in physical development: they connect actors, data, decisions, and accountability channels. If the infrastructure is weak, the flow of information becomes slow and fragmented. If the infrastructure is strong but users are not trained, the system remains underutilized. This interpretation broadens the meaning of infrastructure from physical devices to include procedures, skills, and institutional norms.

For village government practice, the most important implication is that financial information management must become a collective responsibility. The operator should not be treated as the only person responsible for the success or failure of Siskeudes. The village head provides leadership, the secretary coordinates documents, the financial officer records cash movement, the planning officer prepares program data, and activity implementers provide evidence. When all actors understand this chain, the application can become an integrator of work rather than a burden placed on one technical user.

The findings also suggest that capacity building should be redesigned. Formal training is often too general and too far from the actual problems faced by village officials. A more effective model would use case-based learning. Officials should practice entering real APBDes data, correcting common mistakes, preparing transaction evidence, and generating reports under the guidance of experienced facilitators. This approach would make training more practical, measurable, and relevant to the village context.

Another practical implication concerns internal control. Siskeudes should be used not only at the end of the year but throughout the fiscal cycle. Monthly or quarterly internal review can help identify incomplete documents, incorrect input, delayed activities, and budget deviations. This preventive control mechanism would reduce the accumulation of errors near reporting deadlines. It would also make the village secretary and village head more aware of financial progress before external verification takes place.

The study also has implications for community transparency. Siskeudes produces technical reports, but citizens need information that is easier to understand. The village government can convert system outputs into simple public summaries, such as budget allocation by sector, percentage of realization, activities completed, activities delayed, and remaining budget. Such information can be shared through village meetings, information boards, and community groups. In this way, digital financial administration can support participatory governance rather than remain an internal bureaucratic tool.

For subdistrict and district governments, the study highlights the need for differentiated supervision. Villages do not have the same level of readiness. Some have stronger operators and better internet, while others face serious capacity constraints. A uniform supervision model may not be sufficient. The district should map village readiness and provide more intensive assistance to villages with weak infrastructure, frequent reporting errors, or high dependence on one operator. This would make guidance more equitable and effective.

The research also points to the importance of knowledge management. Every village should document common Siskeudes problems and their solutions. A simple internal manual or logbook can record frequent input errors, steps for correction, updated regulations, and contact persons for

technical assistance. This would help preserve organizational knowledge even when staff change. Without such documentation, the village risks losing practical knowledge whenever an operator is transferred or replaced.

In relation to regulatory adaptation, the findings show that changes in rules should be accompanied by clear operational translation. A new regulation should not only be distributed as a document. It should be translated into practical guidance: which form changes, which budget item is affected, what menu in Siskeudes must be adjusted, and what deadline must be followed. This operational translation is essential because many village officials do not work with legal texts every day; they work with forms, evidence, and system menus.

Finally, the case of Werot Village suggests that effective digital governance is gradual. The village has already moved from purely manual administration toward a more structured system. The next stage is institutionalization. This means developing stable routines, shared competence, preventive control, transparent communication, and continuous learning. When these elements become part of everyday village administration, Siskeudes will no longer be viewed as an external requirement, but as a normal and useful instrument for governing public money responsibly.

A further implication concerns the relationship between financial data and village development planning. If the data in Siskeudes are timely and accurate, the village can evaluate whether development priorities are supported by real financial capacity. This makes the system useful not only for accountability after spending, but also for improving future planning. In Werot Village, this potential has not been fully realized because the system is still strongly associated with reporting. Strengthening the planning use of financial data would help connect APBDes realization with the quality of public programs.

The study also shows that digitalization may reproduce existing administrative weaknesses when it is introduced without organizational reform. A manual system with weak document discipline can become a digital system with late input and repeated corrections. Therefore, technology should be introduced together with reform of work habits. Officials need clear checklists, internal deadlines, document storage standards, and responsibility maps. These simple managerial tools can make a major difference because they transform digitalization from an application-based project into a governance routine.

The implication for leadership is equally important. Village heads and secretaries must act as champions of digital financial governance. They do not need to master every technical menu, but they must understand the logic of the system, monitor deadlines, require complete evidence, and encourage other officials to learn. Leadership commitment can reduce the perception that Siskeudes is only an operator's task. When leaders consistently ask for data-based reports, staff will gradually treat the system as part of decision making.

There is also a methodological implication. Qualitative research is especially useful for studying public sector information systems at the village level because many implementation problems are hidden behind formal reports. A quantitative report may indicate that a village has submitted documents, but interviews can reveal delays, stress, dependence on one operator, unstable internet, and repeated corrections. The article therefore demonstrates the value of combining interviews, observation, and documentation when evaluating the real effectiveness of digital governance tools.

For future policy design, the study suggests that system developers and regulators should consider user experience in small village offices. Menus, codes, and reporting formats must remain aligned with regulation, but guidance should be written in practical language. Help features, error

warnings, and examples would make the system easier to use for non-specialist users. The more intuitive the system becomes, the lower the dependence on external correction and the higher the chance that village officials will use it confidently.

In a broader sense, the Werot Village case reminds us that accountability is not a single report but a chain of responsibility. It begins with planning based on community needs, continues through disciplined budgeting and spending, and ends with reporting that can be verified and understood. Siskeudes can strengthen each link in this chain, but only when the human, technical, and institutional elements operate together. This is the central lesson of the article and the main contribution of the present article.The article also implies that evaluation of Siskeudes should be repeated periodically. Effectiveness is not a fixed condition because village officials, regulations, technology, and development priorities change. A yearly evaluation can identify whether training has improved skills, whether reports are submitted faster, whether document errors decline, and whether citizens receive clearer financial information. Such periodic evaluation would make system improvement evidence-based and prevent the village from assuming that implementation is complete simply because the application is already installed.

Thus, the practical value of the article lies in its diagnostic clarity. It does not reject Siskeudes; it shows how the system can be made more effective. The main challenge is to transform a formal application into an institutional habit. This transformation requires patience, leadership, learning, and support from higher government levels.

CONCLUSION

This article shows that SIKD/Siskeudes has contributed to a more structured, standardized, and traceable financial administration process. It helps the village move away from manual reporting and provides a formal basis for planning, budgeting, administration, reporting, and accountability. Nevertheless, the system has not yet been fully effective. The main symptoms are delayed data entry, administrative errors, late reports, repeated corrections, limited transparency to the community, and dependence on the technical capacity of a small number of users. The inhibiting factors are interconnected: limited human resource capacity, inadequate technology infrastructure, weak administrative discipline, insufficient internal coordination, uneven guidance and supervision, and difficulty adapting to regulatory change. The main conclusion is that Siskeudes effectiveness is not determined by software availability alone. It is determined by the readiness of the village organization to use the system as a collective governance instrument. For Werot Village, strengthening must focus on continuous training, infrastructure support, workflow discipline, coordination, contextual assistance, and citizen-oriented transparency. When these elements are improved together, Siskeudes can become not only an administrative tool but a foundation for good village financial governance.

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