

Research Article

## The Role of the SIKSDA Application (Regional Financial Information System) in Enhancing the Efficiency of Financial Recording and Reporting in Sidoarjo Regency

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**Abstract.** This study examines the role of the Regional Financial Information System application (SIKSDA) in improving the efficiency of financial recording and reporting in Sidoarjo Regency, East Java. Local governments are increasingly required to manage public funds quickly, accurately, and accountably, yet manual administrative practices remain a source of recording errors and reporting delays. Using a descriptive qualitative approach, data were collected through semi-structured interviews with staff of the Regional Financial and Asset Management Agency (BPKAD), direct observation of the system in use, and analysis of related budget and reporting documents. The findings indicate that SIKSDA shortens the financial recording cycle by automating transaction entry, integrating data across regional work units, and minimising duplication and arithmetic errors that previously occurred in manual bookkeeping. In the reporting dimension, the system accelerates the preparation of accountability reports, enables real-time monitoring of budget realisation, and improves the consistency between planning, execution, and reporting documents, thereby strengthening transparency and accountability. Nevertheless, the efficiency gains are not yet optimal because of limited technically skilled human resources, uneven supporting infrastructure, and the persistence of manual work habits. The study concludes that SIKSDA functions not merely as an administrative tool but as a strategic instrument of good public financial governance. It recommends continuous training, strengthening of technical infrastructure, and bureaucratic reform so that the efficiency potential of the system can be fully realised. The novelty of this study lies in its specific focus on recording and reporting efficiency at the operational level of a single regency, complementing prior research that emphasises transparency and accountability more broadly.

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### 1. Introduction

Sound public financial governance is a fundamental prerequisite for ensuring that state resources at the regional level are managed efficiently, effectively, and accountably. The processes of budgeting, recording, disbursement, and financial reporting must be conducted transparently so as to support accurate planning and decision-making. Within the context of regional autonomy, the quality of financial recording and reporting constitutes an important indicator of local government performance, as it determines the speed, accuracy, and reliability of the information presented to stakeholders (Dewi et al., 2019). Where recording is still performed manually, the risks of arithmetic errors, data duplication, and delays in the preparation of reports are considerable, thereby impeding the efficient use of the budget.

Advances in information technology have driven a shift in public administration from conventional mechanisms towards electronic services (e-government). The adoption of technology in the public sector is widely held to enhance the efficiency, effectiveness,



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transparency, and accountability of governance (Mensah et al., 2022; Aleisa, 2024). Indeed, the public value of e-government is determined by the extent to which a system is able to deliver efficient and responsive services, rather than merely by the availability of the technology itself (Rodriguez Muller et al., 2024). Digital transformation does not, however, automatically yield positive outcomes; in the context of developing countries, inadequate technological maturity may even diminish the quality of accounting information systems if it is not accompanied by organisational readiness (Hamdy et al., 2025).

The success of a financial information system cannot be separated from the quality of the system, the quality of the information, and the quality of the service, which together determine the level of use and the net benefits accruing to the organisation (DeLone & McLean, 2003). Users' acceptance of technology is likewise shaped by performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003). Furthermore, the benefits of technology do not inhere in the device itself but are constituted through the day-to-day practices of public officials (Orlikowski, 2000). The recording and reporting efficiency promised by digitalisation therefore depends heavily on how the system is actually operated within bureaucratic routines.

A range of studies on Integrated Financial Management Information Systems (IFMIS) across several countries indicates that financial digitalisation can strengthen the transparency and accountability of budget management (Ogbuabor et al., 2019), improve budgeting management (Kinyondo et al., 2019), and bring greater order to public procurement processes (Onakoya et al., 2021). In Indonesia, the implementation of the Regional Government Information System (SIPD) and comparable systems has been shown to assist the synchronisation of planning and reporting data, although their effectiveness remains constrained by human resource capacity and infrastructure (Daud et al., 2025; Purwati et al., 2025). These findings reveal a consistent pattern: the efficiency potential of financial information systems is frequently held back by non-technological factors.

Sidoarjo Regency has implemented the Regional Financial Information System application (SIKSDA) as part of its efforts to improve the quality of regional financial management. The system is expected to accelerate and bring greater order to the recording of transactions and the preparation of financial reports by the regional work units. Most prior studies, however, have placed greater emphasis on the dimensions of transparency and accountability in general terms (Jannah et al., 2025), whereas the question of the extent to which SIKSDA genuinely enhances recording and reporting efficiency at the operational level has not yet been explored in any depth. It is this gap that forms the focus of the present study.

In light of the foregoing, this study aims to analyse the role of the SIKSDA application in enhancing the efficiency of financial recording and reporting in Sidoarjo Regency, to identify its enabling and inhibiting factors, and to formulate strategic recommendations for the local government. The contribution of this study lies in its specific focus on the efficiency of the recording and reporting processes within a single regency, thereby complementing a body of literature that has hitherto been concerned more broadly with transparency and accountability. The remainder of the article presents the literature review, the research methods, the results and discussion, and finally the conclusions and recommendations.

## 2. Literature Review

### **The Regional Financial Information System and Digital Transformation in the Public Sector**

A Regional Financial Information System is a system that organises the collection, processing, storage, and reporting of financial data in an integrated manner to produce accurate and timely information for decision-makers in regional government. According to Government Regulation No. 56 of 2005, such a system serves to record, manage, and process regional financial data so that this data may be presented to the public and used as a basis for planning, execution, and accountability reporting. Digital transformation in the public sector entails not merely the replacement of manual tools with electronic ones, but also changes in work processes, organisational structures, and bureaucratic culture (Edelmann et al., 2023).

The use of technologies such as centralised databases, cloud computing, and data analytics enables financial information to be managed more rapidly and in a manner that is integrated across units (Hashem et al., 2015). The success of such systems, as explained in the

information systems success model, is determined by system quality, information quality, and service quality, which ultimately lead to user satisfaction and net benefits (DeLone & McLean, 2003). In the context of electronic government services, user satisfaction with service quality is a principal determinant of successful adoption (Skordoulis et al., 2017; Mensah & Mwakapesa, 2023). The SIKSDA application in Sidoarjo Regency represents one manifestation of these principles at the regency level.

### **The Efficiency of Financial Recording and Reporting**

Efficiency in the context of public finance refers to the capacity to produce appropriate administrative outputs while making more economical use of time, effort, and cost. Efficient financial recording is characterised by the automation of transaction entry, the reduction of manual errors, and the integration of data across work units, whereas efficient reporting is characterised by the speed with which reports are prepared, the consistency of the data, and the ease of tracing and auditing (Dewi et al., 2019). Information-technology-based systems allow expenditures and receipts to be recorded automatically and linked directly across units, thereby reducing manual errors and accelerating reporting.

Studies of IFMIS confirm that integrated systems accelerate reporting and strengthen budgetary control (Kinyondo et al., 2019; Onakoya et al., 2021). Several studies, nonetheless, caution that efficiency benefits may fail to materialise where user capacity is low or infrastructure is inadequate (Hamdy et al., 2025). In other words, efficiency is not solely a function of technology but rather the product of the interaction between technology, people, and governance (Orlikowski, 2000; Venkatesh et al., 2003).

### **Public Financial Governance and Good Governance**

Public financial governance encompasses all the rules, processes, and institutions that ensure the planning, budgeting, execution, reporting, and oversight of public funds proceed in accordance with development objectives and the prevailing regulations. The principle of good governance requires that every process of financial management be conducted in an open and accountable manner that prioritises the public interest. Transparency and accountability underpinned by information systems have been shown to improve the quality of financial management and to enhance public trust (Jannah et al., 2025; Biancone et al., 2016).

The strengthening of governance is also bound up with the quality of internal audit and oversight (Gamayuni, 2018), as well as with efforts to curb indications of corruption through accountable fiscal decentralisation (Saputra & Setiawan, 2021). Within this framework, the recording and reporting efficiency generated by SIKSDA is not merely of administrative value but also serves as a foundation for better public financial governance and, in turn, for the creation of public value (Rodriguez Muller et al., 2024; Mensah et al., 2022).

## **3. Research Methods**

This study employs a descriptive qualitative approach to develop an in-depth understanding of the role of the SIKSDA application in enhancing the efficiency of financial recording and reporting in Sidoarjo Regency. A qualitative approach was chosen because it permits the exploration of the experiences, views, and perceptions of those who implement the system and experience its effects in the management of regional finances. The research site is the Regional Financial and Asset Management Agency (BPKAD) of Sidoarjo Regency, which carries out the functions of administering and reporting regional finances.

Data were collected by means of three techniques. First, semi-structured interviews were conducted with BPKAD staff who operate SIKSDA to elicit the benefits and challenges of using the system. Second, direct observation was carried out of the process of recording transactions and preparing reports using the application. Third, document analysis was undertaken, covering budget documents, realisation reports, and related accountability reports. Source triangulation was applied by comparing the results of the interviews, the observations, and the documents in order to enhance the validity of the findings.

Data analysis was conducted interactively through the stages of data reduction, data display, and the drawing of conclusions. The efficiency indicators employed were drawn from the literature, namely the speed of the process, the reduction of errors, the integration of data, and the ease of reporting and auditing (DeLone & McLean, 2003; Dewi et al., 2019). Using

this framework, the field findings were interpreted to assess the extent to which SIKSDA contributes to the efficiency of financial recording and reporting.

#### **4. Results and Discussion**

##### **Implementation of SIKSDA in Sidoarjo Regency**

The Government of Sidoarjo Regency uses the SIKSDA application as an integrated financial information system for managing the budgeting, administration, and financial reporting activities of the regional work units. The application is accessed online and serves as the backbone of regional financial administration. Its adoption is consistent with the mandate for the operation of regional financial information systems set out in national regulation, which positions the system as a basis for planning, execution, and accountability reporting. As has been found in the implementation of similar systems in other regions, the success of implementation is strongly influenced by the commitment of leadership, the involvement of all agencies, and the capacity of users (Sihotang et al., 2024; Daud et al., 2025).

The observation indicates that the readiness for the digitalisation of financial reporting within the Sidoarjo environment is comparatively good, although technical obstacles are still encountered. This pattern is consistent with studies of the SIPD in several regions, which found that the system effectively improves the synchronisation of planning and reporting data but encounters constraints relating to servers, operator capacity, and infrastructure (Purwati et al., 2025).

##### **Improving the Efficiency of Financial Recording**

In the recording dimension, SIKSDA has demonstrably shortened a work cycle that was previously lengthy and prone to error. Transaction entry, which was formerly performed manually, is now automated and stored in a centralised database, so that data duplication and arithmetic errors can be curtailed. Integration across work units allows financial data to flow directly without the need for re-entry, which translates into savings in time and effort. These findings are in line with the information systems success model, which holds that system quality and information quality drive net benefits in the form of increased productivity (DeLone & McLean, 2003), as well as with studies showing that integrated systems improve the accuracy of public financial recording (Ogbuabor et al., 2019).

The efficiency of recording is also reflected in the reduction of repetitive administrative work. Officials are able to redirect time away from clerical activities towards analytical ones, such as the monitoring of budget realisation. This confirms that the benefits of technology are realised through patterns of use embedded in work routines (Orlikowski, 2000). The degree of efficiency achieved, however, depends on users' acceptance of the system; where performance expectancy and facilitating conditions are met, the intensity of use increases and efficiency becomes more apparent (Venkatesh et al., 2003).

##### **Improving the Efficiency of Financial Reporting**

In the reporting dimension, SIKSDA accelerates the preparation of accountability reports because the data are stored in an orderly and structured manner and can be retrieved quickly. A process that was formerly time-consuming and error-prone has become more concise, so that reports can be submitted on time in accordance with the regulations. The system also enables the real-time monitoring of budget realisation, allowing leaders to make decisions that are both more timely and more accurately targeted. The ease of tracing data further simplifies the processes of audit and oversight. This pattern supports the finding that integrated systems improve budget management and control (Kinyondo et al., 2019) and enhance the quality of information in local government financial reports (Dewi et al., 2019).

The improvement in reporting efficiency has a direct bearing on transparency and accountability. The rapid and integrated presentation of financial data makes it easier for the public and oversight bodies to obtain budget information, so that the use of funds can be more readily accounted for (Jannah et al., 2025; Biancone et al., 2016). The reporting efficiency generated by SIKSDA thus strengthens public trust and closes off opportunities for irregularity, in keeping with efforts to curb indications of corruption through accountable management (Saputra & Setiawan, 2021; Gamayuni, 2018).

##### **Enabling and Inhibiting Factors of Efficiency**

The analysis shows that the efficiency achieved by SIKSDA does not stand alone but is influenced by a number of factors. The principal enabling factors include the commitment of leadership, sound communication among staff, the availability of adequate resources, a positive attitude on the part of officials, and a clear organisational structure. Conversely, the inhibiting factors comprise a shortage of skilled personnel, the persistence of manual work habits, technical disruptions, and supporting infrastructure that remains unevenly distributed. These factors are consistent with the literature on e-government adoption and digital transformation in the public sector (Aleisa, 2024; Sihotang et al., 2024; Hamdy et al., 2025). A summary of the factors is presented in Table 1.

**Table 1.** Enabling and inhibiting factors of recording and reporting efficiency in SIKSDA.

Enabling Factors	Inhibiting Factors
Commitment of leadership and involvement of all agencies	Shortage of skilled personnel and technological literacy
Smooth communication among staff	Persistence of manual work habits
Availability of resources and clear authority	Technical and network disruptions
Positive attitude of officials and an appropriate organisational structure	Unevenly distributed technological infrastructure

Source: compiled from the results of interviews, observation, and document analysis (2025).

### Implications for Governance and Regional Development

Taken as a whole, the improvement in recording and reporting efficiency through SIKSDA has implications for better public financial governance. Budgets that are managed rapidly, accurately, and transparently make possible development planning that is more accurately targeted and the execution of programmes that is more efficient. An open and accountable bureaucratic environment also has the potential to attract investment and to stimulate regional economic growth (Mensah et al., 2022; Rodriguez Muller et al., 2024). SIKSDA therefore functions not only as an administrative tool but also as a strategic instrument of development grounded in sound financial governance. For these benefits to be sustained, however, the constraints relating to human resources and infrastructure need to be addressed in a systematic manner (Hamdy et al., 2025; Purwati et al., 2025).

### 5. Conclusion

This study concludes that the SIKSDA application plays an important role in enhancing the efficiency of financial recording and reporting in Sidoarjo Regency. In the recording dimension, the system automates transaction entry, integrates data across units, and curtails manual errors, so that the process becomes faster and more accurate. In the reporting dimension, the system accelerates the preparation of accountability reports, enables the real-time monitoring of budget realisation, and facilitates audit and oversight, which ultimately strengthens transparency and accountability.

Nevertheless, the efficiency achieved is not yet optimal, owing to a shortage of skilled personnel, the persistence of manual work habits, technical disruptions, and unevenly distributed infrastructure. The success of SIKSDA therefore requires support in the form of continuous training, the strengthening of technological infrastructure, and bureaucratic reform. This study is limited to a single regency and adopts a qualitative approach, so its findings cannot be widely generalised. Future research is advised to employ a quantitative approach or a comparative study across regions in order to measure the magnitude of the efficiency gains more objectively, as well as to examine the role of leadership and change management in the successful implementation of the system.

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