ENHANCING TRANSPARENCY AND ACCOUNTABILITY THROUGH DIGITALIZATION: A CASE STUDY ON THE USE OF THE E-SIAP BOS APPLICATION IN BOS FUND MANAGEMENT

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Abstracts: *This study investigates the influence of digitalization on the management of School Operational Assistance (BOS) funds to enhance the efficiency and accountability of financial reporting in the education sector. The research focuses on the effectiveness of technologies, such as the e-SIAP BOS application, in addressing public fund management challenges, including reporting delays, data inaccuracies, and transparency issues. Employing a qualitative approach, the study analyzes the implementation of digitalization by collecting data through in-depth interviews with key stakeholders and examining official documents. The findings indicate that digitalization significantly improves the speed and accuracy of financial reporting, enhances transparency and accountability, and ensures compliance with regulations. Proper implementation of digital technology is expected to enhance public financial management and foster public trust in government fund oversight. As a qualitative study, the data analysis utilized the interactive model of data analysis proposed by Miles and Huberman (1992), providing a comprehensive understanding of the observed phenomena.*

Kata Kunci: *Digitization, BOS Fund Management, Financial Efficiency, Public Accountability, Financial Reporting*

1. Introduction

The advancement of information technology has greatly influenced various sectors, especially the public sector, with a particular focus on financial management. A notable innovation is the digital transformation in managing School Operational Assistance Funds (BOS), aimed at improving efficiency, effectiveness, and accountability in public fund management. Public accountability refers to the responsibility of entrusted individuals (agents) to report, present, and disclose all activities under their supervision to the principals who have the right to request such accountability. In the context of BOS fund management, digitalization is a vital tool for achieving this objective, as it necessitates strict oversight and high levels of accountability to ensure appropriate utilization of the funds.

Previous studies indicate that, despite clear regulations outlined in the Minister of Home Affairs Regulation No. 24 of 2020 regarding BOS Fund Management, the implementation across various regions, including Tojo Una-Una, continues to encounter challenges. Audit reports frequently highlight discrepancies in BOS fund reporting that require improvement and follow-up, primarily due to manual processes that increase the risk of human error, impacting the reliability of financial statements.

According to the New Public Management concepts proposed by Osborne and Gaebler (1992), this approach emphasizes efficiency, innovation, and results-oriented management within the public sector, which is pertinent to the challenges in regional financial management and delays in the issuance of expenditure approval documents. Digitalization has the potential to tackle these issues by offering an integrated, accessible system, expediting verification processes, and enhancing the quality of BOS fund reporting. Furthermore, implementing digitalization in BOS Fund Management is one of the follow-up actions recommended by audit reports to strengthen BOS Fund Management. This aligns with research conducted by Furqan et al. (2020), which indicates that a higher level of audit follow-up correlates with better accountability in government financial reporting, as evidenced by improved audit opinions.

However, the implementation of digitalization in BOS Fund management faces obstacles. A significant challenge is the readiness of human resources (HR) at the school level to operate digital systems effectively. Many school fund managers lack the necessary technical skills to utilize digital technology efficiently. Rogers' (2003) diffusion of innovation theory explains that the diffusion of technological innovations involves communication processes that mitigate uncertainty and address social problems. The success of adoption relies on users' capacity to understand and accept the technology. Additionally, data security is a crucial aspect of BOS Fund digitalization, governed by the Electronic Information and Transactions Law No. 11 of 2008, which regulates the legal, security, and data protection dimensions in electronic transactions. This law aims to establish a clear legal framework for internet usage and digital technology in Indonesia while safeguarding user rights and stipulating sanctions for violations in electronic transactions.

This research aims to assess the implementation of digitalization in BOS Fund management in Tojo Una-Una using a qualitative approach. The analysis is expected to deepen the understanding of how digitalization can enhance the efficiency and accountability of financial reporting and identify strategies to optimize the use of digital technology. With an integrated digital system, each financial transaction can be accurately recorded, and changes can be tracked in real-time, thereby increasing transparency and minimizing the potential for discrepancies. This research is anticipated to make a significant contribution to understanding and implementing digitalization in BOS Fund management, supporting local government efforts to improve financial governance and strengthen public trust.

2. Research Method

This study employs a qualitative approach to evaluate the use of digitalization in managing School Operational Assistance (BOS) funds in Tojo Una-Una Regency. The qualitative descriptive research aims to gather detailed and current data, identify various issues, conduct evaluations or comparisons, and understand the actions taken by others facing similar challenges. By examining their experiences, this research intends to support future planning and decision-making processes (Suyanto & Sutinah, 2006).

The data analysis was conducted using the interactive qualitative analysis model developed by Miles and Huberman. The analysis process consists of data collection, data reduction to filter and simplify relevant data, data presentation in a narrative format with images and tables to provide a clear overview, and drawing conclusions accompanied by verification to ensure the accuracy of the research findings.
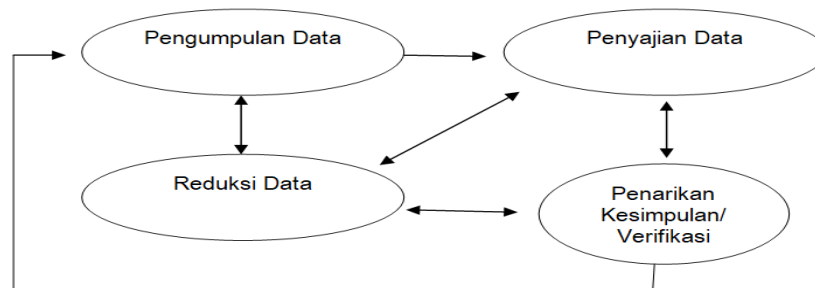

Figure 1. Interactive Model of Data Analysis
Source: Qualitative Data Analysis, Miles and Huberman (1992)

SWOT analysis is a comprehensive evaluation encompassing the strengths, weaknesses, opportunities, and threats faced by an organization (Kotler & Armstrong, 2008:64). In other words, the SWOT method is used to assess internal resources' strengths and weaknesses, as well as external opportunities and challenges (Hartono, 2005:46). Furthermore, according to Sitti Aminah et al. (2019), SWOT analysis provides a descriptive overview of the strategies employed by various stakeholders in decision-making regarding current and future facilities. This analysis includes the assessment of internal and external qualities, as well as the indicators used to evaluate the success of management in achieving their vision and mission. This aligns with the SWOT analysis framework based on the New Public Management approach introduced by Richard Osborne and Gaebler (1992), which emphasizes efficiency, innovation, and results orientation in public sector management.

Additionally, this study refers to the regulations outlined in the Ministry of Home Affairs Regulation No. 24 of 2020, which governs the management of BOS funds at the local government level. This regulation is an important reference for analyzing how digitalization can meet legal and regulatory requirements and how stakeholders can leverage digital technology to enhance transparency and accountability.

Data collection for this study was conducted through in-depth interviews with various stakeholders involved in managing BOS funds, including local government officials, school principals, school treasurers, and other relevant parties. In-depth interviews allowed the researcher to gather rich, contextual information about the informants' experiences and perceptions regarding the digitalization of BOS fund management. Additionally, secondary data from official documents, financial reports, and related regulations were used to support the analysis (Yin, 2009).

3. Results and Discussions

The digitalization of School Operational Assistance (BOS) fund management is crucial for expediting the preparation of financial reports to ensure greater accuracy and timeliness. By implementing digital technologies such as the e-SIAP BOS (Electronic School Operational Assistance Reporting System) innovation, the financial reporting process becomes more efficient and accurate compared to manual methods. Digitalization allows many processes, previously done manually, to be automated—from data collection and transaction recording to financial report generation. This automation reduces the human errors often found in manual data entry and calculations, enabling financial reports to be prepared more quickly and accurately. Moreover, a digital system allows for real-time data consolidation, minimizing delays in report preparation.

Digital technology also facilitates automatic data verification and the detection of errors or inconsistencies in financial data. With validation features built into financial software, data entries can be checked and corrected immediately if errors are found, ensuring that financial reports are accurate and timely according to applicable accounting standards. An integrated digital system allows real-time

access to financial data by authorized parties such as auditors and the Regional Financial and Asset Management Agency (BPKAD). This access simplifies direct monitoring and evaluation, ensuring that every transaction can be tracked and analyzed promptly. Such transparency not only enhances accountability but also accelerates the reporting process, as all financial information is readily available in the system.

The e-SIAP BOS application is designed to streamline the management of School Operational Assistance funds more efficiently and systematically. Users can begin by entering their username, password, and the appropriate fiscal year to access the main dashboard. Within the dashboard, users will find various features and menus that allow them to manage financial data in an integrated manner, including transaction recording, report verification, and real-time fund allocation tracking.

Figure 1: e-Siap BOS Dashboard Menu

The "Organizational Parameters" menu in the e-SIAP BOS application simplifies user access and management of detailed organizational structure data. The "Detail" feature allows users to navigate down to the sub-unit level, displaying relevant tables for each organizational layer. The "General Data" option within sub-units facilitates the entry or updating of key information, such as addresses, names, employee identification numbers (NIP), positions, and photos of personnel, ensuring that organizational data is both complete and accurate. This feature enhances data management efficiency with structured and user-friendly navigation.

The report input and verification process in the e-SIAP BOS application plays a crucial role in maintaining accuracy and transparency in school financial management. By selecting the organization, organizational unit, and sub-unit, the Principal can review and check the reports uploaded in detail. This feature allows downloading and printing of reports in PDF format for audit purposes, and enables the Principal to reject reports requiring revisions, along with reasons for the rejection that must be addressed by the Treasurer. Once the Principal approves a report, its status changes to "approved," ready for verification by the SKPD team. This process ensures that each reporting step is traceable and accountable, supporting enhanced transparency and accountability in school fund management while ensuring compliance with applicable regulations.
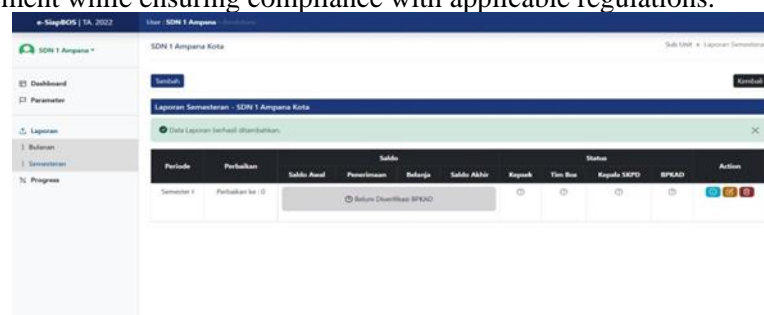

Figure 2: e-SIAP BOS Verification Menu

To ensure transparency and accuracy in financial reporting, the e-SIAP BOS application includes a feature that allows the Principal to view reports in PDF format, which can be directly downloaded and printed. This process enables the Principal to conduct a thorough review of each type of uploaded report. Furthermore, the accountability reports for the BOS funds can be verified by the Regional Financial and Asset Management Agency (BPKAD) to ensure compliance with regulations. The

process concludes with the issuance of a Spending Approval Letter (SPB) that records all verified transactions, thereby maintaining the integrity and accountability of school fund management.

Figure 3: e-SIAP BOS Report Menu

This research employs a qualitative approach with SWOT analysis to gain an in-depth understanding of how digitalization can enhance the efficiency and accountability of financial reporting in the management of School Operational Assistance Funds (BOS). By identifying the elements of strengths, weaknesses, opportunities, and threats in the implementation of digitalization, appropriate strategies can be formulated to maximize the use of digital technology in managing BOS funds. This is expected to contribute to achieving more transparent and accountable financial management.

The digitalization of BOS fund management through the e-SIAP BOS application presents several strengths, weaknesses, opportunities, and threats. The main strength of this digitalization is the improved efficiency of financial reporting processes, which become faster and timelier due to the automation of data collection, transaction recording, and report preparation. This automation also reduces the risk of human error, thereby enhancing the accuracy of financial reports. Furthermore, the e-SIAP BOS application allows for greater transparency by providing real-time data access to authorized parties, such as auditors and the Regional Financial and Asset Management Agency (BPKAD), facilitating direct monitoring and evaluation, which in turn increases accountability in financial management.

Figure 4: Socialization of e-Siap Bos Utilization

However, there are certain weaknesses in implementing this application, such as reliance on adequate technology and infrastructure. Without a stable internet connection and proper hardware, the application may not function optimally. Additionally, intensive training for users is necessary to ensure they can operate the system effectively, as a lack of skills or understanding of technology can diminish the application's effectiveness. Resistance to change from manual to digital methods, particularly among users who are less familiar with technology, can also be an issue.

On the other hand, this digitalization presents opportunities to improve the quality of financial management through more accurate and timely reporting, supporting transparency and accountability. There are also opportunities to develop additional features within the application, such as automated

financial analysis and deadline reminder notifications, which could enhance its functionality. Moreover, digitalization fosters improved collaboration among schools, BPKAD, and other relevant stakeholders, making the verification and monitoring of BOS funds more effective and efficient.

However, digitalization also faces threats, such as data security risks, where potential financial data breaches or cyberattacks could jeopardize the integrity and privacy of financial information in schools. Limited infrastructure in some areas poses a challenge, particularly in regions with poor internet connectivity or insufficient technological devices. Changes in government policies related to the management of BOS funds could also impact the operational aspects of the e-SIAP BOS application, necessitating swift adjustments to remain compliant with applicable regulations.

In managing the School Operational Assistance (BOS) funds, a SWOT analysis plays a crucial role in shaping strategies for various stakeholders. As highlighted by Sitti Aminah et al. (2019), this analysis not only helps evaluate internal factors, such as strengths and weaknesses, but also assesses external opportunities and threats that could influence decision-making in facility management. This comprehensive understanding aids decision-makers in developing more effective strategies, particularly in achieving transparency, accountability, and efficiency, which are the primary goals of school financial management. By leveraging SWOT analysis, schools gain a solid foundation to formulate policies responsive to emerging challenges.

Aligned with this, the implementation of information technology significantly enhances the quality of BOS fund usage reports. Tri Purwaningsih, N.K. (2024) affirms that information technology positively impacts report quality, reinforcing transparency and accountability in school financial management. This finding is supported by Basuki, G. & Ahmad, M. (2023), who noted that financial management in elementary schools has improved as school principals apply these principles from planning through reporting. Consequently, the use of technology not only facilitates data access and processing but also strengthens financial oversight, ensuring that activities align effectively with the established budget plan.

Technological innovation, such as the e-SIAP BOS platform, addresses various challenges in BOS fund management, including reporting delays and data accuracy issues. In accordance with the Minister of Home Affairs Regulation No. 24 of 2020, this innovation enables faster, real-time reporting, enhancing accountability and transparency. This also aligns with the principles of the Government Internal Control System (SPIP) outlined in Government Regulation No. 60 of 2008, providing better control over public fund usage at the school level. Through e-SIAP BOS, the government aims to strengthen internal controls, ultimately fostering public trust in school financial management.From a theoretical perspective, the implementation of e-SIAP BOS aligns with the New Public Management (NPM) concept, which emphasizes efficiency, innovation, and results in public sector management (Osborne & Gaebler, 1992). This innovation supports NPM principles by enabling local governments and schools to manage BOS funds more effectively through the use of digital technology. This is consistent with Nasrun et al. (2024), who argue that innovation can expedite processes and enhance transparency and accountability in regional financial management.

Overall, the findings of this research are expected to contribute to the literature on the digitalization of public financial management and offer practical recommendations for local governments and schools to improve the effectiveness and efficiency of BOS fund management through digital technology. Thus, e-SIAP BOS represents an innovation that not only addresses practical issues in managing BOS funds but also supports digital transformation in the education sector, enhancing administrative capacity and strengthening financial accountability at the local government and school levels.

4. Conclusions

The research demonstrates that the digitalization of School Operational Assistance Fund (BOS) management through the e-SIAP BOS application significantly enhances the efficiency and accountability of financial reporting. By automating data collection, transaction recording, and report generation, this digital system minimizes human errors and ensures timely report production. Additionally, digitalization facilitates real-time data access for stakeholders, promoting greater transparency and accountability in the management of school finances.

To achieve the primary objectives of this study, it is essential to enhance human resources (HR) through targeted training programs. These programs should cover technical skills for operating digital systems, a solid understanding of financial regulations, and proficiency in financial software. Moreover, robust technological infrastructure and data security measures are crucial for protecting sensitive financial information. Despite the limitations of this study, digitalizing BOS fund management presents significant potential for transforming financial reporting and management in educational institutions, making them more efficient, transparent, and accountable.

References

Basuki, G., & Ahmad, M. (2023). Implementasi Prinsip-prinsip Manajemen Keuangan Sekolah di SD Ar-Rahman Motik Jakarta Selatan. AS-SABIQUN, 5(4), 1005-1014

Furqan, A. C., Wardhani, R., Martani, D., & Setyaningrum, D. (2020). The effect of audit findings and audit recommendation follow-up on the financial report and public service quality in Indonesia. International Journal of Public Sector Management. Vol. 33 No.5, hal. 535–559

Hartono, Jogiyanto. 2005. Sistem informasi strategik untuk keunggulan kompetitif. Yogyakarta: Penerbit Andi Offset

Karim, S. A. H., Lahay, M., Monoarfa, Z., Adam, R. P., & Suardi, S. (2019). Pengaruh Kompetensi Aparat Desa, Komitmen Organisasi Dan Partisipasi Masyarakat Terhadap Keberhasilan Pengelolaan Keuangan Desa (Sudi Kasus Desa Buntongi Kec. Ampana Kota Kab. Tojo Una Una). Agribusiness Journal, 13(2), 18-24.

Kotler, Philip, dan Gary Armstrong. 2008. Prinsip-prinsip pemasaran jilid 1. Jakarta: Penerbit Erlangga.

Mardiasmo. (2009) Akuntansi Sektor Publik edisi kedua. Yogyakarta: Andi Yogyakarta.

Naida, N. (2024). SWOT Analysis of Digitalization Implementation in Verification Processes on the Effectiveness of Financial Management in Tojo Una-Una Regency. ARTOKULO: Journal of Accounting, Economic and Management, 1(2), 186-190.

Osborne, D., dan Gaebler, T. (1992) Reinventing Government. Reading, MA: A Plume Book.

Republik Indonesia, Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik.

-------------------, Peraturan Pemerintah Nomor 12 Tahun 2019 tentang Pengelolaan Keuangan Daerah.

-------------------, Peraturan Pemerintah Nomor 60 Tahun 2008 tentang Sistem Pengendalian Intern Pemerintah.

-------------------, Peraturan Menteri Dalam Negeri Nomor 24 Tahun 2020 tentang Pengelolaan Dana Bantuan Operasional Sekolah.

Rogers, E.M. (2003). Diffusion of Innovation: Edisi Kelima. New York: Free Press.

Suyanto, Bagong, dan Sutinah. 2006. Metode penelitian sosial. Jakarta: PT Kencana Persada.

Tri Purwaningsih, N. K. (2024). Mediasi Sistem Pengendalian Internal Terhadap Pemanfaatan Teknologi Informasi dan Transparansi Terhadap Kualitas Laporan Penggunaan Dana BOS (Doctoral dissertation, Universitas Pendidikan Ganesha).

Yin, R.K. (2009). Case Study Research Design and Methods (Edisi ke-4). Sage Publication