Implementation of The School Budget Activity Plan Application (Arkas) and The Bos Fund Management Information System on The Accountability of Bos Financial Reporting In Education Entities In Cirebon City

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ABSTRACT

The purpose of this study was to analyse the effect of ARKAS and SIMBOS application on the accountability of financial reporting of BOS funds in elementary schools in Cirebon City. We conducted this research using quantitative methods. We distributed questionnaires as part of the data collection technique. Furthermore, we will conduct validity and reliability tests on the responses to these questionnaires. We carried out the data analysis using linear regression. This research findings that the use of the School Budget Work Plan (ARKAS) application significantly influences the accountability of BOS fund use in elementary schools in Cirebon City, with better use of the ARKAS application leading to more transparent use of BOS funds. The BOS Management Information System (SIMBOS) also has a significant effect on the transparency of the use of BOS funds in public elementary schools in Cirebon City. The better the use of the ARKAS application, the more transparent the use of BOS funds.

Keywords: Accountability, Budgeting, BOS Funding, Education, Financial Report.

INTRODUCTION

School Operational Assistance (BOS) funds play a vital role in supporting the operations and improving the quality of education in Indonesia. BOS funds are designed to increase the accessibility of education by reducing the burden of education costs for parents, so that more children can attend school without financial constraints. In addition, these funds are used to support various teaching and learning activities, including the provision of books, stationery and school infrastructure improvements, all of which contribute to the creation of a conducive learning environment. The main objective of the BOS Fund is to ensure that every student receives an adequate and quality education, without discrimination based on economic conditions, and to assist schools in managing resources effectively to achieve optimal educational outcomes.

The management of BOS funds in schools faces various challenges, ranging from administrative complexities involving recording, planning, and reporting that often require an in-depth understanding of complicated financial procedures. The potential for misuse of funds is also a serious problem, with several cases found of misappropriation or inappropriate use of funds, resulting in state losses and the non-achievement of the main objectives of BOS. The lack of transparency and accountability in financial reporting makes it difficult for authorities to audit and ensure funds are used appropriately. A study by BPK in 2021 showed that 30% of schools in several regions in Indonesia experienced discrepancies in reporting the use of BOS Funds, indicating the need for an improved management system that is more accountable and transparent

to address these issues.

Each year, the government consistently updates the technical guidelines for BOS fund management, aiming to enhance its quality and decrease irregularities in the practice. However, despite these updates, irregularities still persist. Misuse of BOS funds often occurs in several educational institutions, from elementary schools to senior high schools. As happened in January, there were findings of BOS Fund corruption of Rp 1.8 million at SMK Pencawan Medan. This was due to a number of items of expenditure (expenses) that were attached to the Accountability Report, which showed that there were discrepancies with the actual facts (https://www.detik.com/ on March 15, 2024).

The government developed an application known as the School Activity and Budget Plan Application (ARKAS) to better mitigate the misuse of the BOS Fund with the aid of increasingly rapid technological advancements. ARKAS serves as a monitoring tool to ensure financial reporting accountability for the allocated budget to the entity. According to data from the Directorate General of Early Childhood Education, Basic Education, and Secondary Education (2022), there are currently 31,076 schools, out of a total of 217,620 schools receiving BOS funds, that have not registered ARKAS. This condition can be caused by the constraints of the internet network to download the application, or the absence of trained personnel to manage ARKAS in schools.

The ARKAS application, which continues to undergo various feature developments, has also caused its use to not take place optimally (Wulandari & Putri, 2022). To address this issue, the government has established a dedicated website with ARKAS-related information, including newly added features, usage guidelines, and technical problem-solving guidelines, ensuring the BOS management team in schools always has access to the most recent updates. As a result, the BOS management team in schools can easily learn the newly developed features and look for references for solutions when they experience technical problems. Ammar & Bustamam (2019), revealing effective and accountable management of BOS funds in both public and private schools. In contrast, Hakim & Suhendar (2020) found differences in public schools tended to have more effective and accountable BOS fund management than private schools. The findings from each research site suggest that the conditions of the educational institution itself influence the management of BOS funds. Therefore, the government expects that the obligation to use ARKAS as a uniform management system in all education units can become a means for the various parties involved to coordinate well (Directorate General of Early Childhood Education, Basic Education, and Secondary Education, 2022), so that the management process becomes more accountable.

Several other studies have also found that accountability positively affects the effectiveness of BOS fund management in education units (Nupus, 2021; Tanjung, Masnila, & Mubarok, 2022; Yusra, Yunita, Nurhasanah, & Arliansyah, 2021). This study introduces the influence of ARKAS on the effectiveness and accountability of BOS fund management. Previous studies, conducted during the manual management of BOS funds, revealed differences in management understanding compared to ARKAS, which promotes a uniform understanding of management. The purpose of this study was to analyse the effect of ARKAS and SIMBOS application on the accountability of financial reporting of BOS funds in elementary schools in Cirebon City.

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In the context of education in Indonesia, the existence of School Operational Assistance (BOS) funds is a strategic step by the government to improve the accessibility and quality of education. However, challenges in managing BOS funds are still a significant issue. Research by (Delfa Indah Sari, 2021) shows that accountability in managing BOS funds has a positive impact on the effective use of these funds. This emphasizes the importance of a transparent and accountable management system so that the main objectives of the BOS program can be achieved.

One of the government's initiatives to increase accountability is through the development of the ARKAS application. This application is designed to facilitate schools in carrying out budget planning and reporting in a more structured and accurate manner. According to (Putri Tanjung, Masnila, & Mubarok, 2022), implementing ARKAS has the potential to reduce errors in financial reporting and increase school administrators' understanding of procedures for using BOS funds. With ARKAS, it is hoped that every school can optimize the use of BOS funds and minimize the possibility of misuse.

However, the implementation of ARKAS is not without obstacles. Research by (Yusra et al., 2021) identified various obstacles faced by schools in using this application, including limited trained human resources and adequate technological infrastructure. Therefore, it is important for the government to continue providing technical support and training to schools so that they can make maximum use of ARKAS. In this way, management of BOS funds will not only be more effective, but also more accountable and transparent, in line with the expectations of all relevant parties.

This study presents a novel approach by analyzing the influence of both the ARKAS and SIMBOS applications on the accountability of School Operational Assistance (BOS) fund financial reporting in elementary schools in Cirebon City. The uniqueness of this research lies in the combined exploration of these two applications, which has not been extensively addressed together in previous studies. Most prior research has focused on the effectiveness of either ARKAS or SIMBOS individually, without investigating the synergy between the two in improving the accountability and effectiveness of BOS fund management. Additionally, the local context of Cirebon City, with its distinct challenges in implementing these applications, adds a new dimension to the understanding of BOS fund management in specific regions.

The study aims to analyze the impact of the implementation of the ARKAS and SIMBOS applications on the accountability of BOS fund management in elementary schools in Cirebon City. It seeks to identify the challenges faced by these schools in utilizing the ARKAS and SIMBOS applications for financial reporting. Furthermore, this research evaluates the effectiveness of these applications in enhancing the transparency and accountability of BOS fund management in elementary schools.

Theoretically, this research is expected to enrich the literature on BOS fund management in elementary schools by introducing a new perspective on the combined use of ARKAS and SIMBOS in improving financial accountability. Practically, the findings can serve as a reference for both the government and schools to optimize the use of these applications, thus improving the effectiveness and accountability of BOS fund management. The study also offers recommendations for policy improvements and training for schools in the use of ARKAS and SIMBOS. From a policy standpoint, the research provides insights for policymakers to understand the challenges faced by elementary schools in Cirebon City, helping them devise strategic steps to overcome these challenges and ensure more effective, transparent, and accountable BOS fund usage.

RESEARCH METHOD

According to Cooper et al. (2014), research is the process of planning, retrieving, analyzing, and disseminating appropriate data, information, and interviews needed for decision-making by mobilizing organizations to take appropriate action to maximize performance. We used the research design to analyze "The Effect of the School Budget Activity Plan Application (ARKAS) and the BOS Management Information System Application (SIMBOS) on the Accountability of Financial Reporting of BOS Funds at Elementary Schools in Cirebon City" because we aim to explain the causal relationship between variables by testing previously formulated hypotheses.

We conducted this research using quantitative methods. We distributed questionnaires as part of the data collection technique. Furthermore, we will conduct validity and reliability tests on the responses to these questionnaires. We carried out the data analysis using linear regression.This research uses primary data. We obtained primary data using a structured questionnaire, aiming to collect information from each elementary school that participated in the study. We sent the questionnaire along with a letter of request explaining the purpose of the research. We made the instructions for completing the questionnaire as simple and clear as possible to facilitate the completion of the actual answers.

RESULT AND DISCUSSION

Classical Assumption Test

Table 1 Normality Test Results Using Kolomogrov-Smirnov

		Unstandardized Residual
N		118
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.82437013
Most Extreme Differences	Absolute	.069
	Positive	.069
	Negative	-.045
Test Statistic		.069
Asymp. Sig. (2-tailed)		.200[c,d]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

According to the table above, the significance value of $0.200 > α$ (0.05). We choose to accept H0, indicating a normal distribution of the tonight versus segment broadcast variable (X) and the tonight versus segment memory variable (Y1).

Table 2. Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
x1	.872	1.147
x2	.872	1.147
a. Dependent Variable: y		

Table 2 shows that the tolerance value of all independent variables has a tolerance value > 0.1 and a VIF value < 10. Therefore, it can be stated that there is no multicolonicity

between the independent variables.

Table 3. Heteroscedasticity test results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.204	1.244		.968	.335
x1	-.058	.030	-.189	-1.935	.055
x2	.098	.060	.160	1.636	.105

a. Dependent Variable: res2

Table 3's heteroscedasticity testing results reveal the sig value. Variable X1 exhibits a sig value of 0.055, surpassing the 0.05 threshold. The value of 0.105 exceeds the threshold of 0.05 in variable X2, indicating that there is no heteroscedasticity issue in variables X1 and X2, when paired with variable Y1.

Determination Coefficient Test Results

This analysis to assess how much variation in the independent variable can explain the total variance of the dependent variable.

Table 4 Determination Coefficient Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.621ᵃ	.385	.375	1.84017	1.733

a. Predictors: (Constant), x2, x1

b. Dependent Variable: y

The calculation results show the value of R quared worth 0.385. This indicates the independent variables (ARKAS and SIMBOS) explain 38.5% of the variance in the dependent variable (financial reporting accountability), while other dependent variable factors account for 61.5% of the variance.

Linear Regression Test Results

Table 5 Linear Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	8.328	1.521		5.477	.000
x1	.031	.037	.066	.847	.399
x2	.556	.073	.594	7.581	.000

a. Dependent Variable: y

The test results show a value of 0.847 and a significance of 0.399 for the ARKAS variable. Meanwhile, the SIMBOS variable gets a t count of 7.581 with a significance of 0.000, it can be concluded that the ARKAS (X1) and SIMBOS (X2) factors partially affect the financial reporting accountability variable (Y).

Validity and Reliability Test Result

Table 6 Validity Test Results

Item	R-count	R-table	Description
y01	0.791	0.179	valid
y02	0.761	0.179	valid
y03	0.805	0.179	valid
y04	0.828	0.179	valid
y05	0.768	0.179	valid
x1.1	0.761	0.179	valid

Item	R-count	R-table	Description
x1.2	0.710	0.179	valid
x1.3	0.875	0.179	valid
x1.4	0.811	0.179	valid
x1.5	0.815	0.179	valid
x1.6	0.795	0.179	valid
x1.7	0.786	0.179	valid
x2.1	0.799	0.179	valid
x2.2	0.859	0.179	valid
x2.3	0.762	0.179	valid
x2.4	0.739	0.179	valid
x2.5	0.826	0.179	valid

The validity test results in the table above indicate that 118 respondents in this study filled out 17 questionnaire statements containing these 3 variables. The formula for r table is df = N-2, so 118-2 = 116, so r table = 0.179. The validity calculation in the table above reveals that r count surpasses r table. The declaration of 17 questionnaire statements as valid confirms this, as r count exceeds r table by 0.179.

This study must conduct a reliability test to determine if the questionnaire consistently measures the impact of variables X1 and X2 on variable Y. We must establish an alpha of 0.60 as a basis for decision-making before conducting reliability testing. Variables are considered reliable if their value exceeds 0.60. If the value is smaller, we cannot consider the variable under study to be reliable.

Table 7. Reliability Test Result

Variables	Cronbach's Alpha	N of Items
Y	.839	5
X1	.899	7
X2	.834	5

The table above shows that the Cronbach Alpha value of each variable used in the study is more than 0.06. Thus, it is stated that each variable in this research instrument is reliable.

Hypothesis test
T-test Result

Table 8. T-Statistic Test Result

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	8.328	1.521		5.477	.000
x1	.031	.037	.066	.847	.399
x2	.556	.073	.594	7.581	.000

a. Dependent Variable: y

The result show that the ARKAS variable (X1) has a t value of 0.847 and a significance value of 0.399 less than 0.05, and the SIMBOS variable (X2) has a t value of 7.581 and a significance value of 0.000 less than 0.05, implying that the ARKAS (X1) and SIMBOS (X2) variables have a partial effect on the financial reporting accountability variable (Y).

F Test Result

When testing the hypothesis using the F statistic, if the significant value of F is less than 0.05, we adopt the alternative hypothesis, which argues that all independent variables concurrently and significantly influence the dependent variable (Ghozali, 2016). The table below presents the results of the F test analysis.

Table 9. F Test Result

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	243.984	2	121.992	36.026	.000[b]
	Residual	389.414	115	3.386		
	Total	633.398	117			
a. Dependent Variable: y						
b. Predictors: (Constant), x2, x1						

The results show that the F value of 36,026 is greater than the f table value of 3.10 with a significance level of 0.000 or <0.05, so simultaneously the ARKAS and SIMBOS variables have a significant effect on financial reporting accountability.

Discussion

The Effect of the Use of ARKAS Application on the Accountability of the Use of BOS Funds

The hypothesis testing findings also indicated that the better the use ARKAS, the more accountable the use of BOS funds. Furthermore, the two variables contributed 36.2% of the influence, while other variables not examined in the study accounted for 63.8% of the influence. Based on the conditions observed by the researchers, the increasingly accountable use of BOS funds in several public primary schools in Mangarabombang sub-district was due to the good cooperation factor between all parties, namely the government, the education office, schools, and the community.

According to Prianty (2019), school budget work plans (ARKAS) are related to the quality of education, and when BOS funds are used properly, the quality of education will improve. This closely relates to the availability of school infrastructure. According to Yosli et al. (2020), schools have received permission to manage BOS funds in accordance with the technical guidelines. The management of BOS funds goes through three stages: planning, implementation, and reporting. This makes BOS funds an ideal option for reducing the workload of accountants.

The use of ARKAS application has been an important breakthrough in the management and accountability of BOS funds. This application is designed to facilitate the planning, implementation, and reporting of school budgets by providing an integrated and user-friendly system. With ARKAS, schools can develop more structured and transparent work plans, thereby minimising errors and irregularities in the use of BOS funds. This is important because BOS funds must be used in accordance with the applicable regulations to ensure effectiveness and efficiency in supporting the education process.

One of the main positive impacts of using ARKAS is the increased accountability in the report on the use of BOS funds. This application allows schools to record every transaction and activity related to the use of funds in a detailed and systematic manner. The data collected can be easily accessed and analysed, making it easier for related parties to conduct audits and evaluations. With a better recording system, schools can present more accurate and reliable reports to supervisory parties, such as the education office and auditors.

In addition, ARKAS also plays a role in improving administrative efficiency at the school level. Planning and reporting processes that previously required significant time and effort can now be done more quickly and easily through this application. ARKAS users no longer need to rely on manuals and physical documents that are prone to loss or damage. With the digital features provided, the administration of BOS fund management becomes more organised and efficient, allowing greater focus on the educational activities themselves.

The Effect of Using SIMBOS on the Transparency of the Use of BOS Funds

The results of the research previously described found that descriptively, the use of ARKAS was in the good category, while the transparency of the use of BOS funds was in the transparent category. This suggests that several public primary schools in the Embentukan subdistrict have effectively implemented the ARKAS application, enabling them to demonstrate transparency in the management of BOS funds. The study also found the results of testing a hypothesis with a partial test. This showed that using ARKAS had an impact on how clear it was that BOS funds were being used. This is evidenced by the acquisition of a probability value smaller than the significant level, namely $0.000 < 0.05$, and a t count greater than the t table, namely $7.581 > 1.77$. We conclude that the use of SIMBOS application significantly enhances the transparency of BOS fund use at state elementary schools in Mangarabombang District. Pratiwi (2019) argues that preparing school budgets for the implementation of BOS fund management is incorrect, as school managers should structure the budgets to optimize the use of available BOS funds. Sari (2021) asserts that the management team possesses the authority to manage Boss funds due to their experience in managing existing Boss funds and their goal of maximizing their benefits for schools.

SIMBOS is designed to simplify and improve the administration and reporting process of BOS funds by providing an integrated and easily accessible platform. With this system, schools can plan and implement the use of BOS funds in a more transparent and measurable manner, which in turn facilitates the preparation of accurate reports that are in accordance with the applicable regulations.

One of the main advantages of SIMBOS is its ability to improve accountability and transparency in the management of BOS funds. The system allows the recording of every transaction and use of funds in real-time, which facilitates monitoring and auditing. The data collected through SIMBOS can be used to generate detailed and reliable reports, assisting authorities in monitoring schools' compliance with the regulations on the use of BOS funds. This reduces the potential for errors or irregularities that may occur in manual fund management.

In addition, SIMBOS also contributes to the efficiency of school budget administration and management. With features that enable digital budget monitoring and management, SIMBOS reduces dependence on physical and manual documents. The reporting and accountability process becomes faster and more accurate, minimising the possibility of data loss or corruption. Schools can easily access and manage information related to BOS funds, enabling savings in time and resources previously used for manual administration.

CONCLUSION

The conclusion of this study shows that the implementation of ARKAS and SIMBOS application has a significant influence on the accountability of BOS Fund financial reporting in educational entities in Cirebon City. The use of ARKAS and

SIMBOS has increased transparency and efficiency in financial management and reporting, reduced the potential for errors and irregularities, and facilitated the audit and evaluation process by the authorities. The implementation of these two systems has also strengthened the capacity of school administration in preparing more accurate and timely reports, thus supporting the main objective of using BOS funds to improve the quality of education. Nevertheless, the full success of this implementation requires ongoing support in the form of training and adaptation to the new technology.

Based on the conclusions presented, the suggestions given are that it is necessary to seek solutions to overcome the obstacles that occur in the use of the ARKAS application, such as conducting training for interested parties in the use of BOS funds so that they can be more effective and efficient in their use. Furthermore, we expect teachers, particularly school treasurers, to enhance their proficiency in using the ARKAS application, enabling them to report on the utilization of BOS funds in optimal.

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