The Effectiveness of E-RKAM (Electronic-Based Madrasah Work Plan and Budget) Implementation in Managing School Operational Assistance (BOS) at Private Madrasah Aliyah in Medan City

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#### **ABSTRACT**

study aimed to determine This effectiveness of E-RKAM implementation in managing school operational assistance (BOS) at Private Madrasah Aliyah in Medan City. This study uses a descriptive research design using primary data types. Data collection was done by directly distributing questionnaires to 93 respondents, divided into Madrasah Principals, Heads of TU, and BOS Treasurers. Data analysis was carried out using validity testing, reliability testing, R Square testing, and hypothesis testing with the help of the SmartPLS program. The results of this study indicate that the influence of the Implementation of the E-RKAM application has a positive effect on effectiveness of BOS management, the quality of the E-RKAM system has a positive impact on the efficacy of BOS financial management, and the core knowledge of the madrasah team in operating E-RKAM has a positive effect on the effectiveness of BOS fund management.

**Keywords:** e-rkam, bos, finance

#### INTRODUCTION

Education is one of everyone's most important needs. From this, the government is trying to help all schools provide quality education and educational services through a school operational assistance (BOS) program. Since 2005, the government has provided School Operational Assistance (BOS) funds to all States' and private The flow BOS madrasas. of fund from the RKAM disbursement starts (Madrasah Work Plan and Budget) budget planning, which is then submitted to the education unit level, city, province, and central government. After submitting the RKAM, the central government will conduct the disbursement process. The amount of funds to be provided per the number of students: the more students registered in the Madrasah EMIS account, the more funds will be received, and vice versa. If the number of registered students is small, the Madrasah will receive fewer funds.

In realizing the quality of the 12-year Compulsory Basic Education completion program, the government has programmed provision of School Operational Assistance (BOS), which aims to assist schools in exempting student fees. The BOS includes madrasah activities prepared in the RKAM (Madrasah Work Plan and Budget), bookkeeping, realization of fund use, recapitulation of fund use, and handling public complaints. If the Madrasah carries out activities under those reported, then the Madrasah implements the use of BOS funds following the technical instructions (Hakim, 2019).

School operational assistance funds (BOS) are used following the points listed so there are no errors or misappropriation of BOS funds. Many schools are irresponsible and not transparent to parents and committees, so it is easy to misappropriate BOS funds. The problem is that BOS funds are given to underprivileged students. However, the school does not fully provide adequate educational services to disadvantaged students, which is contrary to the operational assistance fund (BOS) program concept. Meanwhile, according to the Ministry of National Education (2006), the prohibition using BOS funds is to finance contributions to commemorating national and religious events. Schools need to improve the quality of education and run the information system properly to ensure that BOS funds remain alive and competitive.

development With the increasing technology government, today, the especially the Ministry of Religion, has upgraded a system that will make it easier for madrasas to prepare and/or report school operational assistance funds (BOS). The system that has been developed is an online madrasa financial accountability report application called e-RKAM (Electronic -Madrasah Activity and Budget Plan). The related application can be accessed from the page www.erkamkemenag.go.id. e-RKAM was developed to address today's challenges and needs and encourage effective, efficient, transparent, and accountable education governance.

The Implementation of the e-RKAM application system nationally is a planning, budgeting and reporting system for private madrasas. This e-RKAM system is expected to increase the effectiveness and efficiency of spending through a performance-based planning and budgeting system in private madrasas receiving BOS under the Ministry of Religion so that they can plan, budget, monitor the use of funds and report the use of BOS funds more effectively, efficiently, and accountably. It is also a habituation of digital transformation and education on governance and accountability of private madrasah work

units with all their limitations (Saidu, 2021). CNN Indonesia (09/2023) reported that several irregularities have been found in managing BOS funds, such as management that is not under technical instructions. Some schools ignore the role of the School Committee and Education Council in managing BOS funds on the grounds of simplifying the process, which is then exploited for budget misuse.

In some cases, BOS funds are only managed by the head of the Madrasah and the treasurer. Then, it is deliberately managed non-transparently, and the school does not report the use of BOS funds on the information board (CNN Indonesia, 2023). Several phenomena cause ineffectiveness in managing BOS funds, one of which is because the manager does not sufficiently understand the proper financial management process for BOS funds. Appropriate and good financial management indicators must go through several methods, including utilization, planning, reporting, accountability when using BOS funds.

Concerning the above problems, the e-RKAM Application was created to answer the issues, challenges and needs by upholding the principle of "Money follows program" (the budget must follow the program) in the process of preparing the madrasah work program and being able to achieve quality spending so that BOS funds are ensured to be used to finance activities that affect the quality of the Madrasah. It means that this e-RKAM application will provide opportunities for the creation of transparent and accountable financial management in managing BOS funds and other funds, the management process of which can also be monitored in stages starting from the madrasah unit level to the (PMU Team, 2020). Implementation of this e-RKAM Application is carried out through several stages, such as the formation of the Madrasah Core Team, the Implementation of technical guidance in stages, and technical assistance to each Madrasah to ensure that each Madrasah can implement the stages of using the e-RKAM application following the guidelines, such as using the EDM instrument and compiling RKAM based on EDM results correctly. Since implementing this application, several madrasahs have progressed in compiling RKAM based on EDM results. However, several problems were still found, such as duplicate tasks and inconsistencies implementing procedures in the financial management process through this e-RKAM application. In addition, there are many phenomena about the application technology in the work environment of institutions or companies, which have a negative impact due to the complexity of operating and maintaining information systems (Sopyan et al., 2021). Thus, the key to the success of implementing digital transformation lies not only in the quality of the application but is also influenced by the success of managing its changes (Sa'idu, 2021).

The e-RKAM application of BOS funds is also implemented in private Madrasah Aliyah in Medan City to improve the quality of basic education. The management of BOS funds in these private madrasahs also encounters obstacles like in other educational institutions, namely obstacles in making reports on the details of the use of BOS funds because of the large amount of data that must be entered, resulting in a lot of time and energy needed to enter data, data inaccuracy, or unintentional errors (human error). For this reason, it is necessary to implement the e-RKAM system to help make BOS fund management more effective and efficient. Research by Handika (2023) on Implementation of e-RKAM at MI Terpadu Al Husna shows that the Implementation of EDM and e-RKAM is going well, even though facilities, time, and online systems constrain it. Support from supervisors and the Foundation and good coordination are supporting factors. Alizar's research (2022) at MTs Syekh Yusuf Sungguminasa found although e-RKAM had that been implemented according to procedures, strategic planning was not optimal due to the lack of external analysis and SWOT. In private Madrasah Aliyah Medan, obstacles related to BOS reporting require the Implementation of e-RKAM for effective management.

Research conducted by Fathia and Indrawati (2020) found that the application can improve the quality of government financial reports. Similar things were also found by (Lestari and Nurwana, 2023). Juniartha and Sugiarto (2020) found that human resource competence significantly affects the quality of regional financial reports. Based on the phenomena above, the researcher wants to conduct a deeper study on the effectiveness of implementing the e-RKAM application in the private Madrasah Aliyah environment in Medan City. Based on this description, the author is interested in conducting a study entitled "The Effectiveness Of E-Rkam (Electronic-Based Madrasah Work Plan and Budget) Implementation in Managing School Operational Assistance (Bos) At Private Madrasah Aliyah In Medan City."

#### LITERATURE REVIEW

#### **School Operational Assistance (BOS)**

According to the Regulation of the Minister of National Education Number 69 of 2009, BOS is a government program that provides funding for non-personnel operational costs for basic education units as implementers of compulsory education programs.

In general, the BOS program aims to ease the burden on the community for financing education in the context of quality learning. It plays a role in accelerating the achievement of Minimum Service Standards (SPM) in schools that have not met SPM and the achievement of National Education Standards (SNP) in schools that have met SPM.

In the BOS program, the funds received by the school are in full and managed independently by the school by involving the teacher council and school committee. Thus, the BOS program strongly supports the Implementation of School-Based Management, which generally aims to empower schools through the granting of authority (autonomy), the granting of greater flexibility to manage school resources, and encouraging the participation of school residents and the community to improve the quality of education in schools.

#### Madrasah Work Budget Plan (RKAM)

Every activity in an educational unit is managed based on the Madrasah Work Budget Plan (RKAM). RKAM is a very important document in every Madrasah because it can guarantee the continuity of the education process. One of the contents of the National Education Standards is that every educational unit must have a School/Madrasah Work Plan that will be implemented within four years. Compiling the Madrasah Work Plan should involve many parties, such as the Head of the Madrasah, teachers, and the Madrasah Committee.

The Madrasah's needs and the community's aspirations are the main basis for compiling the RKAM. In other words, the RKAM aims to express what the madrasah needs and the hopes of the community around the Madrasah. With a clear RKAM, all interested parties parents, teachers, Madrasah employees, Madrasah Committee, residents around the Madrasah and the Head of the Madrasah himself will know what the Madrasah needs, what needs to be done to improve the condition of the Madrasah, the purpose and objectives of the activities that will be carried out over the next few years.

RKAM (Madrasah Work Plan and Budget) manages madrasah finances, starting from the planning budgeting process, administration, and reporting, which can be accessed online and semionline. The purpose of RKAM is for madrasahs to have an integrated financial information system from the Madrasah, district/city, provincial to central levels. The purpose of RKAM is for madrasahs to produce financial information in the form of planning, administration and reporting

documents that are accurate, timely, accountable, transparent, efficient, and effective. It is done as a habituation to meet the needs of madrasahs according to the evaluation carried out by madrasahs so that the allocation of BOS funds by madrasahs can be spent according to their needs and work planning.

#### **EDM and E-RKAM Applications**

E-RKAM (Electronic-based Madrasah Work Plan and Budget) is an application for managing madrasa finances, starting the budget planning process, administration, and reporting, and it can be accessed online and semi-online. The purpose of E-RKAM is for the Ministry of Religion to have an integrated madrasah financial information system from the Madrasah, district/city, provincial to central levels. The purpose of E-RKAM is for madrasahs to produce financial information in the form of planning, administration, and reporting documents that are accurate, timely, accountable, transparent, efficient, and effective in improving the planning and budget management system. The Ministry of Religion has developed a digital platform to make it easier for madrasahs to selfevaluate as a basis for preparing madrasah work plans and budgets. The platform, hereinafter referred to as E-RKAM or Electronic-based Madrasah Work Plan and Budget and EDM (Madrasah Self-Evaluation), is expected to be able to answer the challenges and needs of E-RKAM madrasahs. and **EDM** applications are important breakthroughs that encourage effective and efficient education governance. It is in line with President Joko Widodo's appeal that the time and energy of madrasah principals and teachers are not wasted on making accountability reports but can be more focused on developing the quality of learning. To obtain data on the use of BOS funds, data on SNP (national education achievements quickly and standards) accurately, and increase the effectiveness

and efficiency of spending through a performance-based planning and budgeting system in madrasahs and easily monitored by the Ministry of Religion office.

So on June 17, 2020, the Indonesian Ministry of Religion, in collaboration with the World Bank, will realise changes in education through reforms to improve the quality of management and education services in madrasahs through the EDM e-RKAM System (Electronic-Based Madrasah Work Plan and Budget) nationally and the Provision of Assistance Funds for Madrasahs.

#### **Framework**

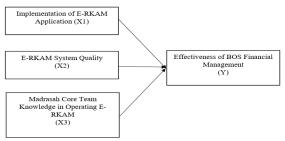


Figure 1. Conceptual Framework

H1: Implementation of the E-RKAM Application has a significant effect on the Effectiveness of BOS Financial Management

H2: The Quality of the E-RKAM System has a significant effect on the Effectiveness of BOS Financial Management

H3: The knowledge of the Madrasah Core Team in operating E-RKAM has a significant effect on the Effectiveness of BOS Financial Management

#### **MATERIALS & METHODS**

According to Silaen (2018), research design is the process of planning and implementing research that involves procedures and methods for collecting and analyzing data related to research variables. This qualitative research uses a descriptive method, which aims to describe societal problems through narratives based on informant statements, observations, and documents. The operational definition

explains the characteristics of the research object so that the concept can be measured. Population is a collection of objects with the same characteristics, while a sample is part of the population that represents the whole (Erlina, 2011; Sumargo, 2020). The research population includes the objects or subjects studied, not limited to humans, but also documents or cases with certain characteristics (Sugiyono, 2017). According to Arikunto (2012), if the population is less than 100, the entire sample is taken; if more, 10-25% can be taken. This study's population was the Madrasah Core Team in 31 Private Madrasah Aliyah in Medan City. The research instrument is used to measure the observed phenomena, and this study includes a closed questionnaire based on Likert scale, the interviews, and observations (Sumargo, 2020).

Qualitative data from the instrument were analyzed quantitatively using statistical analysis. The data collection technique in this study used a questionnaire developed from the research of Satria and Narisa (2017) and Jois (2020). This questionnaire measures respondents' attitudes using a Likert scale of 4 (Strongly Agree) to 1 (Strongly Disagree). Data methods include descriptive statistics, validity tests, reliability tests, hypothesis tests using SmartPLS software. SmartPLS implements the bootstrapping process, so it does not require normality assumptions and can be used on small samples. Yamin (2021) emphasizes four important aspects of data management with SmartPLS: determining measurement scale sample size, dealing with missing data, and paying attention to outlier data.

#### **RESULT**

#### **Data Quality Testing**

SEM analysis with the help of the PLS application has three criteria for assessing the outer model: convergent validity, discriminant validity and composite reliability.

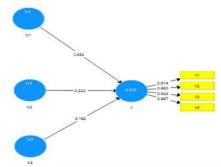


Figure 2. PLS Outer Model Source: Data Processed with SmartPls, 2024

The results above show the results of the formative relationship model. The outer weight of each indicator is compared to that of the other to determine the indicator that provides the greatest contribution to one construct. At alpha 5%, the indicator has the smallest weight (t-statistic).

#### A. Validity Test

#### 1. Convergent Validity

The convergent validity test in PLS is assessed based on the loading factor (correlation between item scores/component scores and construct scores). The rule of thumb used for convergent validity is the outer loading value> 0.70 and the AVE (Average Variance Extracted) value> 0.5 (Abdillah, W., & Hartono, J, 2015). Meanwhile, Hair et al. (2006) (Abdillah, W., & Hartono, J, 2015) said that the outer loading value> 0.50 is considered practically significant. So, in this study, a minimum limit of 0.5 was used.

**Table 1. Outer Loading** 

	9				
	Outer Loading	Description			
X1					
X1.1	0.619	Valid			
X1.2	0.851	Valid			
X1.3	0.783	Valid			
X1.4	0.844	Valid			
X1.5	0.775	Valid			
X1.6	0.568	Valid			
X1.7	0.543	Valid			
	X2				
X2.1	0.619	Valid			
X2.2	0.632	Valid			
X2.3	0.703	Valid			
X2.4	0.546	Valid			
X2.5	0.552	Valid			
X2.6	0.768	Valid			
	X3				
X3.1	0.580	Valid			
X3.2	0.568	Valid			
X3.3	0.505	Valid			
X3.4	0.712	Valid			
Y					
Y.1	0.914	Valid			
Y.2	0.690	Valid			
Y.3	0.924	Valid			
Y.4	0.887	Valid			
•	•				

Source: Data Processed with SmartPls, 2024

The Table above shows that the Outer Loading on each research variable is >0.5. It illustrates that each indicator in this study is valid and meets the requirements in the assumption of convergent validity. So, it is suitable for measuring research variables. Furthermore, convergent validity can also be assessed from the AVE value. The Table below shows the AVE value of each research variable.

**Table 2. AVE Value** 

	Average Variance Extracted (AVE)	AVE Level	Description
X1	0.582	0.5	Valid
X2	0.595	0.5	Valid
X3	0.528	0.5	Valid
Y	0.738	0.5	Valid

Source: Data Processed with SmartPls, 2024

Based on table 2 shows that the AVE value for each research variable is > 0.5. It shows that the research variable meets the rule of thumb requirements of AVE > 0.5. So, it can be said that the research variable can become a good research construct.

#### 2. Discriminant Validity

Discriminant validity ensures that each concept of each latent variable is different from other variables. A model is said to have good discriminant validity if each loading value of each variable indicator has the highest value compared to the loading values of other latent variables.

Table 3. Cross Loading

Table 3. Closs Loading						
	X1	X2	X3	Y		
X1.1	0.619	-0.021	0.186	0.381		
X1.2	0.851	0.195	0.093	0.387		
X1.3	0.783	0.138	0.024	0.244		
X1.4	0.844	0.186	0.053	0.370		
X1.5	0.775	0.064	0.028	0.193		
X1.6	0.568	-0.042	0.033	0.390		
X1.7	0.543	-0.077	0.196	0.126		
X2.1	0.116	0.619	-0.008	0.140		
X2.2	0.105	0.632	0.022	0.171		
X2.3	0.111	0.703	0.030	0.171		
X2.4	0.082	0.546	0.079	0.024		
X2.5	-0.026	0.552	0.065	0.105		
X2.6	0.036	0.768	0.007	0.262		
X3.1	0.034	0.202	0.580	0.101		
X3.2	-0.062	0.121	0.568	0.119		
X3.3	0.046	0.031	0.505	0.097		
X3.4	0.181	-0.139	0.712	0.202		
Yl	0.419	0.213	0.232	0.914		
Y2	0.326	0.260	0.096	0.690		
Y3	0.465	0.257	0.229	0.924		
Y4	0.418	0.223	0.253	0.887		

Source: Data Processed with SmartPls, 2024

The results of Discriminant Validity processing in the Table above show the

correlation between the indicators of E-RKAM Application Implementation, E-RKAM System Quality and Core Team Knowledge. These results indicate that latent constructs predict indicators in their blocks better than indicators from other blocks.

#### 3. Reliability Test

Composite reliability is used to measure the actual value of the reliability of a construct. As a rule of thumb, the alpha value or composite reliability must be greater than 0.7, although a value of 0.6 is still acceptable. The Table below presents the composite reliability value for each research variable.

**Table 4. Composite Reliability** 

		1	- 0
	Composite Reliability	Composite Reliability Level	Description
X1	0.787	0.7	Reliable
X2	0.715	0.7	Reliable
X3	0.768	0.7	Reliable
Y	0.877	0.7	Reliable

Source: Data Processed with SmartPls, 2024

The Table above shows that the composite reliability value is > 0.7. It means that each research variable is reliable and has a consistent construct so that all variables can be used as research variables.

#### **B.** Data Analysis Prerequisite Testing

The inner model or structural model test is used to determine the influence of the construct. What is tested using the inner model is R square and the hypothesis test to determine the significance value.

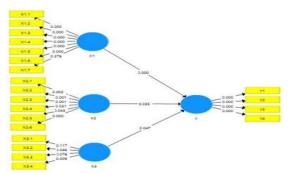


Figure 3. PLS Inner Model Source: Data Processed with SmartPls, 2024

The results above show the direct influence of a construct or exogenous latent variable on the endogenous latent variable. As in the path model in this tutorial, for example, the direct impact of X on Y shows the significance value of the relationship between X and Y by looking at its significance influence (P Value).

#### 1. R Square Test

The PLS model in assessing the model can be seen from the R square for each dependent latent variable. Changes in the R square value can be used to determine the influence of certain independent latent variables on dependent latent variables and whether they have a substantive impact. The R2 result is considered moderately good for assessing endogenous variables in the structural model if it ranges from 0.33 to > 0.67. Meanwhile, if R2 is 0.19, it is indicated as weak. The Table below presents the results of the R2 test on the research variables as follows:

Table 5. R Square

	R Square	R Square Adjusted
Y	0.312	0.288

Source: Data Processed with SmartPls, 2024

The Table above shows that the R2 value of the employee performance variable construct is 0.288. It shows the large percentage of employee performance explained by other constructs of 0.712, which is described by other variables outside the research model. The R2 value is considered a good category because it is> 0.19.

#### 2. F Square Test

The results of the F-square test are effectsize tests used to determine how much influence the predictor variables have on endogenous variables. The F-square test can be assessed as follows (Cohen, 1988; Noviyanti, 2019):

- a) The F-Square test result of 0.02 is interpreted as a weak predictor latent variable in the structural model.
- b) The F-Square test result of 0.15 is interpreted as a moderate predictor latent variable in the structural model.

c) The F-Square test result of 0.35 is interpreted as a strong predictor latent variable in the structural model. The following are the results of the F Square data processing.

Table 6. F Square

	Y
Implementation of E-RKAM Application	0.264
Quality of E-RKAM System	0.071
Core Team Knowledge	0.048

Source: Data Processed with SmartPls, 2024

Results are based on the test results in the Table above, the F-square value. It can be interpreted as the Implementation of the E-RKAM application having a sufficient influence in explaining endogenous variables (BOS Financial Management Effectiveness) with a value of 0.264 or 26.4%. Meanwhile, the Quality of the E-RKAM System, with a value of 0.071 or 7% and Core Team Knowledge, with a value of 0.048 or 4%, have a weak influence in explaining endogeneity (BOS Financial Management Effectiveness).

#### 3. Q Square/Blindfolding Test

Another test used to measure the SEM structural model is predictive relevance (Q-Square), which is produced from the Blindfolding test. This test is carried out by eliminating single data points, but not all cases, considering the omitted data points and estimating the PLS path model. More specifically, a Q-Square prediction of less than 0 (Q2 <0) can be interpreted as having no predictive relevance. Meanwhile, a positive Q-Square prediction value indicates that the prediction error of the PLS path model is smaller (Shmueli et al., 2019). The following are the results of the Q Square data processing:

**Table 7.Q Square** 

	Sso	Sse	Q2 (=1-Sse/Sso)
Implementation of E-RKAM Application	651.000	651.000	
Quality of E-RKAM System	558.000	558.000	
Core Team Knowledge	372.000	372.000	
Y	372.000	295.900	0.205

Source: Data Processed with SmartPls, 2024

A Q-Square value of 0.205 was obtained based on the calculation results above. It shows that the large diversity of research data the research model can explain is 20.5%. While other factors outside this research model explain the remaining 79.5%.

### C. Hypothesis Testing T-Test/Hypothesis

The inner model value indicates the significance level in a study's hypothesis testing. The inner model suggested by the T-statistic must be > 1.96 for a two-tailed hypothesis and > 1.64 for a one-tailed hypothesis for hypothesis testing at 5% alpha and 80% power (Abdillah, W., & Hartono, J, 2015). The influence of the structure between variables is said to be significant if the p-value or t statistic > t table

Table 7. Results of the t-Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
X1-> Y	0.432	0.435	0.081	5.315	0.000
X2 -> Y	0.222	0.245	0.094	2.355	0.019
X3 -> Y	0.182	0.199	0.088	2.074	0.039

Source: Data Processed with SmartPls, 2024

Based on the Table above, it can be seen that this study examines the direct influence of independent variables on the effectiveness of BOS fund management as the dependent variable. The following are the results of the explanation of the Table above:

#### 1. Hypothesis 1

Implementing the E-RKAM application has a positive and significant effect on the effectiveness of BOS financial management, with a coefficient of 0.432 and a t-statistic value of 5.315. The Table above shows a p-value of 0.000> 0.05 with a significance level of 5%. The original sample value (estimate) is 0.432, which means that implementing the E-RKAM application had a positive influence of 43.2% on BOS financial management. It means that hypothesis stating that there is a positive and significant influence on BOS financial management is accepted.

#### 2. Hypothesis 2

The quality of the E-RKAM system has a positive and significant effect on BOS financial management, with coefficient of 0.222 and a t-statistic value of 2.355. The Table above shows that the p-value is 0.019 < 0.05 with a significance level of 5%. The original sample value (estimate) is 0.222, which means that the quality of the E-RKAM system is 22.2%, which positively influences BOS financial management. It means that the hypothesis stating that the quality of the E-RKAM system has a positive and significant influence on BOS financial management is accepted.

#### 3. Hypothesis 3

The knowledge of the core madrasah team in operating E-RKAM has a positive and significant effect on BOS financial management with a coefficient of 0.182 and a t-statistic value of 2,074. The Table above shows that the p-value is 0.039 < 0.05 with a significance level of 5%. The original sample value (estimate) is 0.182, which means there is a positive influence of the knowledge of the core madrasah team in operating E-RKAM of 18.2% on BOS financial management. It means that hypothesis stating that there is a positive significant influence of the knowledge of the madrasah core team in operating E-RKAM on BOS financial management is accepted.

#### **DISCUSSION**

## The effect of implementing the E-RKAM application on the effectiveness of BOS financial management

The first hypothesis of this study shows that the Implementation of the e-RKAM application has a positive and significant effect on the effectiveness of BOS financial management, with an impact of 43.2%. This result is supported by a positive coefficient of 0.432 and a p-value of 0.000 <0.05, which means the hypothesis is accepted. Theoretically, implementing e-RKAM helps madrasahs manage BOS funds more

effectively, allowing for better and more precise fund allocation. The e-RKAM application has proven to be an important factor in increasing the effectiveness of BOS financial management.

## The quality of the E-RKAM system affects the effectiveness of BOS financial management.

The second hypothesis states that the quality of the e-RKAM system has a positive and significant effect BOS on financial management, with an impact of 22.2%. This result is supported by a positive coefficient of 0.222 and a p-value of 0.019 < 0.05, which means the hypothesis is accepted. The quality of e-RKAM helps madrasahs manage BOS funds effectively. A good system facilitates management, while poor quality can hinder it. The e-RKAM and applications **EDM** also transparency and accountability in managing BOS funds, enabling access from the madrasah level to the central Ministry of Religion. The e-RKAM and **EDM** applications open up opportunities for more transparent and accountable management of BOS funds and other funds, which can be accessed in stages from the madrasah level, the Regency/City Ministry of Religion Office, the Provincial Ministry of Religion Office to the Indonesian Ministry of Religion level (Alizar & Rani: 2023). Using the e-RKAM and EDM applications is expected to reduce reporting bureaucracy. This digital transformation is a concrete effort to realise more effective, efficient, transparent and corruption-free education budget management (Mahfud, 2023)

# The knowledge of the core madrasah team when operating E-RKAM affects the effectiveness of BOS financial management.

The third hypothesis shows that the knowledge of the core madrasah team in operating e-RKAM has a positive and significant effect on BOS financial management, with an impact of 18.2%. This result is supported by a coefficient of 0.182

and a p-value of 0.039 <0.05, so the hypothesis is accepted. The core team with basic knowledge of operating e-RKAM can increase the effectiveness of BOS fund management. Theoretically, understanding of the use of the application is needed to support effective BOS fund management. The Ministry of Religion has provided facilities in the form of technical guidance (Bimtek) where Bimtek can be attended by the Madrasah Core Team (TIM) consisting of the head of the Madrasah, the madrasah treasurer, and the madrasah operator. In the Bimtek activity, the TEAM will gain knowledge and skills to implement e-RKAM in the Madrasah. After the Bimtek activity, face-to-face assistance will be carried out directly at each Madrasah, which is the target of the aid (Aprizal, 2023).

#### **CONCLUSION**

This study aimed to determine and examine the Effectiveness of E-RKAM Implementation in the financial management of School Operational Assistance (BOS) funds located in Private Islamic Senior High Schools in Medan City. The object of research in this study was employees of Private Islamic Senior High Schools. From the results of the research and analysis, the following conclusions were drawn:

- 1. Implementing the E-RKAM application affects the effectiveness of BOS financial management.
- 2. The quality of the E-RKAM system affects the effectiveness of BOS financial management.
- 3. The knowledge of the core team of the Madrasah in operating E-RKAM affects the effectiveness of BOS financial management.

#### **LIMITATIONS**

In the process of conducting this research, some limitations may affect the results of the study, namely:

- 1. There are limitations in research time, energy, and researcher abilities.
- 2. There is a lack of respondents' ability to understand the statements in the

- questionnaire and their honesty in filling out the questionnaire, so there is a possibility that the results are less accurate.
- 3. This study only examines the Effectiveness of E-RKAM Implementation in the financial management of School Operational Assistance (BOS) funds located at the Private Madrasah Aliyah in Medan City.
- 4. The conclusions drawn are only based on the acquisition of data analysis, so it is hoped that there will be further research on the Effectiveness of E-RKAM Implementation in the financial management of School Operational Assistance (BOS) funds with different research methods, wider samples, and the use of other and more complete research instruments.

#### **IMPLICATIONS**

Some implications need to be considered to improve the Effectiveness of E-RKAM **Implementation** in the financial Operational management of School Assistance (BOS) funds referring to the research results and conclusions. It is due to rapid changes in the era of globalization, which requires applications to provide all conveniences. The quality of human resources to compete in the global era must participate in global progress.

- 1. Efforts to implement the E-RKAM application for the effectiveness of BOS Fund management. For employees and related parties who manage BOS funds, further socialization or seminars are needed to provide direction on using the E-RKAM application and efforts to hold workshops to practice directly using the application.
- 2. Efforts to improve the quality of the E-RKAM system for the effectiveness of BOS financial management. The application is not only for ease and effectiveness in its use but also requires a good quality application

- system, especially for the financial management of BOS funds, namely the E-RKAM application. Efforts must be made to periodically update or renew the application so that it can present data that is easier and more modern.
- 3. The efforts of the core team of the Madrasah in operating E-RKAM for the effectiveness of BOS financial management. These efforts can be carried out periodically by holding workshops, seminars, and even further direction for the team to provide knowledge and ease of application use.

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