

DIGITAL TRANSFORMATION OF BUDGETING AND ACCOUNTING: IMPLEMENTATION OF E-RKAM AT MI MUHAMMADIYAH 2 PENDIL

Fitriya Andriyani, Sabrina Alifia Salsabila, Oryza Ardhiarisca, Dessy Putri Andini
Business Major, State Polytechnic of Jember
Jl. Mastrip PO BOX 164, Jember, East Java, 68121, Indonesia
fitriya.andriyani@polije.ac.id

ABSTRACT

This study aims to analyze the preparation of budgets (Budgeting) and bookkeeping (Accounting) based on the electronic application of the madrasah budget work plan (e-RKAM) at Madrasah Ibtidaiyah Muhammadiyah 2 Pendil. This study uses a qualitative descriptive analysis method with a case study approach. Data collection techniques use interviews and documentation. The results of this study indicate that budgeting and accounting have been implemented according to their stages. stages of budget preparation (planning, preparing, managing implementation, and assessing the budget). With e-RKAM, the effectiveness of managing the madrasah budget and allocated according to the needs and priorities that have been planned, monitoring and evaluation activities are more systematic, so that budget adjustments are made in real time based on the implementation of activities. Stages of bookkeeping (summary, recording, reporting), the e-RKAM system can improve accountability and transparency in madrasah financial management. With this system, all financial transactions are recorded electronically and transparently, allowing for tighter supervision and easier audits.

Keywords: Budgeting, Accounting, e-RKAM

INTRODUCTION

Current issues in educational development are focused on the implementation of education. Education is a collaborative effort to drive the wheels of learning with the primary goal of improving the nation's intelligence, as mandated in the fourth paragraph of the 1945 Constitution (Huda, 2015a). Education acts as a continuous process, providing new experiences and additional knowledge to students, the next generation who will lead the nation towards a bright future. One crucial aspect of education is financing. Funding is essential because it affects the learning process, teacher salaries, facilities and infrastructure. Facilities and infrastructure will be impacted by educational institutions' suboptimal management of their funding.

According to Hidayat & Rusdiana (2022) said that educational financing management is a series of collaborative processes to achieve planned and systematic educational goals within educational institutions. Furthermore, Hidayat & Rusdiana (2022) states that educational financing management consists of three stages : budgeting, accounting, and auditing. However, within the scope of e-RKAM in Madrasah Ibtidaiyah, the financing management stages implemented include budgeting and accounting. Meanwhile, the auditing stage is the domain of the Ministry of Religious Affairs. Hidayat & Rusdiana (2022) provides further explanation regarding budgeting, which is the process of formulating goals and actions for an educational institution to achieve predetermined targets. Implementing this budget requires proper accounting so that the educational institution can make informed decisions to support educational success. The accounting process involves identifying financial data, recording it, and ultimately producing financial reports (Hidayat & Rusdiana, 2022). According to Bowen in Hidayat & Rusdiana (2022) said that, the achievement of the target of education financing management is the determination of economical, effective, efficient spending policies, as well as transparent and accountable budget implementation.

To achieve these educational targets, the Ministry of Religious Affairs has introduced the Electronic Madrasah Budget Work Plan (e-RKAM) platform to facilitate all madrasah administrators in preparing budget work plans and reporting finances online, thereby minimizing the time and energy of budget administrators in reporting or accountability. Ningsih et al., (2024) the Electronic Madrasah Budget Work Plan (e-RKAM) application has many benefits, such as improving budget management in madrasahs to be more efficient, effective, transparent, and accountable so that it can be monitored and supervised systematically, both from the educational unit level, the Ministry of Religious Affairs at the district/city level, the provincial level, to the central level. Thus, the e-RKAM application is expected to reduce reporting bureaucracy and also spending efficiency, and can improve the quality of madrasah education as a result of the use of funds on target. One example is that madrasah do not need to allocate a large official travel budget just to send the Accountability Report from the madrasah to the Ministry of Religious Affairs Office. In addition, the Electronic Madrasah Budget Work Plan (e-RKAM) application can save the budget for purchasing stationery for making Accountability Report. The existence of e-RKAM is a manifestation of efficient, easy, and transparent education budget management.

Madrasah Ibtidaiyah, commonly abbreviated as MI, is the most basic level of madrasah education, equivalent to elementary school but with distinctive Islamic characteristics. Madrasah Ibtidaiyah is an educational institution under the auspices of the Ministry of Religious Affairs of the Republic of Indonesia. The Ministry of Religious Affairs is responsible for regulating three aspects: curriculum, standards, accreditation, certification, and operational assistance for madrasahs, as well as ensuring quality education. Furthermore, the Ministry of Religious Affairs also actively improving the financial management and planning information system. This is done to support digitalization in the management of educational institutions, one of which is Madrasah Budgeting and Accounting. Madrasah Ibtidaiyah 2 Pendil is one of the madrasah that uses the Electronic Madrasah Budget Work Plan (e-RKAM) application. This e-RKAM application has been implemented for 3 years since 2022. Madrasah Ibtidaiyah 2 Pendil uses e-RKAM to produce financial information in the form of planning, administration, and reporting documents that are accountable, transparent, effective and efficient. Based on the explanation above, the researcher is interested in analyzing Budgeting and Accounting based on the Electronic Madrasah Budget Work Plan (e-RKAM) application at Madrasah Ibtidaiyah 2 Pendil. So the title of the research that the researcher took is "Implementation of Budgeting and Accounting Based on the Electronic Madrasah Budget Work Plan (e-RKAM) Application at Madrasah Ibtidaiyah 2 Pendil".

LITERATURE REVIEW

Good Governance

According to Tampubolon et al., (2023) Good governance is often defined as the activities or actions of a government institution that are based on the interests of the community. The following are the principles of good governance according to Tampubolon et al., (2023) which is used to assess the quality of governance of an organization, namely as follows: Participation, Transparency, Accountability, Responsive, Consensus, Equality, Effectiveness and efficiency. From the principles explained above, the principles related to Budgeting and Accounting in this study are accountability, transparency, effectiveness and efficiency. In the Budgeting stage at Madrasah Ibtidaiyah 2 Pendil. The principles of Good Governance are realized through effectiveness and efficiency with appropriate financial planning to minimize inefficiencies and prevent unnecessary expenses. Utilization of the e-RKAM application allows fast and detailed access to budget usage, thereby helping to reduce the risk of waste, misuse of funds, and reduce administrative costs through automation of the submission, approval, and

Andriyani: Digital Transformation of Budgeting...

reporting processes. Meanwhile, in the Accounting stage, the principles of transparency and accountability are reflected in financial management that can be monitored in stages from the madrasah to the center, providing complete and easily accessible information to stakeholders, and ensuring that every decision related to the allocation and use of funds is well documented so that it can be accounted for.

Budgeting

Hidayat & Rusdiana (2022) provides an explanation regarding budgeting, which is the process of formulating the goals and actions of an educational institution to achieve predetermined targets. The budget serves as a tool for planning and controlling operational activities and as a management tool in determining appropriate, effective, and efficient program financing. According to Lipham, the process of preparing a school financial budget is as follows Hidayat & Rusdiana (2022) reveals four main activity phases as follows : Planning a budget, namely identifying educational goals, determining priorities, translating goals into measurable operational steps, and analyzing alternative methods to achieve them. Preparing a budget, namely making a clear activity plan, and the objectives of the teaching program in compiling an inventory of available materials and equipment. Managing budget implementation, namely preparing bookkeeping, spending and transactions, and supervising implementation in accordance with regulations and financial accountability reports. Assessing the budget, which includes evaluating the implementation of the teaching and learning program, evaluating how program targets can be achieved and proposals for future budget improvements. The relevance of budgeting in this study is that by using the e-RKAM application, budgets can be prepared in an integrated, structured, effective, and efficient manner in accordance with the formulated educational objectives. In e-RKAM, all operational activity plans, including the required budget, are systematically recorded. All budget data recorded in e-RKAM will be useful in implementing activities at the madrasah.

Accounting

In the field of education, accounting plays a crucial role in supporting the smooth operation of educational institutions. Proper application of accounting can serve as a basis for institutions in making strategic decisions to achieve educational goals. According to Sugiarto and Suwardjono in Hidayat & Rusdiana (2022), accounting is the science concerned with presenting an organization's financial information to relevant parties as a basis for decision-making. The accounting process encompasses identifying financial data, recording it, and preparing financial reports as its primary output. Furthermore, the accounting cycle can be grouped into three stages: recording, summarizing, and reporting (Hidayat & Rusdiana, 2022). The following is a table of the stages of the accounting cycle. The relevance of accounting in this study is that after integrated, structured, effective, and appropriate planning is implemented and recorded in the e-RKAM system, accounting can be implemented more accurately and transparently. Through e-RKAM, all relevant parties can see how the budget is being used responsibly and transparently.

Electronic Madrasah Budget Work Plan (e-RKAM)

With the advent of the digital era, the Ministry of Religious Affairs has introduced the Electronic Madrasah Budget Work Plan (e-RKAM) platform, a driving force for efficient and effective education governance. Using a single application, madrasah administrators can work more efficiently, reducing the burden on their tasks. The e-RKAM application is expected to streamline reporting and streamline spending. According to the Director General of Islamic Education at the Ministry of Religious Affairs of the Republic of Indonesia (2020), the e-RKAM application can be accessed through the following page. The e-RKAM application can be accessed online via the website using a PC/laptop for Practice and for Implementation. The semi-online application will be developed for

madrasah that do not have internet access in their area. The steps for semi-online access are as follows: Madrasah download the e-RKAM application from the Ministry of Religious Affairs website; Madrasah completed the e-RKAM offline; Madrasah re-upload the completed e-RKAM application to the designated Ministry of Religious Affairs website.

Table 1. Accounting Cycle

No	Stages	Activity
1.	Recording Stage	<ol style="list-style-type: none"> 1. Identification and measurement of transaction evidence and recording evidence. 2. Recording transaction evidence in a diary or journal. 3. Transfer from journal by group or type into the general ledger account.
2.	Summary Stage	<ol style="list-style-type: none"> 1. Preparation of trial balance based on general ledger accounts. 2. Preparation of adjusting journal entries. 3. Preparation of work papers or work balance sheets. 4. Making closing journal entries. 5. Preparation of post-closing trial balance. 6. Making reversing journal entries.
3.	Reporting Stage	<ol style="list-style-type: none"> 1. Surplus deficit report. 2. Cash flow statement 3. Balance Sheet 4. Notes to the financial statements

Source: Processed Data (2022)

METHODS

This type of research uses a qualitative descriptive analysis method with a case study approach. It's called descriptive because it describes an object or phenomenon in a narrative text. The research used is a case study, where the research is conducted within a unified system, such as a program, event, activity, or individual. The location of this research is at the Madrasah Ibtidaiyah Muhammadiyah 2 Pendil in Sebaung Village, Gending District, Probolinggo Regency, East Java 68118. This research instrument used a purposive technique. Purposive technique is the determination of subjects selected with specific considerations and objectives. In this study, the subjects considered were the Principal, Treasurer, and e-RKAM Operator of the Madrasah Ibtidaiyah Muhammadiyah 2 Pendil, regarding competency and mastery of budgeting and accounting implementation. The data sources used in this study are primary data using interview results obtained from informants regarding the research topic and secondary data using documents related to the 2024 Madrasah Budget Work Plan (RKAM) report. The data collection techniques used by researchers were interviews with informants and documentation related to Budgeting and Accounting. According to Sugiyono (2022) states that data analysis techniques are the process of searching for and organizing data obtained from various sources using data collection techniques. The data analysis used by researchers in this study is the interactive qualitative analysis model of Miles, Huberman, and Saldana includes data collection, data reduction, data presentation, conclusions. In this study, triangulation was used. Sugiyono (2022) states that triangulation is a technique that combines various data collection techniques from existing data sources through source triangulation tests and technique triangulation tests.

RESULTS

Budgeting

The implementation of budgeting based on the electronic application of the madrasah budget work plan (e-RKAM) at Madrasah Ibtidaiyah Muhammadiyah 2 Pendil begins with planning activities in 1 academic year. The prepared budget is implemented in accordance with the applicable stages and is supervised in accordance with existing regulations, namely by the foundation as an internal audit and the Ministry of Religious Affairs as an external audit, while the management of the implementation of the program/activity budget to be implemented is carried out by the Facilities and Infrastructure department. Budget evaluation is carried out by monitoring the availability of the budget to determine whether it is sufficient to complete the program/activity and evaluating deficiencies in its implementation. Table 2 is a table of budget preparation (Budgeting) at Madrasah Ibtidaiyah Muhammadiyah 2 Pendil as follows.

Table 2. Budgeting at Madrasah Ibtidaiyah Muhammadiyah 2 Pendil

Budget Planning	Preparing a Budget	Managing Budget Execution	Assessing the Budget
a) Determining educational objectives according to the curriculum NSM: 111235130333 NPSM : 60716369 Valid: 2023-2024 b) Priority Goals: 1. Character Development 2. Literacy 3. Competence	a) Activity plan b) Included in the activity and budget plans in the e-RKAM application.	a) RAB Submission b) Verification and validation by the Principal Madrasah c) Disbursement d) Realization	a) Assess whether the budget is sufficient or not. b) Assess the shortcomings of an activity.

Source: Processed Data (2025)

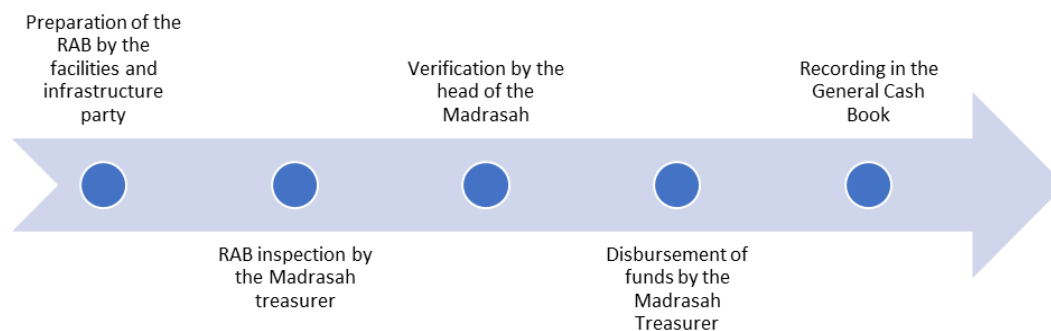


Figure 1. Budget Implementation Stages

Source: Budget Implementation Stage at Madrasah Ibtidaiyah Muhammadiyah 2 Pendil (2025)

Andriyani: Digital Transformation of Budgeting...

Budget planning begins with the formation of a drafting team consisting of the Madrasah Principal, Treasurer, Drafting Team, Committee, and Teaching Staff to evaluate the Madrasah Self-Evaluation which discusses educational objectives that include priority objectives, namely character development, literacy, and competency, as stated in the Madrasah Operational Curriculum (KOM) 2023-2024. Next, the team prepares programs/activities in the madrasah budget work plan through the e-RKAM application and evaluates the suitability between the required budget and the budget available in the BOS Fund. The goal is to ensure that the budget proposal is in accordance with the established standards of needs and activity plans. The above opinion is supported by Berlianto & Wulandari (2023) which states that the budget planning stages include forming a drafting team, collecting data, discussing and determining the level of each indicator, and seeking the approval of the Madrasah Principal. Therefore, the results of the Madrasah Self-Evaluation serve as a reference for determining priority programs/activities in the preparation of the activity plan. After the activity program is drawn up, budget realization/implementation is carried out, the following is a picture of the stages of budget implementation management:

In budget management, the Facilities and Infrastructure department prepares a Budget Plan for each program/activity and submits it to the Madrasah Treasurer to be checked for suitability and completeness. Once approved, the Madrasah Treasurer submits verification to the Madrasah Principal, followed by the disbursement process, which is recorded in the General Cash Book along with expenditure receipts. During implementation, the budget is evaluated and monitored periodically to ensure there are no unexpected expenses and sufficient funds. If there is excess funds, a decision is made whether the funds are allocated for other purposes or returned according to procedure. This research is in line with the statement made by Solehan (2022) states that the implementation of financing is grouped into two activities, namely recording receipts and expenditures.

The entire budgeting process is implemented through the e-RKAM application. This application has two Madrasah-level accounts, as mandated by the Ministry of Religious Affairs: the Madrasah Principal and the Madrasah Treasurer, enabling more effective and efficient budget management. Madrasah Ibtidaiyah Muhammadiyah 2 Pendil prepares the madrasah work plan and budget (RKAM) through the e-RKAM application, there are different roles between the Madrasah Principal and the Madrasah Treasurer, where the Madrasah Principal determines the activities/sub-activities while the Madrasah Treasurer inputs the details of the activities and their cost components through the e-RKAM application. The process begins with the Madrasah Principal logging in, opening the planning menu in the revenue submenu, and then entering the BOS Fund disbursement. Next, they enter the spending submenu to enter the activity plan and budget allocation. The Madrasah Treasurer then logs in and enters the budget work plan in the spending submenu, completing the activity and cost details. Afterward, they await verification and approval from the Madrasah Principal via the e-RKAM application. Figure 2 are the stages in preparing a madrasah budget work plan.

Accounting

In the process of realizing the work plan for the budget of Madrasah Ibtidaiyah Muhammadiyah 2 Pendil, it cannot be separated from bookkeeping activities (Accounting), Table 3 is the bookkeeping table (Accounting) in the e-RKAM application. The accounting in the e-RKAM application is operated by the Madrasah Treasurer under the supervision of the Madrasah Principal, while the application management is delegated to the Madrasah Operator. The process begins with the identification and classification of income transactions (BOS Funds, donors, self-help, etc.) and expenditures (teacher salaries, operational costs, stationery, building maintenance, etc.).

Andriyani: Digital Transformation of Budgeting...

The Madrasah Treasurer records receipts and expenditures in detail in the General Cash Book with receipts/notes as evidence. Every month, the Treasurer checks the General Cash Book balance to match the bank account balance and prepares a financial report which is then reported to the Madrasah Principal. This is in line with research Hidayat et al., (2023) which states that in the implementation of budget spending, bookkeeping activities (Accounting) are a very important part and are recorded carefully in the General Cash Book.

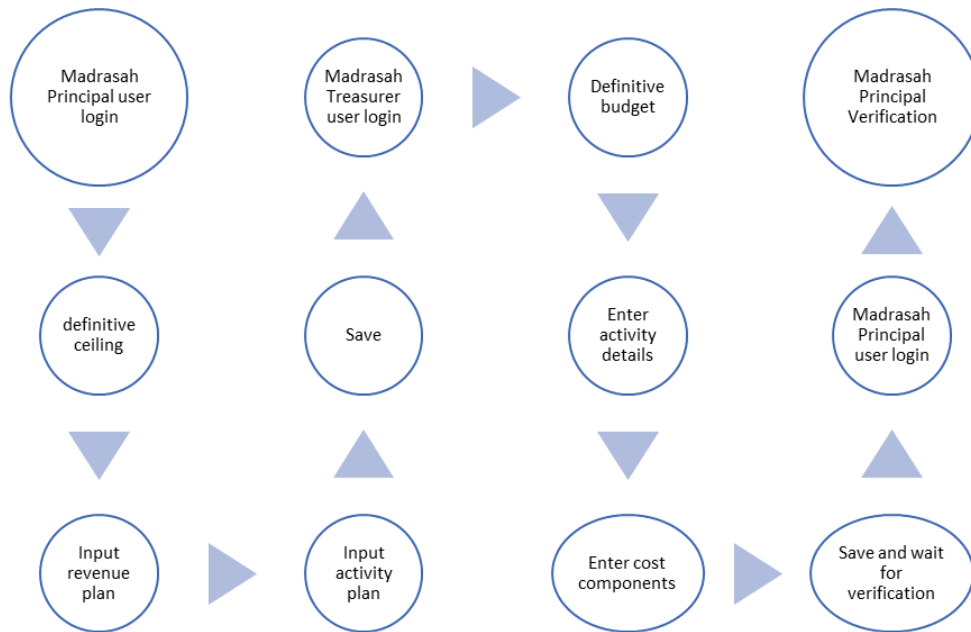


Figure 2. Stages of the e-RKAM-based madrasah work plan and budget
Source: Stages of the e-RKAM-based madrasah work plan and budget Madrasah Ibtidaiyah Muhammadiyah 2 Pendil (2025)

Table 3. Accounting in the e-RKAM Application

e-RKAM Application-Based Accounting		
Recording	Summary	Reporting
1. Identifying transactions. 2. Recording in the General Cash Book (BKU): 1. Manual 2. Excel application. 3. Receipt/Note 3. Verification of Madrasah Principal	1. Inputting the realization of BOS Fund income. 2. Move books 3. Realization of activity expenditure 4. Verification of Madrasah Principal 5. General Cash Book Archive (BKU)	Desired report: 1. Login 2. Report features 3. Select the desired report 4. Archives

Source: Processed Data (2025)

Manual and Excel-based General Cash Book recording helps minimize input errors. Once the Excel recording is approved by the Principal, the data is transferred to the e-RKAM application, starting with entering BOS Fund revenue in the realization feature. After BOS Funds are withdrawn, bookkeeping and activity expenditures are recorded according to the work plan. The Principal then verifies the report, and if there are any revisions, adjustments are made before resubmitting it for approval. Finally, the report is recorded in the General Cash Book feature, and the document is archived.

CONCLUSION

The implementation of E-RKAM-based budgeting at Madrasah Ibtidaiyah Muhammadiyah 2 Pendil has complied with the budget preparation stages and supports good governance. E-RKAM improves the effectiveness of budget management by ensuring that funds are allocated according to planned needs and priorities. The implementation of E-RKAM-based accounting at Madrasah Ibtidaiyah Muhammadiyah 2 Pendil has complied with the bookkeeping stages (summarization, recording, reporting) and supports good governance. E-RKAM improves financial accountability and transparency by recording all transactions electronically, facilitating monitoring and auditing. This research does not cover financing management at the auditing stage carried out by external parties, namely the Ministry of Religion, because this is a domain and authority that is completely outside the scope of Madrasah Ibtidaiyah Muhammadiyah 2 Pendil. To simplify the recording process in the General Cash Book, the Madrasah Treasurer can use Ms. Excel to make recording more systematic, effective and efficient. Strengthening the main task and function processes within the framework of internal control.

REFERENCES

- Antonio, M. S. (2017). *Bank Syariah: Dari Teori ke Praktik (Cetakan 1)*. Gema Insani.
- Berlianto, A. F., & Wulandari, L. (2023a). Implementasi EDM dan E-RKAM di Madrasah Ibtidaiyah Muhammadiyah Tanjungsari. *Jawda: Journal of Islamic Education Management*, 3(2), 167–183.
- Febriawan, A. (2022). Implementasi EDM dan e-RKAM dalam Meningkatkan Mutu Pendidikan di MAN 2 Sragen Tahun 2021/2022. *LITERATUS*, 4(2), 704–710. <https://doi.org/https://doi.org/10.37010/lit.v4i2.888>
- Handika, & Rifa'i, A. A. (2023). Implementasi EDM dan E-RKAM Dalam Meningkatkan Mutu Pendidikan di MI Terpadu Al Husna Klaten. *ADAARA: Jurnal Manajemen Pendidikan Islam*, 13(1), 21–29. <https://jurnalptiq.com/index.php/andragogi/article/view/78>
- Hidayat, A. N., Sauri, S. R., Rhamdani, N., Alam, R., Kusmiyati, N., & Mahmudah, U. (2023). Manajemen Pembiayaan Pendidikan dalam Meningkatkan Mutu Pembelajaran di SMA Al Qona'ah Baleendah Kabupaten Bandung. *Jurnal Manajemen Pendidikan Islam*, 4(1), 30–37.
- Hidayat, A., & Rusdiana, H. A. (2022). *Manajemen Pembiayaan Pendidikan*. CV PUSTAKA SETIA.
- Huda, M. (2015a). Peran Pendidikan Islam Terhadap Perubahan Sosial. *Edukasia: Jurnal Penelitian Pendidikan Islam*, 10(1), 165–188. <https://doi.org/10.21043/edukasia.v10i1.790>
- Irawan, & Noval, A. (2019). Manajemen Pembiayaan Pendidikan Di Madrasah Tsanawiyah Swasta: Studi Kasus Di. MTS Wihdatul Fikri Kabupaten Bandung. *Jurnal Manajemen Pendidikan*, 14(1), 73–81.
- Iskandar, A., Possumah, B. T., & Aqbar, K. (2020). Peran Ekonomi dan Keuangan Sosial Islam saat Pandemi Covid-19. *SALAM: Jurnal Sosial Dan Budaya Syar-I*, 7(7). <https://doi.org/https://doi.org/10.15408/sjsbs.v7i7.15544>

- Komariyah, S., Nurhidayah, N., Andriyana, N., & Murtafi'ah, N. H. (2022). MANAJEMEN PEMBIAYAAN PENDIDIKAN YANG EFEKTIF UNTUK MENINGKATKAN MUTU PENDIDIKAN. *Al Wildan: Jurnal Manajemen Pendidikan Islam*, 1(2), 78–86. <https://doi.org/https://doi.org/10.57146/alwildan.v1i2.671>
- Mesiono, Suswanto, Lubis, R. R., & Haidir. (2021). Manajemen Pembiayaan Pendidikan dalam Meningkatkan Mutu Pendidikan di Madrasah Aliyah Imam Muslim Serdang Bedagai. *INTIQAD: Jurnal Agama Dan Pendidikan Islam*, 13(1), 119–134. <https://creativecommons.org/licenses/by-sa/4.0/>
- Ningsih, S., Salehudin, M., & Setiawan, A. (2024). Manajemen Keuangan Berbasis E-Rkam Dalam Meningkatkan Mutu Pendidikan Madrasah Di Kota Balikpapan. *EDUSAINTEK: Jurnal Pendidikan, Sains Dan Teknologi*,
- OJK. (2014). Peraturan Otoritas Jasa Keuangan Nomor 31/POJK.05/2014 Tentang Penyelenggaraan Usaha Pembiayaan Syariah. *Peraturan Otoritas Jasa Keuangan*, 18, 27–38. <http://www.ojk.go.id>
- Rachman, M. A., & Salam, A. N. (2018). The Reinforcement of Zakat Management through Financial Technology Systems. *International Journal of Zakat*, 3(1), 57–69. <https://doi.org/https://doi.org/10.37706/iconz.2018.122>
- Sa'idu, N. (2021). Implementasi Aplikasi Edm Dan E-Rkam Dengan Menggunakan Aplikasi G-Suite For Education Pada Madrasah Sasaran Proyek Realizing Education's Promise-Madrasah Education Quality Reform (REP-MEQR) IBRD Loan Number: 8992-Id Th.2020-2024. *STRATEGY : Jurnal Inovasi Strategi dan Model Pembelajaran*, 1(2), 193–199, <https://doi.org/10.51878/strategi.v1i2.598>
- Solehan. (2022). Manajemen Pembiayaan Pendidikan dalam Meningkatkan Mutu Lembaga Pendidikan Islam. *EDUMASPUL: Jurnal Pendidikan*, 6(1), 98–105.
- Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Tampubolon, M., Simanjuntak, N., & Silalahi, F. (2023). *Birokrasi & Good Governance*. PT Global Eksekutif Teknologi.
- Wardhani, A. S., Abdullah, G., & Miyono, N. (2022). Manajemen Pembiayaan Pendidikan Dan Peningkatan Mutu Pendidikan. *Jurnal Prakarsa Paedagogia*, 5(2), 323–332. <https://doi.org/https://doi.org/10.24176/jpp.v5i2.8003>

