

# IMPLEMENTATION OF MADRASAH DIGITAL REPORT APPLICATION IN DEVELOPMENT EDUCATION MANAGEMENT INFORMATION SYSTEMS AT MTs. HIDAYATULLAH LOPI SINJAI REGENCY

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**Abstract:** This research discusses the implementation of madrasah digital report applications in development education management information systems at MTs. Hidayatullah Lopi. This study is a descriptive qualitative research. Data collection instruments include observation, interviews, and documentation. Informants in this study are vice principals of the madrasah, RDM operators, class guardians, and subject teachers. The research findings reveal that the madrasah digital report is a policy of the Ministry of Religious Affairs of the Republic of Indonesia as a form of digitization development in Madrasah. This RDM application is a transformation from manual reports, consisting of planning, implementation, and evaluation stages. Its advantages include enhancing the effectiveness of student report processing, but its weakness lies in the inability to be accessed remotely from the server.

**Keywords:** Application, Madrasah Digital Report, Education Management Information System.

## **INTRODUCTION**

The advancing globalization has made technology an integral part of everyday life that cannot be separated. One of its positive impacts is the increased efficiency and effectiveness in obtaining information. In the education sector, the presence of technology also brings significant benefits to educational institution management, ranging from input processes, output processes, to evaluating the processes that have been conducted.

Management Information System (MIS) is a solution supported by advanced technology to handle various emerging issues. MIS aims to efficiently manage human resources, technology, procedures, and data to obtain desired information in an institution or organization. (Murni, 2021).

Accessing technology in educational institutions has a significant positive effect, one of which is using technology as an administrative tool that assists educators in carrying out various activities, from student and educator data collection to the final assessment process for students. (Rini, 2023).

Changes in the curriculum in Indonesia often have an impact on students and educators, including changes in the required report formats (H. Abdullah & HJ. Safarina, 2016). In the millennial era, manual approaches to report processing and formatting have been replaced by more modern approaches, utilizing continuously evolving information technology. By leveraging this progress, educational institutions, especially madrasah, can optimize staff and teacher performance with accurate and reliable information

systems that support the teaching process and student learning outcomes. (Putri, 2019).

The Ministry of Education and Culture responded to this challenge by introducing online-based report applications since 2013. In 2018, the Ministry of Religious Affairs launched the Madrasah Digital Report (RDM) available for all madrasah, both private and public, in Indonesia. RDM serves as an evaluation tool for learning performance and acts as a repository for grades for madrasah (Muhammad, 2020).

The presence of RDM emphasizes the need for madrasah to adopt internet and digital technology developments more rapidly. This is driven by the necessity for quick access to student information to achieve the targets desired by the community. The RDM application is used to generate evaluation reports on the progress of students' competencies in madrasah over two semesters. (Sulfinatin & Safi'il, 2020).

Based on the research conducted by Nidaul Fajrin and Imam Machali titled "Implementation of Online-Based Madrasah Digital Report (RDM) Usage in Learner Assessment Administration," the findings indicate that utilizing the Madrasah Digital Report online is more effective than using conventional reports or those created using Microsoft Excel (Nidaul & Imam, 2023).

According to the findings of the previous research, the implementation of Madrasah Digital Report is being used in one of the Private Madrasah Tsanawiyah in Sinjai Regency, particularly at MTs. Hidayatullah Lopi located in Dusun Lopi,

Desa Baru, Sinjai Tengah District. The application implementation started in 2021, following the issuance of a circular letter from the Ministry of Religious Affairs mandating all madrasah under its auspices to use the application.

Initially, the assessment of learning outcomes at MTs. Hidayatullah Lopi was done manually, with class guardians writing reports directly. However, with the implementation of Madrasah Digital Report application and the requirement for every educator to be involved in the process of completing student reports, this has encouraged educators to improve their technological understanding. However, some educators still face difficulties in completing these reports, as is the case at MTs. Hidayatullah Lopi.

Based on the above, the objectives of this research are as follows: 1) To identify the policy of implementing the Madrasah Digital Report Application in the development of education management information systems. 2) To analyze the development of education management information systems through the Madrasah Digital Report application at MTs. Hidayatullah Lopi, Sinjai Regency. 3) To identify the strengths and weaknesses of the Madrasah Digital Report application in the development of education management information systems at MTs. Hidayatullah Lopi, Sinjai Regency.

## **LITERATURE REVIEW**

Rosnina, Arifuddin Siraj, and Baharuddin, in 2019, conducted a research study titled "Information System for Processing Grade Data Using Digital Report Applications." This study is a qualitative descriptive research that adopts a phenomenological approach. The research findings indicate that MAN 2 Bone has implemented a Digital Report Application in 2019 as a means to provide information about student learning outcomes (Rosnina dkk., 2021).

This study shares similarities with previous research conducted by Rosnina et al., as both investigate the digital report application in madrasah as an information system and employ a qualitative approach in their research methodology. However, there are differences in the type of research, research location, and educational level studied. The previous study was conducted at the Madrasah Aliyah level, while this study was conducted at the Madrasah Tsanawiyah level. Additionally, this research discusses the implementation of digital madrasah reports as a transformation of the education management information system.

## **RESEARCH METHODOLOGY**

This study employs a descriptive qualitative research method, a research strategy in which the researcher observes events, occurrences, or experiences that individuals or groups undergo in order to narrate their experiences. (Sugiyono, 2018). This research was conducted at MTs. Hidayatullah Lopi, Sinjai Regency. Data sources were collected through

primary and secondary data, gathered via observation, interviews, and documentation. The informants in this study consisted of the Vice Principal, RDM operator, class teachers, and subject teachers.

## **RESULTS AND DISCUSSION**

A. The policy of implementing the digital madrasah report application (RDM) at MTs. Hidayatullah Lopi, Sinjai Regency.

The Digital Madrasah Report Application (RDM) is a web-based platform for recording and reporting student grades online, allowing educators to participate in the grading process. This initiative is part of the Ministry of Religious Affairs' efforts to promote digitization within the madrasah environment. Although RDM has been launched since October 2018, its implementation has not been uniform across all madrasahs in Indonesia. However, with the issuance of a new circular from the Ministry of Religious Affairs in June 2021, all institutions/madrasahs under the Ministry of Religious Affairs, both public and private, are required to use the application.

The Directorate of Madrasah Education Development, part of the Directorate of Islamic Education at the Ministry of Religious Affairs of the Republic of Indonesia, has issued a circular with number: B-1726/DJ.I/Dt.I.I/PP.00/06/2021 addressing the development of the Madrasah Digital Report Application (RDM). The integration between the RDM application with

EMIS (Education Management Information System) and Madrasah E-Learning is intended to facilitate the use of RDM by madrasahs and support the policy of the Directorate General of Islamic Education in providing Islamic education data services through EMIS (Aslih dkk., 2023).

In accordance with the circular, MT's. Hidayatullah Lopi, Sinjai Regency, has also implemented this application since 2021 in the first semester of the academic year 2021/2022. This information is based on interviews conducted with Mr. Sudirman, the Vice Principal of the madrasah in charge of the curriculum.

“We began implementing the madrasah digital report application in our madrasah in 2021, as it was recommended by the Ministry of Religious Affairs of Sinjai Regency. Consequently, we had to adapt to this application, shifting from manually writing student reports in paper-based report books to using an online application. This required our operators and all teachers to learn how to use the application..”

Based on the statement from the informant above, this application represents a transition from manual report to online report, requiring all educators and educational staff to strive to master the application.

The management of this digital report application involves not only operators or class teachers but also all subject teachers, each with different responsibilities, ensuring systematic management of the application..

- B. The analysis of implementing the madrasah digital report application (RDM) in the development educational management information systems.

The Madrasah Digital Report Application is a government effort in developing the educational management information system in madrasahs, particularly in the reporting system of student assessment results. Student reports, which were initially done manually (handwritten), are now carried out through a technology-based website.

The Education Management Information System (EMIS) is a structured set of program components designed to manage data from input, processing, to output stages through management functions, ensuring that the resulting information is more accurate and the process is more efficient (A, 2019).

The development of the madrasah digital report information system at MTs. Hidayatullah Lopi, Sinjai Regency, consists of three parts: the planning stage, the data processing stage (process), and the data storage/output stage.

#### 1. The Planning Stage

The initial stage in the madrasah digital report information system, starting from the planning stage. The initial planning conducted at MTs. Hidayatullah Lopi involved assigning the Madrasah Operator to attend the socialization and training organized by the Ministry of Religious Affairs of Sinjai Regency. Subsequently, the operator provided socialization to the class teachers and teachers at the madrasah.



Based on the interview results, to meet the users' needs, the school continuously conducts training so that users can effectively utilize the system developed by the school. Users who are computer literate and supported by other tools can understand and access the system. In this stage, the madrasah operator plays a crucial role as the controller of the application server. This was revealed by Ms. Dewianugrah:

“In this planning stage, we prepare starting from the equipment used to access the application. I then downloaded the server onto the computer. The application is called VirtualBox, installed on a Windows computer. After that, I installed the RDM VDI version through the madrasah digital report website. This version of RDM VDI is prepared for madrasahs that use a local server to access the RDM application. We run this application using 1 laptop as a server, and the rest are connected to laptops used by teachers and class teachers.”

## 2. The Implementation Stage

Users who can access this application include the madrasah operator, the school principal, teachers, and staff. Each user has their respective tasks: the madrasah operator/admin manages the RDM application system, troubleshoots issues, and performs system repairs; the madrasah principal supervises the process; and the teachers process student grades.

The management of the Madrasah Digital Report (RDM) can only be used when needed, and the system is utilized collectively by all teachers. This is done to ensure that completion is also simultaneous. Moreover, it is expected that

any issues arising during the input process can be jointly resolved. This aligns with the statement made by Ms. Nining Kurniawati, a subject teacher at MT's. Hidayatullah Lopi:

“I was given an account by the operator to access this application, but we only have one server. Therefore, we work on the digital madrasah report together.”

In this data processing stage, all class teachers and subject teachers access the application. Each subject teacher inputs subject grades, comprising both knowledge and skill assessments, which are then accumulated into the report application..

In the process of student assessment, this digital madrasah report application features allow users to conduct assessments through an Excel template that can be filled offline or directly through the application.

The digital madrasah report, as a web-based application system, is expected to transform the working pattern of teachers from manual to digital, thereby facilitating teachers in assessing students and even extending to printing reports and evaluating students' learning outcomes.

### 3. The data storage stage

The data storage stage in the madrasah digital report information system involves the process of sending all student grades, as well as printing the assessment results conducted by each subject teacher, class guardian, and extracurricular advisor..

The printing stage of student reports can be done by the class guardian or madrasah operator. However, the

printing of the reports should be overseen by the class guardian regarding the assessment of students that has been submitted by each subject teacher, as well as providing specific assessments from the class guardian.

C. Advantages and disadvantages of the madrasah digital report application in development education management information systems

1. Advantages:

- a. The application can be accessed anytime.

The research findings indicate that the madrasah digital report application can be accessed anytime as long as there is a good connection, as the application stores the data that has been worked on, including past semesters, so it can be reprinted when needed.

- b. Administrative efficiency.

The digital report application can enhance administrative efficiency by expediting the process of report preparation, distribution, and storage. This can save time and resources. Digital-based applications provide effective processing from input to output processes.

- c. The completeness of student learning outcome data

This application helps facilitate operators in printing out student learning outcomes. Not only the quantity of grades is listed, but also written within are descriptions of the students' knowledge and understanding, as well as their abilities and skills. All of these are detailed for each subject, so that when receiving the report, parents will know the extent

of their child's learning outcomes throughout the semester.

d. Integrated with EMIS

The RDM application is directly related to the management system of Islamic education fundamental data managed by the Secretariat of the Directorate General of Islamic Education, Ministry of Religious Affairs of Indonesia. In this system, student data is synchronized with the EMIS data, so that madrasah operators only need to synchronize/extract students from the EMIS data to the digital madrasa report application.

2. Disadvantages

- a. The RDM application must have good network access.

As conveyed by informant Mr. Sudirman:

“I observe that this digital report application still has shortcomings, such as needing a good network connection to open the application. However, in our madrasah area, the network access is not stable, which makes the processing time longer as we have to wait for the network to stabilize again.”

Based on the statement from the informant above, it can be inferred that the madrasah digital report information system at MTs. Hidayatullah Lopi, Sinjai Regency, faces challenges in implementation due to inadequate network connectivity during the RDM processing.

- b. The RDM application has not yet provided access to parents and students in managing the application.

The features of madrasah digital report application can be accessed by both teachers and parents of students, but in its implementation at MTs. Hidayatullah Lopi, access has not been provided to either students or their guardians.

- c. In the development of the RDM application information system at MTs. Hidayatullah Lopi, remote report processing has not been implemented.

The madrasah digital report application already has a feature for teachers to manage student data and learning outcomes, with student evaluations conducted solely online. This feature provides convenience for teachers to assess students remotely. However, in its implementation at MTs. Hidayatullah Lopi, this feature has not been utilized yet..

- d. There are still many teachers who lack understanding of technology, thus facing difficulties in using the Madrasah Digital Report.

Ideally, a teacher should keep up with the times, including the rapid development of technology, especially in the implementation of the RDM for managing student grades in madrasah educational units.

In its implementation, the madrasah digital report application at MTs. Hidayatullah Lopi still faces challenges due to the existing human resources, where some teachers are still not tech-savvy, and the work is only done at the end of the semester, leading to many teachers forgetting how to access it.

## CONCLUSIONS

The Madrasah Digital Report is a web-based application used in managing the assessment of student learning outcomes, which is a policy from the Ministry of Religious Affairs of Indonesia in developing digitalization in madrasahs. The RDM application is a transformation of manual report processing into a web-based report. In its development, it consists of planning, implementation, and data storage/printing stages. Some of the advantages include accessibility anytime, administrative efficiency, and more valid assessment. Furthermore, the weaknesses of this application are it can only be accessed when the server is up, unstable network in the area of MTs. Hidayatullah Lopi, and the lack of features aimed at students or their parents.

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