OPTIMIZATION OF *EDUCATION MANAGEMENT INFORMATION SYSTEM* (EMIS) AT MADRASAH DINIYAH TAKMILIYAH SUKAMAJU VILLAGE

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Abstract - *The development of information and communication technology has driven changes in the field of education, including the implementation of the Education Management Information System (EMIS) application, launched by the Ministry of Religious Affairs of the Republic of Indonesia. EMIS is a management information system developed by the Ministry to facilitate the management of data for madrasas and other religious educational institutions. The purpose of this study is to explore the optimization of EMIS usage at Madrasah Diniyah Takmiliyah (MDT) in Sukamaju Village. Using a descriptive qualitative approach and case study method, the study identifies challenges in EMIS management, such as a lack of education, limited equipment, and insufficient training, and evaluates the effectiveness of optimization efforts, including outreach and mentoring provided by university students through community service programs. The findings show that outreach and intensive mentoring efforts have improved the understanding and skills of madrasa operators in managing educational data, although infrastructure challenges still need to be addressed to support more effective data management..*

Keyword: *Optimization, Education Management System (EMIS)*

1. INTRODUCTION

The world is currently entering the era of the Industrial Revolution 4.0 which is marked by the presence of cyber-physical systems, the Internet of Things (IoT), and wireless networks. These developments are changing the way we access information, communicate, and connect with each other. Indonesia, as part of the global community, welcomes the Industrial Revolution 4.0 by implementing and utilizing information systems in various sectors, including in the field of Islamic education.(Sofwani dkk., 2023)

In this case, the Directorate General of Islamic Education has developed a management information system for Islamic educational institutions known as the Education Management Information System (EMIS) (Muhammad Risjan F, t.t.) The Education Management Information System (EMIS) is expected to be able to accommodate and process data and produce accurate and accurate information at all times. Technology and information have important things in the world of education to get real data and data that is updated year after year so that existing information continues to be updated (Rahmania dkk., 2020) In its actualization in educational institutions, the EMIS data collection system is the only official Islamic Education data collection instrument within the scope of the Directorate General of Islamic Education, which must be well understood its function and use, moreover EMIS operators in religious education institutions and Islamic boarding schools themselves are expected to be able to carry out their substance consistently.(Zulfa Fadilah, 2022)

The purpose of using EMIS is to make it easier for all madrasas to report their progress. The EMIS application is a website-based application, so to open it requires internet browsing software (browser), which displays data on institutions, the number of madrasas, the number of teachers and educators, and infrastructure facilities in numbers. so that the Ministry of Religious Affairs, especially the Director General of Pendis, can manage madrasah data and monitor its development (Djalaluddin & Santoso, 2022)

However, it is still seen that the implementation of EMIS at the Ministry of Religion of Ciamis Regency is still not optimal, especially Madrasah Diniyah Takmiliyah (MDT) in Sukamaju Village, the implementation of EMIS is not optimal in terms of institutional data that is not in accordance with real conditions and the institution has not been able to operate EMIS as it should due to constraints with other things such as lack of adequate equipment and direct assistance from the authorities.

So, to respond to the weaknesses and obstacles that exist in Madrasah Diniyah Takmiliyah (MDT) Sukamaju Village, Kel KKN 178 UIN Sunan Kalijaga has carried out Optimization of the Administrative Data System (EMIS) in collaboration with Madrasah Diniyah Takmiliyah (MDT) Sukamaju Village with a focus on improving understanding and operational skills of EMIS.

B. METHOD

This study uses a descriptive qualitative approach to explore the process of optimizing the use of Education Management Information System (EMIS) in Madrasah Diniyah Takmiliyah (MDT) Sukamaju Village. This study aims to identify the obstacles faced in the implementation of

EMIS and evaluate the effectiveness of optimization efforts carried out by various parties, including Real Work Lecture (KKN) students and madrasah institutions themselves. This research is a case study that focuses on one location, namely Madrasah Diniyah Takmiliyah Sukamaju Village. The case study was chosen because it allows researchers to conduct an in-depth investigation related to the problems faced by MDT in the operation of EMIS, as well as the steps taken to overcome these obstacles. This research is descriptive because it tries to explain the circumstances and processes that occur in the field in detail.

C. RESULTS AND DISCUSSION

Management of Education Management Information System (EMIS) at Madrasah Diniyah Takmiliyah Sukamaju Village

EMIS (Education Management Information System) is an education management information system used in the field of PD Pontren of the Ministry of Religion to organize educational data and information to be stored, managed, analyzed, and used in educational decisionmaking (Sofwani dkk., 2023)

Education Management Information System (EMIS) is a program launched by the Ministry of Education (DepEd) based on MEC Memo No. 83 of 1981. This program aims to provide information for education administrators in planning and implementing educational services (Enteria & Role, 2018). This system aims to provide data and information needed in policy formulation, planning, education implementation, object development, budgeting, and decisionmaking (Mubarak, 2022) The management of institutional data at Madrasah Diniyah Takmiliyah in Sukamaju village is carried out through the use of the online-based EMIS application. EMIS is an application developed by the Ministry of Religion with the aim of facilitating data processing for madrasas, Islamic boarding schools, and other religious educational institutions. EMIS Online is an application that can be accessed through the web, so to access it requires software such as Mozilla Firefox, Google Chrome, and the like.

To use the EMIS app, users must first have an account. This was explained by the operator of the Ministry of Religion of Ciamis Regency who stated that

"*In order for madrasas to be able to access and register with EMIS, the first step is to register an account using email through EMIS HRM. After the account is approved and activated, the madrasah can log in using the email that has been registered at the initial stage through the https://emispendis.kemenag.go.id/pdpontre nv2/Login website by entering the username and password*

that has been registered. Since EMIS is an online-based application, the computer used must be connected to the internet."

Like applications in general, EMIS management also faces various obstacles. Based on observations and interviews with the Coordinator of Madrasah Diniyah Takmiliyah Sukamaju Village, some of the obstacles that often occur are

"Lack of education and socialization about the use of EMIS, inadequate tools and lack of continuous mentoring or training to improve their skills in managing data through EMIS. This makes madrasas have to study independently, which is sometimes less effective and time-consuming. As a result, many operators still lack an understanding of EMIS workflows, especially when it comes to system updates or new policies being implemented. On the other hand, the limited resources in educational institutions, both in terms of hardware and technical support, further aggravate the situation, so that the management of education data that should be faster and more accurate is hampered."

Therefore, to overcome various obstacles faced in the management of EMIS, it is necessary to take concrete steps such as increasing socialization and education related to the use of EMIS at the madrasah level. An ongoing training and mentoring program should be provided so that operators can better understand the system, especially in terms of updates and new policies. Additionally, it is important for educational institutions to improve their technological infrastructure, including providing adequate devices and stable internet connections. With the right support, both in terms of training and technical resources, data management through EMIS will become more effective and efficient, which will ultimately support the improvement of the overall quality of education.

Optimization Strategy of Education Management Information System (EMIS) at Madrasah Diniyah Takmiliyah Sukamaju Village

The Optimization Strategy for EMIS data management at Madrasah Diniyah Takmiliyah Sukamaju Village is carried out through several steps, namely;

a. Counseling related to Education Management Information System (EMIS)

This program focuses on improving the management of Madrasah Diniyah in Sukamaju Village. This village has around 12 Madrasah Diniyah Takmiliyah which are under the supervision of the Ministry of Religion as a non-formal educational institution in the field of PD/Pontren. These institutions are members of FKDT (Diniyah Takmiliyah Communication Forum), a village-level organization. This activity was held through counseling aimed at madrasah heads and madrasah operators. The event was attended by around 22 participants with direct speakers from the PD/Pontren field operator of the Ministry of Religion of Ciamis Regency to provide an explanation of the madrasah data administration system, namely EMIS.

This counseling is one of the first solutions in optimizing EMIS data management because it provides a deep understanding to all related parties,

such as madrasah heads, administrative staff, and teachers, about the importance of this education management

information system. Through counseling, they will better understand how to manage data accurately, quickly, and integrated, as well as how EMIS can support more effective decision-making in madrasas. In addition, counseling can also help reduce errors in data input, improve compliance with reporting standards set by the Ministry of Religious Affairs, and foster awareness of the importance of valid data for educational planning and evaluation.

b. Assistance in EMIS Data Management at Madrasah Diniyah Takmiliyah Sukamaju Village.

After counseling on the Education Management Information System (EMIS), the next step taken was intensive assistance to the heads of madrasas and operators of Madrasah Diniyah Takmiliyah in Sukamaju Village. This assistance is carried out to ensure that all madrasas can apply the knowledge gained from counseling effectively in managing their data.

The mentoring involved a field visit by KKN Kel 178 UIN Sunan Kalijaga Yogyakarta students who focused on direct guidance related to data input, update, and maintenance in the EMIS system. In addition, the accompanying team also provides practical training in the use of software related to data management systems, solves problems that often arise in the operation of the system, as well as provides guidance on reporting standards that must be followed.

This mentoring lasted for several days to ensure that each madrasah really understood and was able to operate the EMIS system independently. This activity is also expected to improve the skills of madrasah administration and operators, so that the data presented becomes more accurate, valid, and up-to-date, which in turn will strengthen educational planning at the madrasah level. The results of this assistance are measured through periodic evaluations, both in terms of the quality of data management and the level of compliance with regulations set by the Ministry of Religious Affairs. Table 1. Personality Type Relationships

D. CONCLUSION

This research provides important benefits for the managers of Madrasah Diniyah Takmiliyah in Sukamaju Village and policy makers in the field of religious education. By understanding the challenges faced in managing EMIS, such as lack of socialization, limited infrastructure, and lack of training for madrasah operators, this study provides concrete solutions to overcome these obstacles. Increased socialization, continuous training, and intensive mentoring are expected to help madrasas improve the quality of

the data presented, thereby supporting a more effective decision-making process at the level of religious education. The implication for users of the results of this study is the creation of more accurate, valid, and up-to-date data management, which will ultimately improve the quality of educational planning and evaluation in madrasas.

However, this study has some limitations. One of them is the limited scope of the research which only focuses on Madrasah Diniyah Takmiliyah in Sukamaju Village, so the results may not be fully generalizable to madrasas in other areas. In addition, this study focuses more on the technical and managerial aspects of EMIS management, without exploring its direct impact on the learning process or educational outcomes in madrasas.

Based on these limitations, the recommendation for further research is to conduct a broader study by involving madrasas in various regions to get a more comprehensive picture of EMIS management nationally. In addition, further research also needs to explore the relationship between the quality of data management through EMIS and learning outcomes and student achievement.

The recommendation for policy makers is for the Ministry of Religious Affairs to increase technical support for madrasas in the form of continuous training and strengthen technological infrastructure. In addition, the Ministry of Religious Affairs is expected to conduct a routine evaluation of the implementation of EMIS in all madrasas, so that existing weaknesses can be overcome immediately. This step is important to ensure that the management of education data runs efficiently and supports accurate data-based policymaking.

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