

## IMPLEMENTATION OF AN EDUCATIONAL MANAGEMENT INFORMATION SYSTEM AT MTS WAHID HASYIM 1 (MIFTAHUL ULUM ISLAMIC BOARDING SCHOOL) IN MALANG REGENCY

Slamet<sup>1</sup>, Moch. Alfin Khoirudin<sup>2</sup>, Abdurrohman Nur Ahsani<sup>3</sup>

<sup>1,2,3</sup>Universitas Islam Negeri Maulana Malik Ibrahim Malang

Email: [slametphd@gmail.com](mailto:slametphd@gmail.com)

### Abstract

The title of this research is Application of Educational Management Information Systems at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency. The aim of this research is to (1). Knowing the implementation of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency (2). Knowing the role of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency (3). Knowing the supporting and inhibiting factors of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency. This research uses qualitative research. The research location is at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency. The data collection methods used were observation, interviews and documentation. The data processing and analysis techniques used are: data collection, data reduction, data presentation and drawing conclusions. This research found that: (1) Implementation of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency has been implemented well, directed/controlled directly by the Head of MTs and using a data processing application, namely the SIMPATIKA service which is under the auspices of the Ministry of Religion (Kemenag). (2) The role of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency is very important for data processing, school administration, e-reports and so on. (3) The supporting factors are SIMPATIKA services, e-reports and wifi, while the inhibiting factors are the computer network and quota at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency.

**Keywords:** *Implementation, Education Management Information System, MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School), Malang Regency.*

### A. INTRODUCTION

The field of information technology is currently progressing at high speed, developing and even going global. So that currently there is no longer anything that is not touched by information. Observing the reality of progress in the development of information technology will continue in new breakthroughs in the next era, so that one of the tests of proficiency in the reliability of management science is the need to utilize the capabilities of advanced technological developments, and be able to understand the impact they have on organizational life, in other words maneuvering abilities in functional performance which determine the success of the management function in managing the organization they lead.

In an educational institution, good management is an absolute necessity for the survival of the institution. Proper management of information is one of the important things that can maintain and develop educational institutions. Education, especially Islamic education, whether it is held in the family environment (informal educational institutions), schools/madrasahs (formal educational institutions), or in the community (non-formal

educational institutions) is an institution that also requires appropriate information management so that educational goals can be realized. Information management in educational institutions or institutions is part of the education system itself. Information that is managed well should be in an information management system. Management information systems are information that is managed well in a system. Meanwhile, the management information system implemented in educational institutions is called the education management information system. All management functions in educational institutions (Islamic educational institutions in particular) can be carried out successfully if they are supported by a system that provides precise and accurate information. Information that is managed appropriately is very necessary for planning, decision making and control. It is through this accurate information that a manager or person in charge of education is able to make dreams (educational goals) become a reality (Helmawati, 2015).

Many administrators or managers within educational institutions already know about the existence and benefits of this management information system, but some of them have not utilized its existence to the fullest. This indicates that many people are still running management in educational institutions that are not in line with developments in science and advances in knowledge that are growing more rapidly. Because there are still many education managers who have not used or applied this knowledge (management information systems), ultimately the performance of leaders (managers) in planning, decision making, and control is less than optimal. Improper planning will only waste a lot of time and money. This means that planning that is not based on correct and accurate information will be wasteful, ineffective and inefficient. It is not surprising that in the end many educational institutions managed by managers who were not based on management knowledge experienced setbacks and quite a few educational institutions ended up being closed.

Not only that, education management that is not optimal also has an impact on educational output. Many of the outputs are far from the expectations of national education goals or Islamic education goals. The institutional management information system which should function to control the educational process has apparently not been able to be optimized by the managers of educational institutions. The lack of maximum control over students means that many educational outputs lack faith and piety, and even lack noble morals. The unstoppable influence of the era of globalization means that information changes rapidly from time to time. This rapidly changing information is apparently caused by advances in science and technology. This has an impact on education in Indonesia, especially educational output (Helmawati, 2015:2).

The lack of management and maximum use of the required information means that managers and users of educational services face many obstacles. It is only natural that in the end this causes many educational problems in Indonesia. The lack of planning, decision making and control, especially in national education including Islamic education, creates a prolonged crisis in the educational environment, starting from educational goals (faith and piety) that have not been achieved, endless moral crises, education that does not heed society's demands or expectations. (graduates who have knowledge and skills so they are able to live independently and prosperously), uneven education policies, management problems, leadership crisis, lack of reliable human resources (HR), financial crisis, and educational institutional problems.

To anticipate problems with the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency requires improvements to all existing elements, including in the field of management. In order to motivate the managerial aspects of education at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency, this research will analyze "Implementation of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency".

## **B. METHODS**

This research uses qualitative research. The research location is at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency. There are 4 primary data sources for this research, namely: MTs head, foundation secretary, teachers and staff. Meanwhile, secondary data sources are tools and supporting documents related to research objects such as documents, vision and mission and so on. The data collection methods used were observation, interviews and documentation. The data processing and analysis techniques used are: data collection, data reduction, data presentation and drawing conclusions.

## **C. RESULTS AND DISCUSSION**

### **1. Implementation of the Education Management Information System at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency**

A management information system is a combined set of procedures that collects and produces relevant and well-organized data that supports the decision-making process of an organization. The education management information system is intended to help facilitate information data relating to schools including new student admissions, grades, academics and other information. Also as an interactive media for students so that students are able to use technology and not be left behind (Helmawati, 2015). Success in carrying out management functions is supported by an information system that is able to provide the information needed by managers (institution leaders).

On the implementation of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency is carried out in several stages, namely:

#### **1. Planning**

Planning is an important process for all management functions, because without planning the functions of organizing, controlling and directing will not work. Plans can be informal and formal plans. Informal plans are plans that are not written down and are not based on shared goals with members of the organization. Meanwhile, a formal plan is a plan that has been made together and will be carried out within a certain period of time.

According to Mrs. Rika Aimatuzzukriyah as Secretary of the Foundation: "Planning in using the SIMPATIKA service is used over a long period of time, because the SIMPATIKA service has many application features in it that can make it easier for teachers to manage data and carry out their duties".

Thus, planning is an absolute thing in management. Because this planning will determine the course of a goal that the educational institution wants to achieve

#### **2. Organizing**

Organizing in management is the process of arranging the duties, authority and responsibilities of each individual in management. The organizing function is not only managing people, but all the resources they have. Including money, machines, time and everything without exception.

According to Mrs. Uswatun Hasanah as Head of Madrasah Aliyah: "Implementation and management of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency is of course controlled by myself (Mrs. Uswah) as the head of MTs who appoints employees to be responsible in their respective fields for managing and processing data so that it becomes information that can be used by the academic community of MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency".

So, organizing is about arranging resources, arranging so that everything goes according to what was previously planned. There are many people in an organization. Everyone

is different in almost every way, while they must work together to make the wishes of the educational institution come true. For this reason, organization is needed.

### 3. Actuating/Movement

Actuating is an effort made to achieve an educational institution's goals by being guided by planning and organizing efforts. According to Mrs. Rika Aimatuzzukriyah as Secretary of the Foundation stated that: "The education management information system (SIM) is a system that is oriented towards information systems that prioritize data accuracy and target accuracy in obtaining various data or information needed by educational institutions. The data management system used at MTs is the SIMPATIKA service which is under the auspices of the Ministry of Religion (Kemenag). MTs uses SIMPATIKA services, but SMP/MTs and SD still use DAPODIK (basic education data). This SIMPATIKA service is used to improve data management for teachers assisted by the Ministry of Religion. Meanwhile, the learning system during the Covid-19 pandemic issued by the Ministry of Religion is e-Learning. Apart from that, to anticipate slow networks we use the Whatsapp application. We also use the Zoom application in teaching halaqah".

The Ministry of Religion Information and Management System for Educators and Education Personnel is usually abbreviated as SIMPATIKA. This system is a data collection application used by the Ministry of Religion related to data collection on educators and educational staff for madrasas. This service can be accessed via the web page: <https://simpatika.kemenag.go.id/>.

The Ministry of Religion's SIMPATIKA features related to data on educators at madrasas, both regarding institutions, teachers and students, are as follows (Madrasah, 2020): 1). Manage admin/operator accounts 2). Manage Madrasa Heads (KaMad) 3). Manage Student Data 4). Manage Group/Class 5). Manage Academic Calendar (Kaldik) 6). Manage Reports 7). Manage teacher activity (Beginning of each semester) 8). Manage Educational Personnel (Tendik) 9). Manage Pais Supervisor 10). Manage Madrasah Curriculum (KurMa) 11). Manage Teaching Schedule 12). Manage Additional Duties 13). Manage Teacher and Education Personnel (GTK) Attendance 14). Verification & Validation (Verval) of Madrasah activity 15). Print a Certificate of Carrying Out Assignments (SKMT) 16). Workload Statement Letter (SKBK)

### 4. Control

Control is one part of management. Control is carried out with the aim that what has been planned can be implemented well so that the targets and objectives to be achieved can be achieved. Control is one of the manager's duties.

According to Mr. Subiani as staff: "Discussing educational SIMs is certainly carried out by school operators/staff but is still under the supervision of the Madrasah Head.

So, in implementing the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency has been implemented well and is controlled directly by the Head of the Madrasah.

In the process of managing the education management information system, it is not only about who plays a role in implementing the management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency, but also about the process of managing a management information system which consists of data collection, data processing and data input.

#### a. Data Collection

Data is important in research because without data there is no information. Data are facts that can be obtained in the form of unprocessed numbers. This data collection can be done using 3 methods, namely: observation, interview and documentation methods (Munawir, 2018).

According to Mr. Subiani as staff: "The goal of data collection is actually to obtain information that is true and of good quality."

This was reinforced by Gordon B. Davis stating that: to be able to produce quality information, quality data input is also needed. So, the first action to obtain data is to collect data, using three methods, namely observation, interviews and documentation.

Observation is a method used by directly observing conditions in the field with the aim of finding out the data in the field. Interviews are used to obtain original data or information that is accurate and reliable. Documentation is used as supporting data and as evidence to strengthen the results of data collection in the form of notes or photographs of objects and activities carried out.

According to Mrs. Sausan Hasna: "The first step in data collection before going to the observation, interview and documentation stage, is through several processes, namely: goal planning."

It needs to be well understood that the aspects contained in planning data collection activities must be carried out according to objectives based on "what, how, who, when and where".

So, at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency, during data collection, the school principal provided several lists or things needed for information needs. This data is static data and dynamic data. This static data rarely changes, static data at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency is data that consists of school data in the form of school history, school profile, principal biodata, teacher biodata and student biodata, while dynamic data is subject to frequent changes, both short-term, medium-term and long-term frequency changes. Dynamic data for M MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency is also included in the list of ranks of staff at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency, list of student grades, financial data and so on.

b. Data processing

In the data processing process, the data that has been collected will be processed using the help of hands or equipment that follows a series of formulation steps or certain patterns to change certain data into a form, structure, and its properties and contents are more useful.

Data processing process at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency is in accordance with the information system of each institution, as explained by Mrs. Sausan Hasna: "Data processing is carried out by operators/staff according to their field, after the data is processed it is submitted or shown to the school principal to be checked and asked for approval, after approval then data can be input directly." Based on the explanation above, it can be said that data processing includes:

- 1) For information needs, record the necessary things using pen, paper, ruler and so on
- 2) Using a combination of humans (operators) with machines or other data processing tools.
- 3) In processing statistical data, such as student statistical data, usually using computer machines.
- 4) In terms of data processing, each operator in their field already has SOPs (Standard Operational Procedures) which consist of legal basis and management procedures that can be used to process data. With SOPs, data

processing is more systematic and integrated so that the information produced is more communicative. and easily accepted by members/residents of MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency and others will automatically experience changes, therefore data processors must always update the data according to reality.

c. Data storage

For data security, data storage is very necessary. Storing information is very important because not all the information you have is needed at this time, but it is in accordance with your needs (Sutrisno, 2017).

In this case, Mrs. Sausan Hasna said that: "Data that has been stored in data storage can be reopened anytime and anywhere via a computer or laptop. "Apart from that, it is not free from human error, which often forgets, so storage assistance is needed, such as hard disks, flash disks and so on."

Archiving includes data storage, which aims to:

- 1) Whenever necessary for problem solving, it can be easily taken.
- 2) Maintain and maintain physical archives or documents so that they are protected from the possibility of damage, burning or loss.

So, data storage can be used to back up important data. We often store important data on PCs, laptops, hard disks or gadgets. However, we never think about what if the data is lost or the electronic device is damaged? Now that there is a cloud storage service, we can upload important data to this service without worrying that the data will be lost. This service is very useful for office executives , students and students who are still in school.

## **2. The role of the Education Management Information System at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) In Malang Regency**

The role of a management information system is to provide information about an organization in the form of data on new student admissions, student grades, teacher and student absences and so on in order to facilitate work in managing, planning and supervising an educational institution. Education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency has important roles such as:

### **1. Supporting Educational Processes and Operations**

Information systems are used to support the processes and operations of educational institutions with various functions, such as those used at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency. According to Mrs. Rika Aimatuzzukriyah: "The role of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) Kab. Malang really helps teachers in carrying out and managing school administration such as:

- a. The SMPATIKA service used for teacher data management is under the auspices of the Ministry of Religion
- b. E-Learning to support the learning process
- c. "E-Reports are used by teachers to make it easier to give grades to students. Especially during the Covid-19 pandemic like this, management information systems play a very important role in the online teaching process."

### **2. Supports the decision-making process**

The management information system supports the decision-making process because it is a combination of human resources and technology so that information can be collected easily and the Madrasah Head/Leader can make important policies. According to Mrs. Rika Aimatuzzukriyah: "In supporting the decision-making process, the MTs leader/Head must also request approval from members or teachers, so that there are no errors in decision-making."

This was continued by Mrs. Rika Aimatuzzukriyah who said that: "Even though the Head of MTs is the highest decision maker. However, it cannot be separated from the opinions of teachers to help strengthen decision making."

### 3. Strategy support for competitive advantage

This strategic support can also be used as promotional material for MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency itself. And from competitive advantage, you can compete healthily by using existing skills.

According to Mrs. Uswatun Khasanah: "To support the excellence of MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency, the MUIN YUSUF CUP (match) was held involving elementary school children throughout the district. Malang and this is also a promotional event for the community. "As well as lecture training and performing during the month of Ramadan in mosques as mental training and increasing self-confidence."

This is in line with the results of the interview, apart from Mrs. Nurhikma, this statement was also confirmed by Mrs. Rika Aimatuzzukriyah: "In reality, the role of SIM during the Covid-19 pandemic like this is assessed as to the effectiveness and ineffectiveness of the teaching and learning process. However, specifically for Islamic boarding schools themselves, the role of SIM in the teaching and learning process is not effective because access is not possible for students. "As we often see in the news, many children are willing to go to the mountains to get a network and not only that, there are still many children who cannot access the internet and don't even have supporting equipment (computers/laptops and even quota purchase fees)".

The role of the education SIM is very important to support school operational processes such as: student management, academic management, financial management and library management, as well as supporting decision-making processes such as utilizing the education SIM to create a schedule of learning activities according to the number of teachers and number of classes available, and must pay attention to vulnerabilities when using educational management information systems such as:

- a. Hardware (hardware damage, installation errors and so on) can cause educational institution (school) information systems to be disrupted and disrupt school operations.
- b. Vulnerabilities regarding the software used, such as gaps in the software that could allow it to be infiltrated by outside parties.
- c. Vulnerability regarding internet use, because educational information systems are connected to the internet and can be accessed by anyone so that important data can be seen by outside parties and can be used by criminals.
- d. Natural disasters, fires, electrical disturbances and other unexpected disasters can cause information system equipment to be damaged and cause data loss (Prasetya, 2016).

Based on the various explanations above, researchers can say that the role of SIM is very useful and plays an important role in the planning, management and decision-making processes in educational institutions.

### **3. Supporting and Inhibiting Factors of the Education Management Information System at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) In Malang Regency**

Supporting factors mean factors that support, invite, and are helpful or supporting in an activity. Meanwhile, inhibiting factors hinder the progress of an activity. In an institution or organization there must be supporting and inhibiting factors, such as those at MTs Wahid

Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency. As explained by Mrs. Rika Aimatuzzukriyah as secretary of the foundation.

"Supporting factors of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency is:

- a. There is a SIMPATIKA service which is used by teachers from the Ministry of Religion in recruiting both institutionally and personally and students, where the use of this application aims to attract teachers who are entitled to receive allowances in accordance with applicable regulations;
- b. There is an e-report service that helps manage students' grades, even to printing report cards and evaluating students' learning outcomes;
- c. Third, there is wifi which is used to access unlimited internet;
- d. The existence of human resources who can operate computers

Based on the description of the results of the researcher's interview, it can be concluded that the most important supporting factors are human resources, computers, internet networks and other supporting applications. At MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency itself already has several computers that can be used by students.

Basically, when there are supporting factors, there must be inhibiting factors. From Mrs. Rika Aimatuzzukriyah's explanation regarding the supporting factors of the education management information system, of course it cannot be separated from the inhibiting factors of the education management information system.

Explanation from Mrs. Rika Aimatuzzukriyah: "The inhibiting factors of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency, namely:

- a. Network because if the computer network cannot be connected, it will be difficult to share data and information.
- b. Quota If there is no quota then you cannot access the internet\
- c. When students don't understand how to use a computer, they need help
- d. Students do not have computers/cellphones at home

The inhibiting factors for the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency during the Covid-19 pandemic as explained by Mrs. Rika Aimatuzzukriyah as MTs Teacher and Coach. "The most important inhibiting factor is when teachers and students cannot meet face to face. Because the teacher's position will never be replaced by technology." So, supporting and influencing factors depend on the availability of educational management information system tools at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency.

#### **D. CONCLUSION**

Implementation of an education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency has been implemented well, directed/controlled directly by the Junior High School Principal and using a data processing application, namely the SIMPATIKA service which is under the auspices of the Ministry of Religion (Kemenag). The role of the education management information system at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency is very important for data processing, school administration, e-reports and so on. Supporting factors in implementing the education management information system are SIMPATIKA services, e-reports, human resources and wifi, while inhibiting factors are computer networks and quotas at MTs Wahid Hasyim 1 (Miftahul Ulum Islamic Boarding School) in Malang Regency

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