

## Implementation of Management Information Systems at State Junior High School 2 Rejang Lebong Bengkulu

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**Abstract:** *This study aims to identify Islamic education management information systems and their concepts and implementation processes in educational institutions. A management information system is designed to provide information to support decision-making in management activities (planning, implementing, organizing and controlling) within an organization. Understanding management information systems based on information technology, including the concept of information systems, information use, and the value of information. System boundaries have been determined by encouraging the quality of the system's work. This study used a qualitative approach with a case study type, data obtained from interviews, observation, and documentation. Data analysis was carried out when the researcher came to the research locus at State Junior High School (SMPN) 2 Rejang Lebong Bengkulu; after the data was collected, analysis and conclusions were drawn. The process of credibility, dependability, confirmability and transferability is used to check the validity of the data. Research results: the work process in each system produces a result (output) that is sustainable and an evaluation system through feedback treatment. This means that if the output contains information that is contrary to the achievements of the organization, it will be input into the system; if the system has received the results of the feedback, then the system will make the necessary revisions and adjustments so that the output is consistent with its original purpose. Then, with the rapid advancement of technology, it must be tamed with an educator's ability so that technology can become a slave, not enslaved by technology.*

**Keywords:** System Implementation, Information Systems, Management of Educational Institutions.

### Introduction

This research was carried out because information systems in the educational environment, especially Islamic-based education, are an absolute necessity and provide a competitive advantage so that they get a high enough priority (Tho et al., 2013). Good management or

management in an educational institution is vital for the sustainability of the institution. An essential thing that maintains and even develops an educational institution is the management of appropriate information systems and being on target (Rachmaningrum et al., 2018).

Information management in educational institutions or institutions is part of the education system itself (Sutanto et al., 2020). Information that is well managed should be in an information management system. Information that is well managed in a system is known as a management information system. Meanwhile, the management information system implemented in educational institutions is called the educational management information system (Herliana et al., 2021);(Gonadi, 2021).

Technology's rapid sophistication and development positively impact every element of society, especially individuals and organizations. Some of the positive impacts include the convenience, comfort and data security of information users in their work (Firdiyan et al., 2019). One sector that takes advantage of developments and information technology is the education sector. Some methods can turn data into more valuable and useful information for users of information technology (output). The results of this output can make education even better in an educational unit using this technology system (Ansar et al., 2021).

In general, when discussing managing an information management system, what comes to mind is a system created to perform data processing that an organization will use. Today, when someone hears the term management information system, a computer system comes to mind. The core understanding of conventional management information systems is, of course, found in structured jobs such as recording agendas, proposing communication between organizational managers, presenting information for decision making and so on.

Planning, organizing, leadership and supervision, especially in education, are managerial activities in our decision-making processes, and all of them require precise and accurate information (Gunawan et al., 2022). The information needed by managers, including educational implementers, is provided by a management information system, which is a system that provides all information for managers regularly. Information is used as a basis for monitoring and assessing the agenda and the results to be achieved.

Components such as processes, procedures, organizational structures, human resources, management, and organizational culture are needed to form an information system. These components help

the success of the teaching and learning process in education (Wahyuni, 2019).

The management information system is an information system that, besides processing transactions that are very useful for the organization's interests, also provides a lot of information and processing support for the management function in decision-making. According to Ais Zakiyudin in his book, a management information system is a management information system that describes the availability of a fairly complete set of data that is stored to provide information to support operations, management and decision-making within an organization.

The existence and role of information technology have brought a new era in education development but have not been matched by an increase in human resources. These conditions encourage changes and developments in various aspects to accelerate improvements to achieve the goal of quality education (Ikhwan et al., 2020). Quality is indeed necessary, but it doesn't just stop at quality. Instead, other components such as high performance, efficiency, effectiveness and productivity are supported by solid ICT, which is one unit that must be integrated into the management system (Sonia, 2020).

Developing a sophisticated computer-based management information system requires people who have high skills and experience and require the participation of organizational managers. Many organizations fail to build management information systems due to a lack of proper organization, lack of adequate planning, lack of reliable personnel, lack of management participation in the form of managers in designing systems, controlling system development efforts and motivating all personnel involved (H.A, Rusdiana, 2018).

Finding out whether the information is useful depends on the recipient's purpose, the accuracy of delivery and processing of data, time, space and place, form and semantics. Information has several characteristics, which include:

1. True or false. These characteristics relate to something that is reality or not from information.
2. New. Information can mean entirely new to the recipient.
3. Additional. Information can update or add value to existing information.
4. Corrective. Information can be used as a correction material for previous information, wrong or false.
5. Affirmers. Information can reinforce existing information. This is still useful because it can increase the recipient's perception of the truth of the information.

From an Islamic perspective, there are sources of information that are always used or exploited by humans. *First*, the source of information consists of revelations from Allah SWT in the form of the Qur'an and al-Hadith from the Prophet Muhammad SAW, which are explanations of the Qur'an. *Second*, this source is the basis of information that is believed to be true and must be trusted. Al-Qur'an and Al-Hadith are the main sources of information studies in Islam (Agustin, 2018).

So that the importance of management information systems for the development of Islamic education. One example is that the vision and mission of Islamic education have not been successfully formulated properly and universally (Ridwan, 2018). This problem is further exacerbated by the unavailability of professional Islamic educators, namely educators who, in addition to mastering the material taught properly and correctly, must also be able to teach effectively and efficiently to students and have idealism.

## Method

This type of research is qualitative research, trying to capture and translate the phenomena and facts in the field related to the management of information systems being run. The data was collected from interviews at SMPN 2 Rejang Lebong Bengkulu from 14 November 2022 to 10 January 2023. The interviews used were unstructured, with selected informants adapted to their unique characteristics. On this occasion, the selected informants, the managers of the educational institutions concerned are one of the Public Relations teams because they are considered to have the knowledge and understand the situation and know more about the information needed (Ikhwan, 2021).

## Result and Discussion

### *Education Management Information System Concept*

Understanding the system according to experts. According to Gordon B. Davis, the system is parts that operate together to achieve several goals. According to Raymond McLeod, a system is a group of integrated elements to achieve a goal. From the several definitions of the system above, it can be concluded that the system is a set of interrelated elements that influence each other in carrying out joint activities to achieve a goal. For example, in a computer system there is software, hardware, and brainware (human resources).

Information functions as a liaison between various parts of the organization so that the parts are not isolated from one another but

remain a unit within the organization. Because of this important function, some experts liken the information to the organization's blood. The organization will die if the blood does not exist or does not work. It is said that information is an agent for sustaining organizational life.

In conveying information, adequate communication skills are needed to convey information clearly, concretely and thoroughly. From an Islamic perspective, communication is an inseparable part of human life because all of our steps are always accompanied by communication. The communication in question is Islamic communication, namely *al-karimah* or ethical communication. Communication with morals *al-karimah* means communication with originates from the Al-Quran and Hadith (Sunnah of the Prophet). As well as communication that creates good for oneself and for others (Ikhwan, 2018).

The choice of technology in education will open up possibilities for the birth of various alternative forms of new institutions that provide learning facilities. A series of criteria for the use of technology in education, among others: must be maintained compatibility with existing facilities and technology, can stimulate the development of technology and science, and be able to spur efforts to improve the quality of education itself. Thus, the application of technology in education will very likely change teaching and learning interactions between learning resources (Hambali, 2021).

Management information systems are distinguished from ordinary information systems because MIS analyses other information systems applied to organizational operational activities. Academically, the term is generally used to refer to a group of information management methods that are concerned with the automation or support of human decision-making, such as decision support systems, expert systems, and executive information systems. After the 2000s, management information systems began to develop as integrated systems in various holding companies and their branches. The system is then formed in a computer-based information system. Until now, the information system runs in an integrated manner and runs automatically (Hariyanto, 2018).

The success of developing an education management information system is determined by hardware and software and the quality of human resources that compile and use the management information system. Besides that, the involvement of managers and the right method in preparing management information systems is also a concern so that the interrelated elements can improve the quality of education (Rahmadi et al., 2022).

Management Information Systems in education, namely the existence of several people, guidelines, tools for processing data, organizing and selecting data that is ready to be presented as information to schools to support operational activities and instructional activities.

School management is an important factor in carrying out education and teaching in schools by measuring the success of the achievements of students. Schools as an organization developing and achieving goals, must refer to the guidelines and directions for educational development (Rahmadi et al., 2022).

In the concept of an education management information system, all sub-elements must often be related and form a quality information system. Apart from that, there are also components such as brainware, which become the driving force in the operation of the education management information system. Basically, this management information system is information to explain the overall concept by breaking down several management information sub-systems to make it easier to solve problems (Wahyuni, 2019).

There are several ways to understand management information systems, whether in the field of government business, education or politics. The first we have to understand the concept of management information systems first. In understanding, it must be as a whole, not half measures.

The definition of management according to Stoner quoted in Nurdyansyah, is a way in which there are several aspects such as the process of planning, organizing, leadership and supervision between members to achieve a predetermined goal. In almost all fields, people use management principles and elevate education to be their most important main field. Education applies a response stimulus between educators and students which aims to change patterns of thinking, understanding and reasoning in the learning process. Thus, educators must have the right method to convey a material so that effective and efficient learning is realized.

According to Robert G. Murdick, a management information system is a group of people with guidelines and instructions and the tools to process data, retrieve data, and produce information that can be used efficiently. From some of the explanations above, it can be concluded that management information systems are educational data processing that produces information to make the learning process more effective and efficient by utilizing information and communication technology. There are several stages in designing a SIM (Management Information System), including the following:

*First*, the planning stage: Before creating an education management information system, educators must plan what students need in advance so that they can be accepted in the environment. *Second*, the analysis stage: After planning, the next step is to analyze the education management information system to determine whether it is appropriate. If it is not appropriate, this analysis phase serves to design a new system or update the previous system. *Third*, the design stage: This planning stage makes it easier for educators to prepare tools to plan and analyze education management information systems. *Fourth*, the implementation stage: In this stage combines physical and conceptual resources to produce an education management information system according to their respective needs. *Fifth*, the use stage: This stage is useful for meeting the needs in achieving goals at the planning stage and the concept of an education management information system.

The educational Management Information System (MIS) has characteristics, namely: (1) In the organization there is a special section that manages the Education SIM; (2) SIM is an interweaving of data and information traffic from each part of the organization centred in the Education SIM section; (3) SIM is a whole process that includes: a) data collection, b) data processing, c) data storage, d) data retrieval and d) dissemination of information quickly and accurately; (4) SIM is intended so that executors can carry out their duties properly and correctly (Amirudin, 2022).

Management Information Systems educational institutions will provide the following benefits; *First*, the availability of an education data and information management system. The *second* is integrating educational data and information to support the decision-making process. *Third*, the availability of complete educational data and information for all stakeholders with interest in the education sector (Ansar et al., 2021).

The education management information system is also expected to be able to provide quality services. The quality of this service is based on the dimensions of reliability, responsiveness, assurance (guarantee or certainty), empathy (care or earnestness), and tangible (physical or real product). Implementation of education management information systems will affect the image of educational organizations, the image of educational organizations is influenced by factors of leadership, human resources, strategic policies, process management, customer satisfaction, and social responsibility (Sa'adah et al., 2021).

## Conclusion

An Education Management Information System is a system consisting of a group of people, guidelines, and data processing devices, which monitors and retrieves data from the environment, which obtain data from transactions and operations within the organization, and which filters, organizes, and select data and presents it as information to education/school stakeholders, especially education managers at all levels and organizational functions, to support decision making in carrying out management functions, to support communication, and to support operational activities, including instructional activities.

The basic concept of management information systems Educational institutions in Indonesia are socially oriented organizations. The social orientation of education aims to improve the intelligence of the nation. Thus, these educational institutions must always develop better information systems to produce quality graduates (outcomes).

Then it can be concluded from the results of interviews conducted at State Junior High School 2 Rejang Lebong Bengkulu that the school already has an adequate information system and continues to grow every year. The team is in charge of carrying out the implementation of information systems as well as conducting research and collaboration to further improve the quality of existing information. The community can easily access existing information because not only through websites, schools also provide social media and mass media to upload information accurately and systematically.

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