UTILIZATION OF EDUCATION MANAGEMENT INFORMATION IN DECISION MAKING

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Abstract

Purpose of Study: The undeniable fact that information at this time has been viewed as a very potential resource. Information is the only source needed by a leader of an educational institution. Information can be processed from other sources that are influenced by very complex organizations and owned computer devices.

Methodology: Information processed using a computer can be used by an organizational leader and an individual with expertise as a means of communication and problem solving, as well as valuable information in the decision making the process.

Results: In general from the results of research that researchers do indeed the combination of human resources and information technology applications that are tried to apply have been done. But this is not an easy matter, of course, depending on the focus of the development of management information systems individually sees the needs that are needed now.

Implications/Applications: After studying and analyzing about the utilization of education management information system in decision making hence writer concludes that; first, decision making needs good information, second, irrelevant information will cause wrong judgment in making decision, third, the main basis of framework of information system utilization in taking decisions all information presented by the information system should be aimed at supporting certain phases of the decision-making process; fourth, the utilization framework of management information systems in decision making can also be used to assess an ongoing reporting system, fifth, decision making in education is an important part that should be done well by managers or other officials.

Keywords: education management information system, decision making

INTRODUCTION

In this century of information and communication technology, all forms of information and communication technology can be obtained in a relatively easy way. The information age marked by rapid technological advancement, as well as the flow of information runs and spreads at high-speed as indefinitely. Any vital information from anywhere will be spread and known to people in the world who can access information. All sorts of information will pass in front of people. Faced with this kind of thing, everyone should be able to determine the attitude and make decisions in order to choose the right information for himself. (Jalaludin, 1999)

The development of information technology has opened up the possibilities of previously difficult or even impossible activities, now easily done. The advancement of information technology and science has changed the way of life and lifestyle of Indonesian people in carrying out their activities. The existence and role of information technology in the education system have brought a new era of development of our education world. It can be seen that currently, schools try to apply the elements of information and communication technology in the implementation of education, both in terms of learning and management education at the school. Some of the major components of a good school at least consist of: (1) Content and Curriculum, (2) Learning Process, (3) Facilities and Infrastructure, (4) School Human Resources Competency, (5) School Administration and Management System (6) Infrastructure and Superstructure.

But, these developments have not been matched by the increase of human resources that determine the success of education in Indonesia generally. This is more due to the lagging of our human resources to utilize information technology in the education process.

Education today requires a foundation to be built, which is aware of its position as a producer of educational services. Educational institutions should understand well the needs of an increasingly complex community, especially followed by
the rapid development of information technology. A new era in the world of education, which introduced education reforms related to the information system needed in the development of the world of education trying to use a computer device that can be applied as a means of communication to improve education performance significantly.

To produce graduates of educational institutions that have competition and in accordance with the needs of the world of work today, the problem that must be overcome in the education process is how to manage educational institutions to be able to meet the job market demand and not leaving many unemployed. The most appropriate solution is to improve the quality of learning that adopts management practices combined with advances in information technology. One of them is to facilitate the practice of learning by using various technology infrastructures, such as a digital library, learning facilities by combining personal computer or notebook, internet, and other learning technology facilities.

The unquestionable fact showed that current information has been viewed as a potential resource. Information is the only source needed by a leader of an educational institution.

Information can be processed from other sources that are influenced by highly complex organizations and owned computer devices.

Information processed using a computer can be used by an organizational leader and an individual with expertise as a means of communication and problem solving, as well as valuable information in the decision-making process.

Description of organizing education management information system ideally needs how the decision makers in the field of education can easily find information as a decision-making materials in education such as how much human resources needs education, type of school, school level, curriculum implementation and the development of educational institutions, which can improve the education management process of the past, present, and future. (Eti, 2006; Neustroev et al., 2016)

And ultimately the management information system in educational institutions can be realized in accordance with the development of education that the public demanded more marketable and sellable. In addition, the information that can be presented by the management information system can make a very valuable contribution to the process of decision making in the field of education, such as information about the need for education personnel, new student admission information, and others. Because management information systems in educational institutions are expected to be very useful not only for the community as one of the subsystem and control society, especially in the operational process of educational institutions and the presentation of the quality of education services that can be justified. (Emam and Shajari, 2013.)

EXPERIMENTAL DETAILS

Management information system SIM is a combination of human resources and information technology applications to select, store, process and retrieve data in order to support the decision-making process of an institution. A management information system is an integrated system, supported by the computer, the user-machine interaction that produces information to support the functions of operations and decision-making.

A manager is often overwhelmed with information, but not all information received is good information and relevant to the needs of the organization. As a result, managers tend to experience errors when determining the policy, due to inaccurate information. SIM is in charge of filtering information based on organizational needs oriented to support accuracy in decision making from a manager.

The mechanism of action Management information system SIM involves all elements of the organization. Human-related resources, as well as materials, become a continuous series to sustain a managerial pattern. Data needs to be processed in such a way that can be accurate information. So this is very much related to the personnel who will handle it.

One view is that SIM is an organizational resource to a group of managers with similar needs. Information reaches past, present, and future. Available in computer output and used by managers and non-managers in solving problems. In the organizational structure management information system occupies an independent position as a whole in the organization.

Being part of the whole body of the organization can even be said as the soul of the organization. Management information systems are widely used by companies to address organizational problems.

Thus it is clear that the SIM is effective in expediting management in achieving organizational goals. An effective SIM is a SIM that can function in decision making and problem-solving better, this can be achieved if the information is available as needs, both in quantity, quality, time, and cost.

The direction of SIM development is for an organization to have a system, which is capable of processing data into qualified
information in order to assist the work of managers in decision making. So, the management information system is expected to support the duties of employees and all of the key elements involved in organizational activities.

One of the most important functions of leadership is decision-making. A leader, most of his time, attention, or mind is used to examine the decision-making process. A person’s higher position in organizational leadership then decision-making becomes the main task that must be implemented. The behavior and way of leadership in the decision-making pattern greatly influence the behavior and attitude of the followers. This will determine the organization’s performance to achieve its goals.

Etymologically the word decide comes from the Latin prefix “de” which means off; and the word caedo which means to cut. This means the cognitive process of “cuts off” as an act of choosing among several possible alternatives. (Ameen et al., 2018; Jalaludin, 1999; Ulbert, 2008) While in terminology, decision making is a series of activities undertaken by a person in an effort to solve the problems that are facing then set various alternatives that are considered the most rational and in accordance with the environment of the organization. (Siswanto, 2010)

Decisionmaking is not solely done only on the problem-solving process but also in the process of choice making in every management function in reaching the goal. The point of decision making, that is the formulation of several alternative actions in working on the situation faced and setting the best options between several alternatives available after evaluation of the effectiveness of these alternatives to achieve the objectives of the decision maker.

The framework main basis of the information system utilization in decision making is that all information presented by the information system should be aimed at supporting certain phases of the decision-making process. The purpose of the SIM of the effort to support decision making is to improve the quality of performance of decision makers in every form of policy issued.

Irrelevant information will lead to erroneous judgment in making decisions, where data representing one thing is used to make inferences or deductions on other matters. Poor information will be detrimental for decision making because it impedes the decision process and keeps the attention of the problem. The inappropriateness that occurs will cause chaos thus create the erroneous beliefs of all members.

A decision is taken to be implemented in order to achieve the objectives that have been determined, and in the decision-making process, there are factors that influence the decision. Sondang P. Siagian in his Philosophy of Administration proposes three forces that influence the decision making process: (Sondang, 1986)

a. The dynamics of the individual in the organization, namely the decision process must consider all possibilities that will occur in each individual, the situation and condition of individual views on themselves affecting the organization’s decisions.

b. Group dynamics in the organization, ie leaders who want to make the decision-making process should consider the situation and condition of personality double member (individual personality and personality when with the group). This is done so that the decision process can accelerate the process of maturation of working groups within the organization.

c. The dynamics of the organizational environment, that is, all decisions of the organization must take into account the pressures sourced from the environment.

The term dynamics is used to denote that everything is always changing, and the dynamics that require an increase in decision-making capabilities that are consistent with the changes that are and will happen.

This research uses the decision-making process proposed by Gibson, et al. because in addition to the more modern process offer is also the majority of organizations using the framework of the process. These processes are:

a. Determination of specific objectives and measurement of results. If goals are adequately defined, the objectives will determine the outcomes to be achieved and the measures to be used to indicate whether or not the objectives are being achieved.

b. Identify the problem. The urgency of problems in the decision-making process, then apibila problems are not identified then the decision will not succeed with satisfying alternative development. Develop a feasible alternative and consider the possible consequences of each alternative before making a decision.

c. Alternative evaluation. These alternatives should be evaluated and compared. Selected alternatives are based on three conditions; certainty, uncertainty, and risk.
d. **Alternate selection.** Selected alternatives that have been through the evaluation process are then selected again by using consideration of the factors that influence it.

e. **Implementation of the decision.** This is an activity that is more important than the real activity of choosing an alternative. The choice must be implemented effectively and efficiently to realize the objectives.

f. **Control and evaluation.** In every decision-making activity, there should be the periodic measurement of the actual output in anticipation in case of deviation and change.

This research uses a qualitative approach. Qualitative research is a particular tradition in social science that is fundamentally dependent on the observation of a man in his own flock and relates to such persons in his discussion and in his terminology. (Moleong, 2002)

The type of research used is field research, the use of this method because it empirically investigates temporary phenomena in real life context when the boundary between phenomenon and context is not clearly visible; And multiple facts sources used where researchers will describe the results of research in the form of written words obtained during conducting observations and interviews with a number of informants using a phenomenological perspective, the researchers know and understand about the location of the study.

The research design used in this research is multisite. The multisite study was chosen in this study because multi-site studies are one of the qualitative researches that can be used primarily to develop theories raised from several similar research backgrounds so that a theory can be transferred to a wider and more general situation. The scope is put forward. Multi-site investigates more in-depth and thorough examination of the behavior of some individuals. In addition, multiple sites can also lead researchers into the smallest social units such as associations, groups, families, schools and other forms of social units that share similarities.

In qualitative research, the researcher must be present in the field, because the researcher is the main instrument of choice (the instrument of choice in naturalistic inquiry is the human) who must present themselves in the field directly to collect the data.

Data collection techniques in conducting operational activities in the field researchers using field notes. To obtain the data in holistic and integrative, the data collection in this study using three techniques offered by Bogdan and Biklen, namely: 1) In-depth interview; 2) participant observation; and 3) study documentation. Jalaludin (1999) Activities analyze the data in research is an important work to do, because through these activities researchers will get meaning to the data to be collected. This research uses multi-site study design, than in analyzing data done in two stages, namely: (1) individual site analysis, and (2) cross-site analysis. dan Biklen (1982); Mollaei et al. (2014) Checking the validity of the findings (trustworthiness) is a very important and inseparable part of qualitative research. According to Lincoln and Guba, the implementation of checking the validity of the data is based on four criteria, namely the degree of trust (credibility), transferability, dependability, and confirmability. (Robert, 1987)

**RESULTS AND DISCUSSION**

Utilization of management information systems in decision making has a lot of the equation. Comparison of SIM utilization in decision making is too.

In general, from the results of research that researchers do indeed the combination of human resources and information technology applications that are tried to apply have been done. But this is not an easy matter, of course, depending on the focus of the development of management information systems individually sees the needs that are needed now.

Because if it refers to the sense of management information system itself is a combination of human resources and information technology applications to select, store, process and retrieve data in order to support the decision-making process of an institution. (Lincoln and Egon, 1985)

Louis A. Allen argues that there are three principles in management decision making:

a. The principle of definition. A logical decision can only be taken after a problem is determined first because managers will waste resources to solve the problems they face if they do not successfully define the problem.

b. The principle of evidence is adequate. Logical decisions must be valid in terms of the evidence on which the decisions are based.
c. The principle of identity. Management needs to find it important to identify facts, the differences that may occur due to different points of view and time should be considered carefully. (Robert, 1987)

The opinion expressed by Louis A. Allen is very much in line with what is happening on the ground that as a principal or head of a madrasah before taking a decision it is necessary to think about some grounding to decide something. Where the existence of information or data collected is not necessarily believed just need a deep crosscheck action in order to anticipate the existence of invalidity of data or information available. (Komaruddin, 1994)

Because of the fatal consequences, if a verdict was not based on facts and prevailing principles, can lead to misguided mismatch and create an atmosphere that is not harmonious in an educational institution.

The main basis of the framework of the utilization of education management information systems in decision-making is that all information presented by the information system should be aimed at supporting certain phases of the retrieval process decision. The purpose of the SIM in the effort to support decision making is to improve the quality of performance of decision makers in every form of policy issued.

However, to clarify the study in this analysis the author tries to present a brief description of certain points about the similarities between the two institutions of the object of study. (Ameen et al., 2018; Burgos et al., 2018)

1. The basic thing to note is that in institution structurally there is a separate section that handles the management information system, whereas in the institute has not clearly seen the structural part handling this matter though there is already special personnel who handle it.

2. If viewed through the media website, Website features that exist in both institutions coverage area have been very wide ranging from the

3. Integration of online report cards, e-library, e-learning and new student registration (PPDB) online.

4. Specifically, in both institutions have signed MOU with outsiders, in this case, ITS to conduct management information system development

5. Decision making by each institution tends to be the same through the deliberation or meeting in determining all existing policies. Although, sometimes there are also decisions that are directly taken by the head of the madrasah, all of course with the coordination of some parties.

6. The utilization of information or data in the two valleys in making decisions becomes very important. Because for both institutions to make the existing data or information is a reference for them to make decisions or determine school policies.

7. The types of decision-making applied by both institutions are also based on programs that have been prepared in advance. And all of that is usually already listed in the school work plan (RKM), the rest of the decisions are made incidental with attention to the situation and condition of the madrasah at that time.

8. Utilization of a management information system in decision making by both institutions was used as a control tool, data bank, and promotion tool.

The utilization of education management information system in decision making hence can be concluded that Implementation and utilization of management information system in decision start from data collection, stage of data management and data processing the data which have been processed presented in information form which is poured in an application then this application acts as bank data. Then the hook decision-making based all the decisions that are in accordance with existing programs supported by the information contained in bank data after then discussed together with the ranks of managers or certain parties such as the administration or finance to determine policies. Broadly speaking, the utilization of education management information system in decision making it is used as a control tool, data bank as well as for promotion tool. A very valuable contribution to the process of decision making in the field of education, such as information about the need for education personnel, new student admission information, and others. (Mollaei et al., 2014)

Because management information systems in educational institutions are expected to be very useful not only for the community as one of the subsystem and control society, especially in the operational process of educational institutions and the presentation of the quality of education services that can be justified. (Ameen et al., 2018)
CONCLUSIONS

After studying and analyzing the utilization of education management information system in decision making, the authors conclude that:

First, decision-making requires good information. One of the biggest problems facing decision-makers is how to obtain reliable, relevant and up-to-date information. The policymakers will get into trouble if the information obtained is very abundant, while the substance of the information is not in accordance with the needs of decision supporters.

Second, irrelevant information will lead to a false assessment of judgments, in which data representing one thing is used to make inferences or deductions on other matters. Poor information will be detrimental to decision making because it impedes the decision process and keeps the attention of the problem. The inappropriateness that occurs will cause chaos, thus creating the erroneous beliefs of all members.

Third, the main basis of information system utilization framework in decision making is all information presented by the information system should be aimed to support certain phases of the decision-making process. The purpose of management information systems in an effort to support decision making is to improve the quality of performance of decision makers in every form of policy issued.

Fourth, the framework of utilizing management information systems in decision making can also be used to assess an ongoing reporting system. The development of management information systems in support of the decision should concentrate on certain phases of decision-making activities. There may be stages in the decision-making process that do not require an excessive concentration of analyzes. So the supply of information to support decision-making must also be tailored to the existing problem.

Fifth, decision-making in education is an important part that must be done well by managers or other officials. Decisions that are less relevant to organizational goals will have a negative impact on institutional development. Therefore, accurate and quality information is needed by managers of educational institutions as a decision maker.

Sixth, the utilization of information or data in the two valleys in making decisions becomes very important. Because for both institutions to make the existing data or information is a reference for them to make decisions or determine school policies.

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