



International Journal of Multidisciplinary Research and Growth Evaluation



International Journal of Multidisciplinary Research and Growth Evaluation

ISSN: 2582-7138

Received: 02-06-2021; Accepted: 19-06-2021

www.allmultidisciplinaryjournal.com

Volume 2; Issue 4; July-August 2021; Page No. 227-229

Relationship of database system to organizational learning

Dara Maisarah Ibtithia¹, Ermadayani², Eunike Best Tamti Tampubolon³, Iskandar Muda⁴

Graduate Program in Accounting, Faculty of Economics and Business, Universitas Sumatera Utara, Indonesia

Corresponding Author: Dara Maisarah Ibtithia

Abstract

In the current era of globalization, the need for information is increasingly important and urgent. The success of information is strongly supported by adequate facilities and infrastructure. Like the use of computers in the life of the wider community, not only in the work environment but on computers are also used in everyday life. Here, the role of a computer-based management information system is needed that can provide a competitive advantage so that it gets a high priority. The Management information system is an

information system that can be used for processing transactions required by an organization and providing information support, as well as being used for processing for the decision-making process. All these developments will be realized if they are supported by optimal human resources. The longer it takes, the more workers will be able to operate computers effectively. The education system plays an important role in developing human resources.

Keywords: organizational, Relationship, globalization, Management

1. Introduction

The development of technology and information and communication has managed to open the possibility of activities that were previously difficult or even cannot be done, but at present, it is very easy to do. The Application of database systems in education or an organization is very influential in decision making.

In the world of education or an organization implementing a database system cannot be separated from educational activities, which is very important in decision making by the organization. System databases can also improve science and technology especially in the field of computerization have shown that these developments can help solve a problem. And with the system this database can also simplify the process of working on a task in a project organization, utilization and development is what will help every member associated with an organization.

According to Sabandi, Management Information System is a method that is used by information users to manage data, be it student data as well as teacher data which will become information which is then the result of This information is used as material for consideration in process decision-making. (Sabandi, 2019).

An information system is also a collection of components in an organization that is related to the creation and flow of information. Information systems have good principles of development, maintenance, and operation. The principles contained in the information system are management, the principle of sensitivity, the principle of flexibility, the principle of simplicity, and the principle of mutual belief. (Yakub, 2012).

2. Literature Review

2.1 Definition of Management

Understanding Management is a series of processes that include planning, organizing, implementing, monitoring, evaluating, and controlling activities to empower all organizational or company resources, both human resources, capital, materials, and technology optimally to achieve organizational or company goals.

Management as a science and an art. Why is it called Thus, because the two cannot be separated? Management is a science, because it has been studied for a long time, and has been organized into a theory. This is because it describes the symptoms of management, these symptoms are then investigated using scientific methods that formulated in the form of principles embodied in form of a theory. Whereas management is an art, here views that achieving a goal requires work the same as other people, so how do I order others to get others to cooperate. Essentially Human activities, in general, are managing for arranging here requires an art, how about other people require work to achieve common goals.

2.2 Learning Organization

Learning Organization is a continuous process within an organization that provides smooth individual learning and development for all employees, while maintaining transformation continuously, empowering human resources (Santoso, 2003).

Senge (1996) suggests that ineffective learning organization requires skills that must be possessed by every individual to build a learning organization. These skills are competent, mental patterns, same vision, learners' team, and systems thinking, so that learning organization can be realized optimally. The optimal learning organization can have a positive impact on performance.

3. Methods

The research design uses observational analytics by using approach cross sectional. Independent variables are learning organizations consisting of sub-variables: Dynamic Learning, Organizational Transformation, People Empowerment, Knowledge Management, Technology Application, and Disciplines of a Learning Organization with self-achievement as the dependent variable.

4. Result and Discussion

4.1 Result

4.1.1 Basic concepts of management information systems

a. Basic Concepts of Management Information Systems

In simple terms, the system is defined as a set of elements, components, and variables that are organized, interact with each other, mutually interdependent, and integrated. System theory in general was first described by Kenneth Boulding who emphasized the importance of attention to each part that makes up a system.

Systems theory gave birth to futuristic concepts, namely the concept of cybernetics. This concept emphasizes efforts to apply various disciplines, including behavioural science, physics, biology, and engineering. As for the other concepts contained in the definition of the system, namely the concept of self. Where this concept assumes that in a system the output of an organization is expected to be greater than individual output and the output of each section.

b. Characteristics of Management Information Systems

A system has certain characteristics or properties that become characteristics so that it can be said as a system. The characteristics in question are as follows: *Components, Boundary, Environment, Interface, Input, output, Process, Objective.*

Management information systems are not new, the difference is computerization. Long before the computer, the SIM technique has been around for a long time exists as an information center that enables planning and control. Currently computers are becoming more advanced with the addition of one or two dimensions, such as speed, accuracy, and a larger volume of data. So, it can be concluded that the management information system is the application of an information system that is needed by all management levels.

4.1.2 Database System Concept

a. Understanding the Database System

The software that manages the database is called a management system database which can also be called DBMS. The following explains the definition of a database system, according to James Martin in his book *"Database*

Organization" database is a collection of interconnected data that is stored together in a medium, without staring at each other or unnecessarily a data set in a certain way so that it is easy to use or retrieved when needed. James F. Courtney Jr and David B. Paradice in the book *"databases" system for management"* explains that the database system is a collection of databases that design and manage databases, techniques to design and manage databases, as well as computers to support it.

According to Sabandi, Management Information System is a method used by information users to manage data, be it data student and teacher data which will become information that will then be the results of the information are used as material for consideration in a decision-making process. (Sabandi, 2019)

From the above understanding it can be concluded that the database system has important elements, including the database as the core of a database system, software used to process databases, and hardware used to support data processing, and humans have an important role in the system.

b. Relational Database

The rational data model explains to the user about the logical relationship between data in the database by providing examples of two-dimensional images in table form consisting of rows and columns. As for the relationship in the relational database model has the following characteristics:

- All data elements must have a single value or cannot be divided in a certain column.
- In a column all data elements must have a relationship and the same type.
- Each column has a unique name.
- There are no identical rows in the same table.

c. Normalization

There are many possible designs for the data structures used in the database system. Normalization is a technique that structures data in a certain form to reduce and prevent the occurrence of a problem related to data processing in the database. In this normalization process, it is necessary to first know the definition of the normalization stage, that is:

a. Unnormalized form.

This is a form of data set that will be cached, no forced to follow a certain format, the data may be incomplete or duplicated.

b. 1NF/First normal form.

This form is characterized where every data is in the form of a flat file, the data is recorded in one file and the value of the field is *"atomic value"*.

c. 2NF/Second Normal Form.

This form has the following conditions: the data form has met the form criteria first normal.

d. 3NF/Third Normal Form.

It must satisfy the second normal form and the sum of non-primary attributes have no transitive relationship.

e. Boyce-Codd Normal Form (BCNF).

To be BCNF, the relation must be in first normal form and attribute must depend on the function of the super key attribute.

4.1.3 Role of Database System

(Tata, 2003) The success of a SIM is strongly influenced by the system database which is one of the components or elements that make up the system.

1. Database system as SIM component

The database system is used as a constituent component, where this very important to support the SIM performance function.

2. Database system as SIM infrastructure

The DBMS provides an infrastructure for the system organization built-in information, such as transaction processing systems, decision support, and the management information system itself.

3. Database system as SIM information source

Database systems have a very important function in a database SIM, namely as the main source or provider of data needs for users of the information for decision-makers. While The DBMS performs processing functions to manipulate data so that obtained an important form used in making decisions which are then referred to as information. There are three categories of decisions that exist within the organization, namely, planning, and operational decision control, tactical planning, and management control and strategic planning.

4. Database system as a means for SIM efficiency

Database systems are designed and built with user orientation in mind means that this database system is intended to meet the needs of the user. With this data-based system, various system requirements can be fulfilled as soon as possible without the need to change the base of the data.

The development of a database system is designed so that the stored data can be re-displayed when needed. The use of a database system in the SIM will provide efficiency for the SIM. Efficiency that to be achieved by using this database system is efficient in the use of time, labor or personnel, paperwork, and costs. So, the database system provides advantages in the form of efficiency for the SIM that uses it.

5. Database system as a means for SIM effectiveness

The database system will provide support for the achievement of effectiveness SIM because the data is compiled and stored in the file system database is the correct data (valid). In addition, existing software and used in it has also been tested for correctness, the existing database in the SIM only loads the correct software. With words, on the other hand, database systems can provide great support for SIM effectiveness.

4.1.4 Objectives of the management information system

In general, information systems have the following objectives:

1. As a provider of information at the time of decision making.
2. As a provider of information for planning, controlling, evaluation, and continuous improvement.
3. As a provider of information that will be needed in the cost of the calculations cost of goods, services, and for other purposes required by the organization.

4.1.5 Benefit of management information system

Management information systems are generally useful as a producer of information that is fast and easy to use. Some SIM benefits including:

1. Achieving precise and accurate data generation.
2. Guaranteed availability of quality and skills more easily.
3. Identify the availability of funds to be used in the system information.
4. Trying to minimize errors that will occur from the use of more advanced information systems and technology.
5. Increase the productivity of system development and maintenance.

4.1.6 Implementation of Management Information System

The Role of Management Information Systems in Management and Development Information systems are utilized by user's information services to assist in completing the task of determining policy. The existence of a management information system serves to analyze information into decision making. In addition to information that can be obtained through this system, information can also be obtained from outside. Leaders are often overloaded with information, but not all of them the information received is good information and relevant to the organizational needs, resulting in less accurate information, managers tend to experience errors when determining policies. System Management information is tasked with filtering based on organizational needs, whose orientation is to support the effectiveness of the decision-making headmaster. A basis for decision making for the leader is a management information system. Information can be material for decision-makers at certain stages, but it can also be is the raw material for decision-makers for the stages of next. In this regard, the greater challenge for obtaining efficient information is:

1. The ability to provide the type and amount of information needed.
2. Delivering information that meets the requirements and is for leaders to understand.

5. Conclusion

Management Information System is a method used by information users to manage data, both student data and lecturer data which will become information which is then the result of that information used as material for consideration in a decision-making process decision.

The database system has important elements, including database as the core of a database system, the software used to process databases, and hardware used to support data processing, as well as humans, have an important role in the system. Database systems play an important role in management information systems where the database system acts as an MIS component, MIS infrastructure, MIS information sources, means for MIS efficiency, and means for effectiveness driver's license.

References

1. Sabandi, A. Sistem informasi manajemen berbasis database/dbms dalam pengelolaan data siswa, 2019, 8.
2. Tata S. Sistem Informasi Manajemen. Jakarta: ANDI OFFSET, 2003.
3. Yakub. Pengantar Sistem Informasi. Yogyakarta: GRAHA ILMU, 2012.