

## Analysis of The Role of Management Information Systems in The Decision Making Process at PT. Indonesian Trading Company Medan

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### ABSTRACT

Every company will always be faced with uncertain situations that may support or hinder the company in achieving its goals. To be able to determine an attitude or take a decision in the face of a situation full of uncertainty, managers/managers need a variety of information. Good decisions can be made by managers at every level of management, if efficient, precise and direct information is available. How information is presented to managers depends on the merits of the management information system of the company. To discuss these problems, literature research and field research were carried out at PT. Indonesian Trading Company Medan. The results of research and discussion explain that a good management information system will have the ability to process data from all company activities into useful information and take over the management decision-making process. Although the supporting factors are adequate, there are still system errors and weaknesses in the design and implementation. These weaknesses are like processing data into information which takes a lot of time because information is processed in every part of the company so that it requires continuous supervision from the leaders. Information is distributed based on levels according to the organizational structure from superiors to subordinates. If circumstances force, the distribution of the information will no longer take place based on the level but directly to the superior, because the superior is obliged to make decisions that are exceptions to the problem.

**Keywords:** Decision Making,  
Management Information System, Medan **JEL Classification:** D53, D86, F65, G17

## **INTRODUCTION**

Every company will always be faced with uncertain situations that may support or hinder the company in achieving its goals. To be able to determine an attitude or take a decision in the face of a situation full of uncertainty, managers need a variety of information.

A company before carrying out its activities first set the goals to be achieved. In setting this goal the company must be based on the strengths it has so that these goals can be evaluated properly. To know these strengths, it is necessary to have complete and accurate information regarding the goals and policies of the company (Kukreja & Joshi, 2018).

Information is very necessary for strategic decision making in order to achieve company goals. Every decision taken by the manager is a collection of various data that has been processed. Therefore, information has been considered as a resource that must be owned by a company, in addition to natural, capital and human resources.

Good decisions can be made by managers at every level of management, if efficient, precise and direct information is available. How information is presented to managers depends on the merits of the management information system of the company (AlFahad, 2018).

In the company, managers not only receive information, but also give information, namely in the form of orders, instructions and advice. How that information reaches managers, is processed into a decision and sent to people in the company and finally how feedback from the decision is received. All of this can be said as an information system (Putri, 2021).

Based on the description above, and considering the importance of management information systems in making decisions in accordance with the times, as well as in an increasingly sharp competition situation, the authors are interested in discussing further by conducting research that is formulated on "Analysis of the Role of Management Information Systems in the Process Decision Making at PT. Indonesian Trading Company Medan."

The formulation of the research problem is:

1. Is the management information system implemented to support the implementation of managerial decision making at PT.Perusahaan Kemerdekaan Indonesia Medan?
2. Which parts in PT. Medan Indonesia Trading Company that implements a management information system ?
3. What facilities and infrastructure does the company have in implementing the management information system of PT. Indonesian Trading Company ?

## **LITERATURE REVIEW**

Basically a management information system is a system that participates in assisting management in carrying out the transformation of data into information, which information is useful as material for management to make decisions. If the information system is designed and managed properly and distributed to those who need it, it will create an effective communication within the company.

(Zainun, 2001, p. 67) says that "a management information system is in the form of a combination of elements that are in the form of managerial decision making". (Davis, 2004, p. 3) "A management information system is an integrated human/machine system to present information to support the function of management information and decision-making in an organization ". (Onong U, 2001, p. 31) "Management information system is a decision process in communicating which is retrieved (processed) for decisions (output) regarding planning, organizing, and monitoring ".

From the definition above, it can be seen that the management information system is an analytical method to solve certain problems in order to achieve certain goals. The management information system contains elements consisting of humans, machines, goods that provide information needed by management in decision making and supervision (Moekijat, 2001).

In carrying out various activities, the management information system has its main function, namely increasing knowledge and reducing uncertainty or doubt in making good decisions. Other functions can be seen from the information management tasks. According to (Davis, 2004, p. 2) as for the tasks of management information systems in decision making in organizations as follows:

- 1) Transaction processing
- 2) Operational planning
- 3) Tactical planning
- 4) Strategic planning.

The management information system according to (Murdick, 2003, p. 7) is as follows: "The purpose of a management information system is to present information for decision making on planning, organizing, controlling, operating activities of a company's sub-systems and presenting organizational synergies in the process". Apart from the above objectives, the management information system aims to ensure the availability of up to date, reliable, available information whenever the information is needed. This means that you should not collect data, analyze information only when it is needed (Hasibuan, 2013). Thus, all forms of information or data that are thought to be needed in the future are continuously collected.

The purpose of this management information system is to ensure the availability of valuable, accurate, and timely information whenever the information is needed for managerial decision-making activities, for the purpose of carrying out operations, planning and monitoring (Siagian, 2006). In making important decisions concerning the survival of the company and the development of the company, top management is always based on facts (information) and predictions (future assessment). Sometimes information can be obtained easily and for a small fee. For example, information obtained from books, mass media, bulletins or official government publications. However, it is often obtained with great difficulty at a high cost. To obtain information from competitors or to find new and other energy sources requires a very large cost. Information obtained further into actions that are useful and beneficial to the company. So accurate and reliable information will affect the survival of the company (Sululing et al., 2018) .

Information obtained from within the company itself, can be prepared more freely and adapted to needs, not lacking and not excessive. A management information system that is prepared, should be able to meet the needs of external parties and internal management. The type of information for the two users above is not the same. Internal information is intended by company management or is managerial information. Managerial information is very important because it is used throughout the

year, throughout the company's control process, that is, every minute is a profit-making process. Therefore, the need for information is not once a month, not every six months or once a year, but every time when there are important changes that affect the company's financial position (Sarwoto, 2003).

External information is financial information intended for outside parties, including tax offices, bankers, creditors and the public. This information is referred to as financial information. The more complete the information received by management, the better the decisions will be, so that the company's goals will be realized. Good decisions / policies will affect the implementation of decision making in the company (Effendy & Lesmana, 2018).

According to (Surakhmad, 2004, p. 23) "a hypothesis is an answer, an assumption that is considered highly likely to be the correct answer". The hypothesis in this study is "If the management information system is functioning, the level of decision making can be further improved in its usefulness at PT. Medan Indonesian Trading Company".

## **RESEARCH METHOD**

The research method used is descriptive research, considering that the discussion model is exposure. There are several ways of collecting data, namely:

1. Documentation study by requesting data from the company in the form of a brief history of the company, the company's organizational structure and management information system that is applied as well as the implementation process of decision making (Suryabrata, 2012).
2. Interview (Interview), holding direct interviews with related parties to provide the necessary information, be it the company management which includes the General and Administrative Section at PT. Indonesian Trading Company Medan.

The data analysis technique used is descriptive method, namely collecting data, compiling and classifying it, analyzing and interpreting it, so that it can provide an overview of the problem under study (Sujarweni, 2014).

## **RESULTS AND DISCUSSION**

Implementation of information systems is an important period to demonstrate the success of the system. Most of the system's failure lies in its implementation. As previously explained, implementation means running or implementing the system that was prepared by the internal parts of the company.

The management information structure applied to PT. Medan Indonesia Trading Company is still growing and well maintained, even though the country is experiencing a prolonged economic crisis, PT. The Medan Indonesia Trading Company continues to maintain it so that it can be seen the effectiveness of the implementation of the management information system and besides that it also makes improvements in the administrative field. Management information system PT. The applicable Medan Indonesian Trading Company is a system that was compiled at the end of 1983 and began to be implemented in early 1984. The implementation of the information system was started by introducing a new system and also providing information to lower level managers who are directly responsible for running the company's operations, then the users are educated to be able to use the system (Zainun, 2001).

The information facilities used at PT. Medan Indonesia Trading Company is manual, electronic and computer. The use of a computer system is the right choice by PT. Indonesian Trading Company Medan, where the computer work system is

essentially in sync with the ongoing process of the management information system. With the use of computers, this company gets an increase in the efficiency and effectiveness of the management information system where after the information system is controlled by the Finance and Accounting department (Harmono, 2015). For more details, how exactly is the management information system of PT. Medan Indonesia Trading Company can be seen from the management information system that is applied to several parts of the company.

Information flow at PT. Medan Indonesia Trading Company based on the level according to the organizational structure, namely from bottom to top or vice versa. If circumstances force, the flow of information does not take place based on the existing level but directly to the superior because the superior is obliged to make decisions that are exceptions to certain problem situations.

First of all, the departments within PT. The Medan Indonesia Trading Company submits a shortage of manpower or employees to the Personnel Section. Then the Personnel section conducts research on the department, whether there are excess employees or employees. If there is, the filling of the shortfall is taken from within the company itself according to the required group. It is then submitted to the leadership for approval. If there are no excess employees or employees in the PT. The Medan Indonesia Trading Company will then make an advertisement or announcement of employee recruitment accompanied by the conditions required by the company such as education, experience and so on (Gultom, 2015).

The next stage is the selection according to their respective fields. If the candidate does not pass the selection process, there will be no further process, but if the candidate passes the selection process, the next process is to submit the candidate to the department that requires it, if appropriate, it will be submitted to the leadership. Then he was appointed on a trial basis for 3 months, after undergoing trial/training he was appointed as a permanent employee. The staffing system in PT. Medan Indonesia Trading Company is divided into two, namely (Kuncoro, 2009):

- a. Staff employee.
- b. Non-staff employees

**a. Staff officer**

An assessment system for staff employees for appointments both groups and periodically is held by submitting conditions to the superiors of each division to be assessed. The results of this assessment are then submitted to the Personnel section. The Personnel Section conducts an assessment of the assessment information, then it is distributed to each section or bureau and also to the leadership for approval. In this case the Personnel Section submits suggestions to the Board of Directors. This assessment system is carried out annually.

**b. Non-staff employees.**

These non-staff employees are divided into two parts, namely:

- Monthly employee  
The evaluation system for monthly employees for appointments both groups and periodically is the same as the appraisal system for staff employees, only once every three months.
- Permanent daily employee.  
The rating system is the same as for monthly employees.

The information system applied to the Accounting section is as follows:

- Management reports are organized and refined according to conditions at PT. Medan Indonesia Trading Company, which is caused by the type of business and administrative activities.

- Management reports from other departments are submitted no later than the 10th of the following month.
- Consolidation of monthly management reports and quarterly management reports are completed and submitted no later than the 25th of the following month.

One of the most vital company functions is the marketing department which can determine the progress of the company. In this case, marketing and promoting the products to be offered is carried out by the Marketing section, while the tasks of the marketing department in connection with the management information system are: Coordinate sales activities carried out by the marketing department, as well as follow the development of price competition and then report to management and the next step can be determined price changes (Astuti, 2017).

Studying and analyzing state regulations that have to do with marketing issues and cooperation with banks and other financial institutions, then the information is reported to management and leaders can find out if there are changes in state regulations that change and also know the bank or financial institution that provides soft credit facility. Marketing collects complete information from other agencies that have and will enter into marketing/investment financing partnerships and then the leadership can analyze and evaluate the report so that they can make decisions.

For more details, there are two types of decision making at PT. Medan Indonesia Trading Company, namely(Sarwoto, 2011):

1. programmed decision system,
  2. Unprogrammed decision system.
1. Programmed decision system.
- This programmed decision-making is an automatic reaction to predefined policies. All routine problems can be used well in programmed decision making and managers usually free management to devote attention to important tasks. Implementing programmed decision making is due to the large number of decisions made in accordance with routine work procedures. The company's goals are determined in a programmed decision system, for example company expansion, determining marketing targets. Therefore, this programmed decision system is related to long-term planning and includes setting goals, determining policies, organizing and achieving overall company success.
- For this reason, management information systems are needed to provide various alternative options for decision makers in order to implement the decision-making process, so as to accelerate the desired results.
2. Unprogrammed decision system
- This unprogrammed decision making creates problems where people have to deal with problems that are not well coordinated. In making skilled decisions, the Board of Directors must have the assistance of the system. And to make these unprogrammed decisions, companies often face problems such as new production, personnel management and so on.

For this reason, the information system is designed to monitor unexpected events. That way the manager can be prepared to deal with this, so that the goal does not deviate from the set. And if there is a deviation, the leader usually tries to evaluate the causes of the deviation to be corrected. These types of unprogrammed decision making can affect areas such as:

- Formulation of a budget or budget,
- Insurance fee.

## CONCLUSION

Based on the research conducted by the author, the authors conclude that:

1. A good management information system will have the ability to process data from all company activities into useful information and take over the management decision-making process. Management decisions of a strategic, tactical and operational nature are faced by different managers.
2. Although the supporting factors are adequate, there are still system errors and weaknesses in the design and implementation. These weaknesses are like processing data into information which takes a lot of time because information is processed in every part of the company so that it requires continuous supervision from the leaders.
3. Information is distributed based on levels according to the organizational structure from superiors to subordinates. If circumstances force, the distribution of the information, no longer takes place based on the level but directly to the superiors, because the superiors are obliged to make decisions that are exceptions to the problem.
4. Management information system at PT. The Medan Indonesia Trading Company is running well, but its effectiveness to play a role in planning and controlling the company's resources has not been proven in a short period of time.

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## DECLARATION OF CONFLICTING INTERESTS

We declare that we have no conflict of interest with the ICPM Bali 2021 committee or staff from AIBPM or any conflict regarding this article.

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