Management Information Systems in Organizational Functions

Meiryani, ¹ Kevin Deniswara, Giri Darijanto Sugiono, Fransisca Hanita Rusgowanto

Abstract— Information systems are very useful for companies or organizations or others. Information Management system has a very important influence for an organization which in this case is a corporate organization. Management Information Systems can support company leaders in making decisions and making plans for the company in the future, and can help companies to compete with other companies in creating and processing resources to become products or services that have not only quantity but also good quality. Without an information system, an organization cannot run effectively and efficiently. Information is a data that has been processed in such a way that it becomes a useful form for people who receive it, from that many positive sides if an organization implements an information system in it.

Index Terms—Information Systems, Organizational, Functions, Organization, Development of Technology.

I. INTRODUCTION

The development of information technology systems is inseparable from the development of computer systems. Computers at that time already had enormous benefits for human life. Since the existence of computers people at that time could use computers as a medium for business. At that time the computer was equipped with application features for doing business in the form of applications for transaction processing systems or transaction processing systems (TPS). In the computer will contain various kinds of data collected into one and systematically arranged into a useful information for humans. Information systems become something very vital in the community, especially for companies, organizations, and other mass organizations. Therefore there are several roles held by information systems in organizations. Although the organizational system has a large role but it does not rule out the possibility that the information system has flaws due to a problem or challenge that must be faced.

Business orientation in maintaining existence and operations must have sufficient funds so that business institutions are able to produce quality products and services. An overview of company information systems needed in Indonesia, ideally how decision makers can easily find information as material in the decision making process; such as how many Human Resources the company needs, what products are produced, how much capital is needed, the location of the company, and how access to marketing the products will be produced: all of which are expected to

¹ Accounting Department, Faculty of Economics and Communication, Bina Nusantara University, Jakarta, Indonesia 11480 meiryani@binus.edu

Accounting Department, Faculty of Economics and Communication, Bina Nusantara University, Jakarta, Indonesia 11480

Accounting Department, Faculty of Economics and Communication, Bina Nusantara University, Jakarta, Indonesia 11480

Accounting Department, Faculty of Economics and Communication, Bina Nusantara University, Jakarta, Indonesia 11480

ISSN: 1475-7192

continue to build and maintain company performance both in the short term and in the long run.

The digital era nowadays, makes information very crucial for people's lives, especially for people sitting on academic benches. Almost every day they consume thousands of information either from books, magazines, or experience sources. When faced with things like that information has benefits and a very important role in life. The development of information technology systems began in 1954 when IBM introduced the MT / ST Writer, an electronic typewriter that could record onto magnetic tapes. The development of information systems is also inseparable from the development of computer systems.

In the face of globalization, the business world must immediately improve itself in improving information systems to support company resources and the competitiveness of products produced. The information system that will be created must be balanced between the available technological infrastructure and the capabilities of its human resources so that there is not a very large gap between the two so that the information system cannot be realized significantly in supporting the quantity and quality of the company in a fundamental way.

In addition, information systems are increasingly needed by companies, especially to improve the smooth flow of company information, in order to strengthen the competitiveness of companies and products or services produced and create alliances or cooperation with other parties that can improve company performance.

II. LITERATURE REVIEW

2.1 Function of Management Information Systems in Organization

The company as a whole is a super system with industrial and commerce subsystems. A company for example has many subsystems and at the same time the company is a subsystem and a system with subsystems of people, machines and so on. A company is a system, which consists of the whole collaboration of physical elements (materials and machines), biological (labor), social and psychological (relationships between groups, attitudes and beliefs). This system exists both inside and outside the company. These systems and subsystems can be analyzed in terms of the process, namely: input (import) - conversion - output (export).

The role of information in a company can be likened to blood flowing in the human body. Therefore information is needed to support the company's survival. If the company does not have sufficient information, then within a certain time the company will experience an inability to control resources, so that the strategic decision making process will experience obstacles, which in turn the company is unable to compete with other companies. In addition, the information system that is owned is less proportional, because a lot of information that is really not needed to support the company's operations. Therefore understanding the basic concepts of information systems is very important especially for designing an effective information system. Setting up steps or methods in providing quality information is the main goal in designing a new system.

A new era in the business world is the introduction of bureaucratic reform. This is closely related to the information system needed in developing the business world. This concept has the feel of how the business world tries to use computer devices, which can be applied as a means of communication to significantly improve business performance.

Business information that is processed using a computer can be used by business organizations and individuals with their expertise as a means of communication and problem solving. This information is also very useful in the

ISSN: 1475-7192

decision-making process. Information can be extracted through available sources such as; Human Resources, materials, tools, costs needed by the company and data to be processed.

The information generated from the information system can be useful for management, it must first know the company's information needs, namely by knowing the activities for each level of management and the type of decision taken. The purpose of establishing a Management Information System or MIS, so that organizations have useful information in making management decisions, both regarding routine decisions and strategic decisions. So that the SIM is a system that provides organization and data management information relating to the implementation of organizational tasks.

2.2 Functional of Management Information Systems

Management information systems can be used to support activities in business functions. Business functions include accounting, finance, marketing, production, human resources, and so on. Management information systems that are applied to these functions are known as functional information systems or Business Information Systems, some of which are:

Accounting Information System

Information system that records and reports business transactions, the flow of funds in the organization, and produces financial reports.

Marketing Information System

Information systems that support the planning, control and processing of transactions needed to complete marketing activities such as sales management, advertising, and promotion.

Manufacturing or Production Information System (SIMPRO)

Information system that supports the planning, control, and completion of the manufacturing process.

Human Resources Information System (SIMSDM)

Information systems that support management activities such as recruitment, selection and acceptance, placement, and performance evaluation and training and development.

2.3 Information System Challenges for Organizational

A concept of information system design is a total system where all information systems are designed as a single integrated system. This concept has been abandoned mainly because efforts to achieve integration of the entire system are considered too complicated and unnecessary. In exchange, the idea of a federation (or a number of subsystems) has gained a market. This is in accordance with the concept of the system.

Division of Work between Humans or Machines

Management information systems tend to manifest themselves as human/machine systems in which some activities are carried out by computers and some are managed by human operators or managers. Technology has rapidly advanced so that a number of human functions are carried out faster, more accurately and with broader capabilities by computers. But humans have certain advantages. Humans can describe things according to reason with incomplete information. Humans can operate in a trial and error environment and can apply all their abilities to deal with problems that arise. Humans need challenges and diversity in the task there is still work motivation. This is that an optimal

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 09, 2020

ISSN: 1475-7192

technical solution to the division of labor can result in an unsatisfactory work environment for operators and managers. Therefore the main problem is how to construct different tasks in a human / machine environment so that technology is used effectively while a satisfying work environment for humans is still maintained.

Information Quality Control

In a system by hand people see the results of processing as a flow of documents through the system. Errors can be found by various employees who handle this document. The fact that more than one person is processing or handling a document also adds oversight to transactions that are illegal, incorrect or fraudulent.

Separate files and separate processing systems localize the system error. Abundance in the system by hand often results in similar files being stored by different parts of the organization. In the case of errors, abundance often allows the discovery of correct data. Processing integration and data integration mean that a lot of abundance is removed. Quality measurement in information processing has historically been directed at systems that are not integrated, which allows a greater error rate than integrated systems where systems can mix. A major problem in information processing is improving the quality of input and processing in computer information systems.

System and data security

Securing systems and data is not a conceptual problem. This security is a practical problem because as a result of inadequate security can be dangerous. In computer-based information systems, centralizing processing, and files in a limited area using only a small number of operators, increasing the risk of fraud, annihilation, theft and so on. The problem in management of information systems is the provision of data fund system security by the following steps:

Protection from outsider attempts to enter computer centers without permission

Terminal security

Securing data coverage

Fire and theft protection

Backups for files and programs outside the office

Reserves for processing.

Accounting information system

Accounting provides a way to present and summarize business events in the form of financial information to its users. From this accounting definition, an accounting information system (AIS) or accounting information systems (AIS) can be defined as an information system that converts business transaction data into financial information that is useful for the user. Accounting information system (SIMAK or SIA) is an information system that records and reports business transactions, the flow of funds in an organization, and produces financial reports. Accounting information systems (AIS) or accounting information systems (AIS) are the application of information systems to a manual accounting system. The manual accounting system has several subsystems in the form of accounting cycles, namely:

- a. revenue cycle
- b. the cash expenditure cycle
- c. conversion cycle
- d. human resource management cycle
- e. general ledger and financial reporting cycle

ISSN: 1475-7192

The accounting cycle shows the accounting procedures from the data source to the process of recording or processing the accounting. The income cycle is an income procedure starting from the sales department, credit authorization, collection of goods, delivery of goods, collection to cash receipts. The cash disbursement cycle is a cash disbursement procedure from the purchase process to the payment process. Conversion cycle is a cycle of production from raw materials to finished goods. This cycle falls into the category of cost accounting.

The human resource management cycle involves payroll procedures. The general ledger and financial reporting cycles take the form of recording or recording procedures to journals and ledgers and printing financial reports for which data is taken from the ledger files. The accounting cycle is a procedure that also functions as a liaison (interface) between functions in the organization. As a link (interface), accounting cycles will bring the output of a function into an input to other functions, including accounting functions. The following figure shows the accounting cycle will provide input to the accounting information system.

III. DISCUSSION

Functions and uses of the Management Information System for an organization, especially corporate organizations, namely:

1. Information Systems for the company's competitive advantage.

In the business world, the existence of Information Systems as one component that can not be separated from the activities of the company itself. Both of these have a high degree of dependency in shaping the characteristics of the business world. Management in describing the relationship between these two aspects, the company as a driver of business information systems, while the company's information system will be a determinant of the company's performance. In this case there is a perspective seeing that companies and information systems are in the microenvironment of the company, also a part of the macro business world as a whole.

A company has the components needed to run its business operations such as human resources, infrastructure, organizational structure, organizational process costs and so on. While the information system consists of company supporting components to provide information needed by decision makers when conducting company operations.

Many opinions state that information technology is one of the weapons of competition, this should not be doubted because now information technology has become one of the tools to increase the efficiency of the company's operational activities. Almost in every company there has been a phenomenon where companies that become the community's choice criteria are companies that have very adequate information technology tools in various operational activities of the company, because one of the elements of community assessment of the quality of the company today can be seen from the ability of a greetings companies present products / services including using information technology.

A company will continue to improve product / services services to be more competitive, this can be done by the use of information technology so that the products / services produced will not lose competitiveness with other companies. This has been observed by the leaders of institutions such as:

- 1. Competition between the same / similar companies.
- 2. Threats from new entrants.
- 3. Threats from companies offering substitute products / services.

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 09, 2020

ISSN: 1475-7192

- 4. Supplier bargaining power.
- 5. Buyer bargaining power.

The Role of Communication Networks in the Company.

One of the facilities offered by information technology in a company is the establishment of inter-company communication networks to improve efficiency and effectiveness. The phenomenon of cooperation between companies is to work together to face a better company.

3. Information Technology as the Company's Main Asset.

The speed of the development of information technology is so high that it is very difficult for companies to strategize in maintaining its existence in the long run. In this case there are three main keys to money supporting information technology that can be used as a company's assets in the long run:

- a. Human Resources
- b. Technology
- c. Relation.
- 4. Management Information System as a guide in corporate planning.

In the business world, companies must plan the company for the future so that the company can continue to develop and run well, this can be done by forecasting technology.

Large and often very rapid technological changes, making the company's plans in the long run will be less successful if the executives do not do some kind of technology forecasting. This prediction helps the introduction of future developments that indicate the direction that the company must take in developing new product activities.

Management Information Systems in Corporate Data Processing.

- · Data processing is used for two broad purposes:
- 1. To process transactions
- 2. To support decision making.

One of the best ways to explain business data processing is to examine a typical business transaction involving merchandise. Data processing operations can be carried out in ways such as:

- ü Calculation
- ü Communication
- ü Recording and archiving
- ü Coding (coding)
- ü Sorting
- ü Summary (summarizing)
- 6. Management Information Systems as a Tool for Designing Jobs.

In an organization including companies must have a work design within the framework. And within a company itself, a company leader and a manager must be able to analyze the work of its employees. The decisions of these managers are based on departmentation and range of control. Before making this decision, a manager must have collected various sources of information about the performance of the employees working in the company. Managers are also responsible for coordinating groups formed according to organizational goals.

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 09, 2020

ISSN: 1475-7192

7. Management Information System as a Guideline in Analysis of Making Company Financial Statements.

In making a report analysis the company can use the following steps:

- · Use of corporate financial ratios
- · Comparison method of corporate financial ratios
- · Illustration of company financial statements
- · Ratio in the company's financial statements
- · Level of liquidation of activities
- · Measurement of overall company liquidation
- · Measurement of the level of liquidation or activity
- · Debt measurement
- · Measurement of the company's ability to pay fixed financial obligations
- · Measurement of profitability.

IV. CONCLUSIONS

information is a data that has been processed in such a way that it becomes a useful form for people who receive it, from that many positive sides if an organization applies information systems in it. Management Information Systems have a very important influence for an organization which in this case is a corporate organization. Management Information Systems can support company leaders in making decisions and making plans for the company in the future, and can help companies to compete with other companies also in creating and processing resources to become products or services that have not only quantity but also good quality.

Acknowledgment

Thanks to Binus University, Jakarta, Indonesia.

V. REFERENCES

- [1] Kadir Abdul, Introduction to Information Systems, (Yogyakarta; Andi Offset, 2014)
- [2] Laudhon, Kneth, Jane P. Laudhon, Management Information Systems (Yogyakarta; Andi, 2005)
- [3] Laudon Jane., Management Information Systems, (Jakarta; Salemba, 2012),
- [4] Rahmat Taufik, Management Information Systems, (Yogyakarta; Graha Science, 2013)
- [5] Laudhon, Kneth, Jane P. Laudhon, Management Information Systems (Yogyakarta; Andi, 2005), pp.9-10.
- [6] Clay camp. 2011. Scientist for Risk Analysis and Decision Analysis at FDA CVM US FDA, University of Pittsburgh, University of Iowa College of Medicine Northwestern University
- [7] Eppler, M.J. 2003. Managing Information Quality: Increasing the Value of Information in Knowledge-Intensive Products and Processes. Germany: Springer Berlin Heidelberg. Gelinas, Ulric J. and Dull, Richard B. 2008. Accounting Information System. International Student Edition. Thomson Sounth Western.
- [8] Gelinas Dull, B. Richard. 2012. Accounting Information Systems. 9th ed. Usa: South Western Cengange Learning.
- [9] Loudon, Kenneth C. & Jane P. Laudon. 2012. Information System Management: Managing The Digital Firm.12Th Edition. NJ: Prentice-Hall.
- [10] Hansen, Don R. & Mowen. 1997. Cost Management Accounting And Control. South Western College

Publishing.

- [11] Hansen, Don R. Dan Mowen, Maryanne M. 2006. Management Accounting, 7th edition, Cincinati-Ohio: South Western Publishing Co.
- [12] Harris Margaret, Andrews Jane, Cameron Helen. 2009.All change Managers' experience of organizational change in theory and practice journal of Organizational Change Management, Volume: 21 Issue: 3.
- [13] Hendrisman Rahim. 2013. http://keuangan.kontan.co.id/news/laporan-kinerja-asuransi-constrained-ifrs/Friday, March 22, 2013
- [14] Hilson & Hullet David. 2005. Multi-Media Publications Inc. Innovative Strategies for Risk Management ISBN-13: 978-1895186482
- [15] Keil M, Wallace L, 2004. Software Project Risks and their Effect on Outcomes. Commun ACM 47: 68-73
- [16] Klein, J. H. Powell, P.L., 2000. Risk Management for Information Systems Development. Journal of Information Technology 11, 309-311.
- [17] Kieso, Donald E., Weygandt, Jerry J. & Warfield, Terry D. 2002. Intermediate Accounting. John Wiley & Sons, Inc.
- [18] Kieso, Donald E. Et al. 2012. Intermediate Accounting. 14th Edition. UK: Jhon Wiley and Sons, Inc.
- [19] Kothari, C.R. 2004. Research Methodology (Methods and Techniques, Second Revised Edition. New Age International Publishers.
- [20] O'Brien. James A. 2006. Management Information Systems: Managing Information. Hendrisman Mc Graw-Hill.
- [21] Meiryani & Lusianah. 2018. The Influence of Business Process on Accounting Information System Quality. Pertanika Journal of Social Sciences and Humanities. 26, pp. 209-218.
- [22] Meiryani. 2018. The Factors That Affect the Quality of Accounting Information System Empirical Testing in the State-Owned Enterprises. Journal of Theoretical and Applied Information Technology. 15 th April 2018, Vol. 96. No. 7.
- [23] Meiryani, Azhar Susanto and Dezie Leonarda Warganegara. 2019. The Issues influencing of environmental accounting information systems: An Empirical investigation of SMEs in Indonesia. International Journal of Energy Economics and Policy. 9 (1):282-290.
- [24] Muliaman D. Hadad. 2011. Sharia Is Still a Problem? INTENTION. Vol. I. No.5, November 2011. Page 14-15.
- [25] McLeod Raymond, Jr. and Schell George P. 2007. Management Information Systems. Tenth Edition. Pearson International Edition. Pearson Prentice Hall.
- [26] Moh. Nazir. Ph.D, 2011. Research Methods, Ghalia Indonesia. Bogor
- [27] Mustafa Zainal and Tony O'Leary, 2012. Guide to Statistical Techniques of SEM & PLS with SPSS AMOS, Yogyakarta, Atma Light Library.
- [28] Norton, Porter, Gary A & Curtis L. 2012. Using Financial Accounting Information: The Alternative to Debtor and Creditur. South Western 5191 Natorp Boulevard, Mason, OH 45040 USA.
- [29] Rahmat Taufik, Management Information Systems, (Yogyakarta; Graha Sciences, 2013), p. 17
- [30] Abdul Kadir, Introduction to Information Systems, (Yogyakarta; Andi Offset, 2014), p.9

- [31] Jane. P. Laudon, Management Information Systems, (Jakarta; Salemba, 2012), pp.196-197
- [32] Jane. P. Laudon, Management Information Systems, (Jakarta; Salemba, 2012), pp. 200-201
- [33] Gordon B. Davis, Basic Framework for Management Information Systems, (Jakarta; CV. Taruna Grafica, 1998), pp.289-292
- [34] Foster, D.W. 1984. Company Management. Jakarta: Erlangga.
- [35] Gibson, J.L., Ivancevich, J.M., & Donelly, J.H. 1985. Organization (5th edition, Volume 2). Translation by Savitri Soekrisno & Agus Dharma. Jakarta: Erlangga.
- [36] Irawan. 1988. Introduction to Corporate Economics. Yogyakarta: PAU Economic Studies, Gadjah Mada University.
- [37] Musselman, V.A & Jackson, J.H. Introduction to Corporate Economics (9th Edition, Volume 2). Translation by Kusma Wiriadisastra. Jakarta: Erlangga.
- [38] Rochaety, Eti., Et al. 2011. Management Information System. Jakarta: Media Discourse Partner.
- [39] Syamsuddin, Lukman. 2011. Corporate Financial Management: Application Concepts in Planning, Supervision, and Decision Making. Jakarta: PT Raja Grafindo Persada.