



Information Technology and Accounting Information System Role in The Decision-Making Process for Management (Case Study at Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran And Municipal Waterworks Way Sekampung)

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ABSTRACT

The rapid development of technology in the current era of globalization makes companies of all sizes, regardless of how small or large they are, become increasingly technologically sophisticated, which is true regardless of the size of the company. Current technological advances will help companies provide information of a high standard. Information systems within companies, especially administrative information systems, are progressing rapidly due to the development of new technologies. Users can access the information they need for a specific purpose or any number of reasons through the use of a system known as an information system. This system is responsible for the process of data collection, control, and analysis. A system is considered inadequate and of poor quality, if the system analysis results do not meet expectations. Accounting information systems are beneficial for companies because they facilitate the transmission of financial information and assist managers and staff with report generation. The primary purpose of the accounting information system itself is to provide information for planning purposes, as well as to safeguard the information obtained from the existing system, whether it is related to the quality, provision of presentation, or structure of information, and to ensure that the release is accurate. In addition, accounting information systems are intended to provide information for planning purposes. Accounting information systems are often crucial for an organization because it is often necessary to correctly communicate an organization's financial situation to everyone involved in the company. An accounting information system is a vital component to consider when improving business performance.

This system aims to collect, transport, and analyze financial data and other information types to assess an organization's performance based on criteria such as internal planning and facilitation of commercial transactions. All parties involved in the company benefit from the availability of this information, especially for the management department's role in issuing calls to action. As information technology advances, businesses use it to expand their operations and can even use it to support many helpful management functions, such as organizing, directing, and controlling. This trend is expected to continue along with the development of information technology. There is only one accounting method to ensure that the tasks of the management team can be carried out efficiently, namely by running the organization's accounting information system very well, for which there is no other choice. Writing decisions by management organizations is a painstaking process. Because the decisions made as a consequence depend on the information already published, any information that needs to be provided must be correct and relevant. If the information presented is not accurate or current, then the conclusions drawn by the organization's management are also unreliable. Therefore, we need a reliable information system and technology to provide timely, relevant, high-quality information. Any accounting information system can be considered of good quality if it can obtain information that is easy to check and meet information needs in a timely, accurate and reliable manner.

Keywords: Information Technology, Accounting Information System, Management Decision-Making.

1. Introduction

The benefits provided by accounting information systems are invaluable to companies and organizations of all kinds. Accounting information systems can provide financial and other information that can assist the organization in determining its objectives. Businesses that use accounting information systems can get help when developing or making decisions, especially at a managerial level. In order to increase overall productivity, it has been decided that it is the company's responsibility to provide information of sufficiently high quality. System Information Assurance is one example of a project related to business operations that are running well and are being implemented to become a legal entity financial arrangement for companies that need it. To have an efficient organization or company plan, one must have access to information, whether the information is financial or not. That is one of the benefits offered by accounting information systems. From this explanation, it can be concluded that an accounting information system is a system that disseminates information, regardless of whether the information is related to financial or non-financial information, and where the information is processed to produce the information required by the responsible party. This conclusion is based on the description previously mentioned. To produce reports that may be useful to the company and which can assist the business in achieving the goals they have set for themselves. Any company or organization can use this accounting information system to increase their funds. Providing correct information that can be used in control and control and as a means of expressing management concerns is an essential component of an accounting information system.

Technology that is proliferating has touched various aspects of human life. It seems complicated to reconcile human life with technological progress; it may have become necessary for humans. In the past, technical progress was the result of or related to science; in today's world, science can also be associated with technological advances. In this particular scenario, a new understanding is needed, which may come from the findings of the work done on the two technical items above. It is important to remember that every new technological development inevitably leads to the simplicity of use, efficacy, and productivity improvements. Technology was first developed to make it easier for humans to meet their most basic needs. Like a system, the adoption of new technology as the most recent population subsystem will have consequences; Other subsystems in the system do not need to adapt to new technology adoption. Adopting new technology as the most recent population subsystem will have consequences like a system. It will change the daily pattern of individual activities. The use of technology is a manifestation of power. No matter what form or form this impact takes, it is very likely that any individual who can take advantage of technological advances will experience some or many undesirable effects. Sometimes, a person is unaware that they are using a particular technology. Already, homosexuality has benefited from technological advances, and perhaps technology has even become homosexuality itself. Compared to their need to participate in human resource work, which creates much pressure to enslave them, most companies use technology to increase efficiency and productivity. Technology can potentially increase the company's revenue while maintaining quality control at a high level. Technology can also be used as a control mechanism to evaluate a person's overall performance in the workplace. For example, technology, such as systems that use fingerprints, can be used to limit the level of employee aggression that occurs in the workplace.

Because it can provide high-quality and efficient information required by organizations with keen attention to detail, especially management organizations, accounting information systems and information technology are essential advantages in assisting management with decision making. When making an action, management needs information that has essential qualities such as relevance, certainty, and timeliness. The accounting information system is responsible for producing specific financial information for management to carry out its responsibilities. Regarding disclosing management findings, system information security plays an important role. Since accounting information systems support management organizations with the data they need to produce reports, the importance of these systems cannot be overstated. As a result, businesses always need information systems to increase their personnel productivity. Information technology in a company or organization also has an important role, such as can make to work quickly, competently and effectively.

2. Methodology

Types of Research

The type of research known as comparative descriptive with a qualitative approach was used to conduct this research. Writing in the form of an essay designed to explain a scenario, situation, or other subject discussed previously is called descriptive research. This kind of writing is done to elaborate on the topic being discussed. The authors used a qualitative analytical approach during this research. Qualitative research is research that intends to understand phenomena about what is experienced by the research subject, such as behaviour, perceptions, motivations, actions, and other phenomena holistically and with descriptions in words and language.

Research Location and Time

Municipal Waterworks Way Rilau Bandar Lampung City, Municipal Waterworks Pesawaran Pesawaran Regency, and Municipal Waterworks Way Sekampung Pringsewu Regency are the places where this research was conducted. Administrative procedures at Municipal Waterworks Way Rilau Bandar Lampung City, Municipal Waterworks Pesawaran Pesawaran Regency, and Municipal Waterworks Way Sekampung Pringsewu Regency are the main subject of this study. The main focus is how accounting information and information technology are used to achieve sound management decision-making. This research was carried out over a predetermined period, namely for two months in a row, to get accurate results.

Data Source

The data collection process often begins with the creation of a data summary. The data includes all the information used for a particular project during the research. The data can be used as the primary source of information in formulating decisions if the information is presented. In addition, data is the final product of factual-based observation, which serves as a tool for the process of gathering information. The researchers in this research used the following information:

1. Primary Data Source

The data used in this study and the data collected directly from patients are examples of what is referred to as primary data. Through interviews, the data required for this primary research was collected from the grid or research locations, namely Municipal Waterworks Way Rilau Bandar Lampung City, Municipal Waterworks Pesawaran Pesawaran Regency, and Municipal Waterworks Way Sekampung Pringsewu Regency.

2. Secondary Data Source

Secondary data is additional data obtained from ready-made data in the form of publications and other sources or from institutions or agencies that have links or sources of relationship with the following research objects and research sources. Secondary sources were used to collect the information collected for this research. These sources include Municipal Waterworks Way Rilau Bandar Lampung City, Municipal Waterworks Pesawaran Pesawaran Regency, and Municipal Waterworks Way Sekampung Pringsewu Regency, as well as other sources of data and information related to the research findings but not directly related to the research itself.

Data Collection Technique

Here the following is a description of the data collection method used for this research:

1. Library Research

To complete this research, this research necessary to collect theoretical information from reliable sources such as books, literature, and other print media. These sources must be able to become a reference for theories that are relevant to the research being carried out.

2. Field Research

Field research is a method that requires the completion of in-depth research at Municipal Waterworks Way Rilau Bandar Lampung City, Municipal Waterworks Pesawaran Pesawaran Regency, and Municipal Waterworks Way Sekampung Pringsewu Regency while taking approaches to the object under study, among other locations:

- a) One method of doing research, known as observation, involves paying attention to what is being studied while doing research.
- b) Interview is a type of research conducted by asking business executives open-ended questions, especially concerning research-related issues.
- c) The process of obtaining information from various sources such as books, journals, and other publications is called documentation—access to the Internet related to this research.

Data Analysis Method

This research project used a descriptive-qualitative analytic approach for the collected data. The qualitative analysis research method is used when it is necessary to make an accurate, systematic, and unambiguous picture or painting of the facts, characteristics, or relationships between the phenomena being studied to create a picture or painting. The data analysis methods used in this research are data reduction, data presentation, and drawing conclusions and verification.

3. Results and Discussion

Information Technology in Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran, and Municipal Waterworks Way Sekampung

Utilizing or applying this information technology in Municipal Waterworks Way Rilau can significantly impact performance and work culture individually, between units, and as a whole employee at Municipal Waterworks Way Rilau. The benefits of information technology in the world of work can encourage human behavior in every organization also to change, for example, the attitude of acceptance of all technological changes, trust in technology as a tool to help improve performance and several aspects of the attitudes and perceptions of each individual in the company. The development of increasingly modern information technology encourages human behavior in companies to become learners, namely by trying to keep up with rapid changes in order to improve their performance. Information technology can also create and encourage individual awareness in the company to realize that their performance depends on their determination to adapt to change, realize that task completion can be the key and provide motivation to improve their abilities. At Municipal Waterworks Way Rilau, the use of information technology is quite optimal.

Information technology at Municipal Waterworks Pesawaran supports the function of providing information for the management, as well as a means of supporting the company's day-to-day operational activities. The main advantage of information technology is that it is online and in real time. Reports can be generated directly from the transaction database to reflect the current business operations state. All recorded transactions can be in softcopy or hardcopy so they can be traced easily. Utilization of information technology in a company is essential; to apply information technology must look at the company's characteristics. Information technology can increase the efficiency of a company so that in the application of information technology, reliable people are needed who can work well. At Municipal Waterworks Pesawaran, the utilization of information technology is quite good.

With the development of the times, many things have changed, such as information technology which is now proliferating. Information technology is essential and very influential for human life. Without information technology, humans cannot develop with the times. Information technology is part of an information system that uses computer equipment. The computer equipment is in the form of hardware and software. Hardware and related software tools help improve the distribution of information to be more effective and of high quality. There are many advantages to be gained when utilizing information technology. Benefits can be obtained in marketing, finance, management, banking, general administration, economics, business, accounting, management accounting, and auditing. It is not closed if it is used in other fields. At Municipal Waterworks Way Sekampung itself, the use of information technology itself provides many positive impacts, including information technology that can perform complex calculations very quickly, even faster than humans.

Accounting Information System in Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran, and Municipal Waterworks Way Sekampung

The information system owned by Municipal Waterworks Way Rilau is well managed using a computer system or, more precisely, a computer terminal often referred to as the EDP (Electronic Data Processing) system. The computerized accounting information system of Municipal Waterworks Way Rilau

uses the PrismaSoft Multi General Ledger System. This program is a computerized ledger system used by organizations. *Data processing* is a direct tactic that can be used to transform data into information so that the resulting information is useful and valuable to the individuals who need it. Data processing is done to convert raw data into usable information. This restructuring method is carried out in the context of an accounting information system following several important procedures. The accounting data for Municipal Waterworks Way Rilau was processed using the PrismaSoft Multi General Ledger System program. Every transaction must be registered at the Municipal Waterworks Way Rilau and be fully documented using letters such as checks, notes, and other official letters. In addition, this office has a history of using the interface software provided by the PrismaSoft Multi General Ledger System. How data system development procedures for accounting information systems are carried out directly influences the quality of information produced by accounting information systems. The loan terms are described in the information collected from the accounting information system. An accounting information system is needed when the company's management team or other leaders are appointed as a reference for transaction decisions. High-quality information is required to prepare responses; as a result, high-quality information is required to meet the decision reference requirements.



Fig. 1 – Accounting Information System App Municipal Waterworks Way Rilau.

Municipal Waterworks Pesawaran accounting information system has also used an application, namely the PrismaSoft Multi General Ledger System application, for all activities from recording transactions to becoming financial reports. Furthermore, the accounting information system of Municipal Waterworks Pesawaran follows the function of the accounting information system. Municipal Waterworks Pesawaran accounting information system migrates data from Municipal Waterworks Pesawaran to make business financial reports using the PrismaSoft Multi General Ledger System application. This program runs on the Windows operating system, usually installed on every computer, to facilitate the installation process. The quality of the information produced by the accounting information system at Municipal Waterworks Pesawaran is excellent. This conclusion was made because the system is appropriate for employees who are expected to have this system. After all, it is beneficial in the process of financial statements, which can be a benchmark for management in making budgets for the next period. Delayed presentation of reports to Users only needs to stay alert and enter data into the system to keep the integrity of the system intact because every component of the system operates properly and is connected in turn. This is possible because the system is designed to process each transaction automatically according to the system's requirements. Once the system is set up, there are practically no problems with messages sent to different sections or units. This benefit shows that the system works effectively and is consistent with the facts. The use of this information system has produced some data that can be read by consumers, correct data, timely data, and high-quality data. Moreover, it has shown that the statistics are accurate and authentic. Proper accounting information systems are required to produce high-quality information with high-quality standards. The application of this method has resulted in greater levels of motivation among employees, and the results of their efforts can be seen in reports and the accounting realm. Internal and external parties also examine the results of the report.

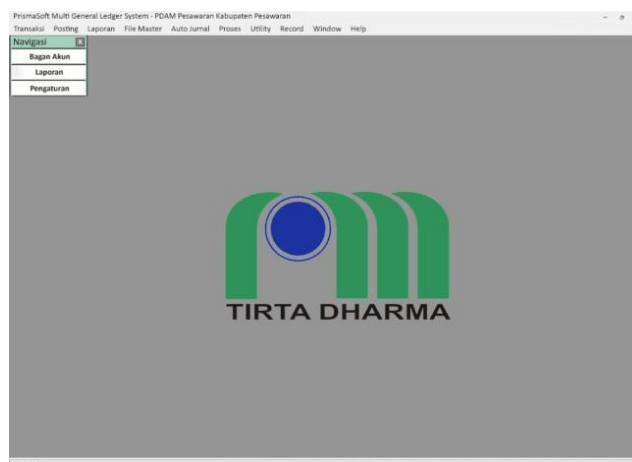


Fig. 2 – Accounting Information System App Municipal Waterworks Pesawaran.

Accounting information that is important to the company will be generated from the system that provides accounting information. Information obtained from a company's internal accounting information system will significantly assist management in carrying out its duties, which include controlling, controlling, and articulating management position statements. The accounting information system has been computerized at Municipal Waterworks Way Sekampung. The PrismaSoft Multi General Ledger System program is used in computerizing the system. The computerized accounting information system is capable of handling any task that has the potential to disrupt business operations. Using the PrismaSoft Multi General Ledger System on the computer at Municipal Waterworks Way Sekampung is the best solution to resolve any possible problems. There is a feature in PrismaSoft Multi General Ledger System that makes it easy to use when transferring data, allowing management companies to do it in a timely and correct manner. Implementing PrismaSoft Multi General Ledger System by Municipal Waterworks Way Sekampung for financial data transmission can help reduce complications that may arise when doing it manually. Good quality information is information that has accuracy, speed and conformity with management needs and the completeness of the information produced. Accounting information quality is an information product whose characteristics, attributes or qualities help make it valuable to users.

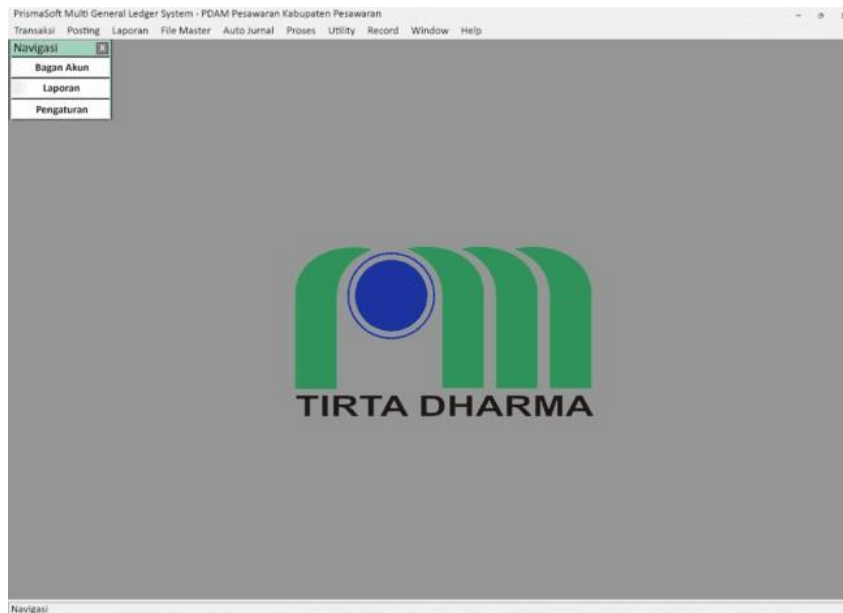


Fig. 3 – Accounting Information System App Municipal Waterworks Way Sekampung.

Information Technology and Accounting Information System Role in The Decision-Making Process for Management in Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran, and Municipal Waterworks Way Sekampung

Accounting information systems and information technology play a vital role in helping management to make decisions because, with this accounting information system, reports on trends in losses and profits can be seen by the system. With the existence of information technology, all work will be faster and more effective. Therefore, accounting information systems and information technology positively impact decision-making and the performance of Municipal Waterworks Way Rilau. The existing accounting information system at Municipal Waterworks Way Rilau is excellent because it uses a computerized information system to produce information related to each department and produce financial information more quickly, as well as the presentation of the information. More relevant, accurate and timely means that this accounting information system plays an essential role because it will facilitate, facilitate and speed up management decision-making.

Municipal Waterworks Pesawaran is a company owned by the local government, like Municipal Waterworks Way Rilau and Municipal Waterworks Way Sekampung, where every planning and highest decision-making is under the authority of the local government. For example, suppose there is a striking deviation between the sales budget and its realization. In that case, the regional manager looks for the causes of the deviation, looks for alternatives and sees the pros and cons of each alternative. Every problem and alternative is submitted to the central office, after which the local government selects the proposed alternative or provides another alternative. Decision-making is made by the local government, which means implementation by the regional manager. However, not all problems are decided or reported to the local government, and regional managers also have the authority to decide on specific issues. One problem that is very influential in the company's operations is determining the costs to be budgeted. The previous flow chart also shows that in preparing the Municipal Waterworks Pesawaran budget, there is a comparison between the budget and its realization, which is obtained from the results of processing accounting information system data in the form of financial reports. The comparison is intended to determine the extent to which the target use of the budget has been achieved. So the company can find out deviations in the use of the budget.

Accounting information systems and information technology are essential in making management decisions at the Sekampung Municipal Waterworks Way. Accounting information from an accounting information system can serve as an incentive to recognize problems by presenting performance deviations with the targets set in the budget or by informing managers that they have failed to achieve predetermined outputs or profit targets. Accounting information systems also play a vital role for decision-makers in realizing and formulating problems or opportunities. Like separating one alternative

action from other alternative actions, explaining the consequences of various alternative actions to choose, helping analyze and assess various alternative actions to be chosen, and as feedback to take corrective actions for deviations. The management decision-making process has four steps: intelligence, design, choice, and implementation. Information technology can support the decision-making process in these four steps. At the intelligence stage, information technology can support finding problems, needs, and opportunities through the ease of presenting the data or information needed. At the design stage, information technology can be an alternative way to solve problems, meet needs, or take advantage of opportunities, in addition to comparing existing methods. At the choice stage, the ability to objectively assess through information technology can assist in making choices. The use of information technology also allows collaboration with various parties in real time. At the implementation stage, information technology can be a complement and even become the primary means of carrying out a decision. Supervision and correction can be done in real-time, making information technology superior to other methods. What has been mentioned is following the application of accounting information systems and information technology at the Municipal Waterworks Way Sekampung and its role in management decision-making.

4. Conclusion

The use of accounting information systems and information technology plays an essential role in the management decision-making of the three Municipal Waterworks. Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran, and Municipal Waterworks Way Sekampung run an accounting information system using the PrismaSoft Multi General Ledger System application. Municipal Waterworks use it as a tool to assist company management in carrying out its operational activities more effectively and efficiently. This system will support the company in managing the accounting data of Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran, and Municipal Waterworks Way Sekampung. This accounting information system will produce information that will later assist management in making decisions. In addition, the results of the accounting information system can be used as material for consideration when the company wants to create a new decision, where the decision will later be realized and will positively impact the Municipal Waterworks company itself. The use of information technology in producing information should consider the user. It is not uncommon to find that the technology used to create knowledge is often inappropriate or not optimally utilized by the user, so the resulting information is of little use to the company. The use of information technology requires careful planning and implementation to avoid rejection of the system being developed, which is closely related to changes in individual behavior in carrying out their work. The use of information technology extends to the operational level to improve the quality of productivity. Therefore, information technology must be accepted and used by all employees in Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran, and Municipal Waterworks Way Sekampung so that information technology can maximize performance and management decision-making. Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran, and Municipal Waterworks Way Sekampung also have sound accounting information systems and information technology operations and processes. Information that becomes more effective and efficient because of the control that controls these processes so that the results achieved can follow the objectives of Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran, and Municipal Waterworks Way Sekampung. Therefore, accounting information systems and information technology must be used as well as possible by the Municipal Waterworks Way Rilau, Municipal Waterworks Pesawaran, and Municipal Waterworks Way Sekampung.

References

- Abu-Musa, A. (2008). Information Technology And Its Implication For Internal Auditing. *Managerial Auditing Journal*. Volume 23.
- Bawaneh, S.S. (2018). Securing Information Technology for Banks and Accounting Information Systems. *International Journal of Applied Engineering Research*. Volume 13.
- Dandago, I.K., and Rufai, A.S. (2014). Information Technology and Accounting Information System in The Nigerian Banking Industry. *Asian Economic and Financial Review*. Volume 4.
- Haleem, A., and Raisal, I. (2016). The Study of The Influence of Information Technology Sophistication on The Quality of Accounting Information System in Bank Branches at Amapara District, Sri Lanka. *Fifth Annual Research Conference*. Volume 1.
- Sačer, I.M., and Oluić, A. (2013). Information Technology and Accounting Information System' Quality in Croatian Middle and Large Companies. *JIOS*. Volume 37, No. 2.
- Thompson, et, al. (1991). Personal Computing: Toward a Conceptual Model of Utilization. *MIS Quarterly*, (pp. 125-143).
- Wisna, N. (2013). The Effect of Information Technology on the Quality of Accounting Information system and Its impact on the Quality of Accounting Information. *Research Journal of Finance and Accounting*. Volume 4, No.15.