

Analysis of the Application of Electronic Data Processing (Edp) in The Accounting Information System at the Tanjung Pura Regional General Hospital, Langkat Regency

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Abstract

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This study aims to determine the application of electronic data processing in the accounting information system at Tanjung Pura Regional General Hospital, Langkat Regency. The data analysis method used is descriptive method that describes a reality found then analyze the data based on theories that are directly related to the discussion of the problem to then be drawn conclusions. From the research conducted can be drawn a conclusion that with the application of electronic data processing systems in the accounting information system in the Regional General Hospital (RSUD) Tanjung Pura Langkat Regency then the hospital can produce financial reports with more quickly, precisely and completely and the data saves time and costs. Meanwhile, the application of EDP when viewed from the internal control system is still not good because there are functions in the hospital that perform duplicate tasks. The results showed that the EDP system owned by the hospital was very good and in accordance with the demands of the times, but the complete computer facilities and the good accounting information system used were not supported by sufficiently skilled personnel and lack of understanding to apply the system used by the hospital. The hospital also uses good internal control to supervise the hospital application system. In defining a system, there are two groups of approaches to defining a system and from the explanation that the definition of a system is a unit consisting of various elements in accordance with procedures that are related and interact to achieve a goal.

Keywords: Analysis of Electronic Data Processing Implementation, Accounting Information System

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INTRODUCTION

With the enactment of Law No. 36/1999 on Telecommunications, there will be a very fundamental change in business patterns in the industry which is very much towards a perfectly competitive market. There will be an effort to compete for consumers among business actors and all of the above will be the basic capital in an effort to create competitive sustainability. If a company uses an EDP system, it requires consistent supervision from management, because even though using EDP this system is very helpful for company performance.

Information systems are a combination of information technology and the activities of people who use that technology to support operations and management. In a very broad sense, the term information system that wants to be

used refers to the interaction between people, algorithmic processes, data, and technology (Fahri & Nasution, 2021).

General control which includes control of the EDP environment, this general control includes several things, namely administrative control, documentation control, data security control, and control of software and hardware. It requires control in terms of turnover and prevention of damage or process failure. In addition, the most important thing in this general control is the clear division of tasks in the EDP department. This means that each personnel in this section such as operators, database administrators, application programmers, system programmers, system analysts should not duplicate tasks with each other. Meanwhile, application control is the control of inputs and outputs that specifically affect individual applications categorized by the data input process, and data output (Siagian and Sondang, 2018: 49).

Data input control ensures that the data has been authorized, registered and reviewed by the entitled and authorized parties. Meanwhile, control over data processing can be done by, among others, always ensuring that the computer used is always in good condition, so that there will be no damage that can disrupt data processing and control over output. In controlling the output, what needs to be done by the management is that the output produced is actually used by the party entitled to use it and the distribution of the output is in accordance with the predetermined time. There are two ways of processing data in EDP, namely Batch Processing and On-Line Processing, in Batch Processing is data processing where the data that has been entered is not processed immediately, but is stored first until a certain time to be processed together.

While On-Line Processing is a method of processing data entered without waiting for a certain time, every data posted is immediately processed into the relevant archive. Entering can be done at any time and on various terminals, these two systems have their own advantages in their application seen in the influence on the accounting function. Computer-based information systems have a positive influence, the presence of computer technology accounting functions can be run more simply, quickly and practically (Prifti et al, 2023).

In this era of globalization, most companies engaged in health services are experiencing very rapid development. Today's hospitals not only function as social institutions, but also as business institutions. This change in function occurs with the increasingly advanced and sophisticated treatment technology in hospitals. The tools needed are also increasingly advanced and sophisticated and require a lot of money. This is one of the things that causes hospitals to require large costs as well. Hospital according to Willan (2019: 125), says that the word Hospital comes from Latin *hospitium* which means a place to receive guests.

The Hospital's organization is structured with the aim of achieving the Hospital's vision and mission by exercising good corporate governance and clinical governance. To achieve this standard the Hospital must have an effective and efficient organization. Langkat Regional General Hospital is a government-owned enterprise engaged in health services, realizing professional and quality health services, and realizing the highest degree of health for all levels of society through the approach of health maintenance (Promotive), disease prevention

(Curative) health recovery (Rehabilitative) and employee welfare. To produce these objectives, the hospital has functions as a medical service (yanmed), medical support services, treatment services, medical records, financial and accounting management, administrative and human resource management (Adm & HR), management of general support facilities (SPU) and others (Romney, et al. 2019: 132).

Hospitals have used computers as a tool to process financial data. The function of data processing through computers in this hospital is generally the same as in other companies, namely to facilitate the preparation of accounting reports and to minimize errors. The program used is SIMRS (Hospital Management Information System), which is in the form of software used to process accounting data, be it income or expenditure. The components contained in the SIMRS program are: Master Data, Financial budget, Administration, Accounting, Data transfer, and Tools (Ellen, 2019: 121).

Before the expenditure data is inputted, it is first authorized by those entitled, namely the Expenditure Treasurer and Budget User (Director). After being authorized, then the data is inputted into the computer manually using the Excell program and then inputted into the Sofit software. If there is data in the form of receipts, it will be authorized by the Receiving Treasurer and then directly inputted into the computer as a general journal by those who receive and are collected to be input directly into the Sofit application by the data input section. In essence, the Hospital wants transparency and accountability in the presentation of financial statements, and in addition to implementing the Financial Reporting Accounting System, it is also needed so that this can be achieved in the form of an opinion, namely: Unqualified (WTP), Reasonable with Exceptions (WDP), unfair and not expressing an opinion.

Table 1. General Hospital Opinion Year 2016-2021 Langkat Regency Region

Year	WTP	WDP	TMP	TW	Total
2016	38%	59%	0%	3%	100%
2017	60%	40%	0%	0%	100%
2018	65%	33%	2%	0%	100%
2019	77%	22%	1%	0%	100%
2020	86%	14%	0%	0%	100%
2021	89%	11%	0%	0%	100%

Source: Financial Report of the Regional General Hospital of Langkat Regency

From the data above there are still Regional General Hospitals Tanjung Pura Langkat Regency that have not received an unqualified assessment (WTP). In the explanation of the opinion given by the General Hospital, it is explained that the LKPD that has not received an Unqualified assessment is because the process of preparing financial statements is not in accordance with established Government accounting standards. According to Bodnar (2018: 81), computer networks were created for the convenience and speed of data exchange between sections or between companies. This shows that network utilization is not good. If the existing network is not utilized properly, then automatically the data exchange that should be done quickly becomes slow so that it is the same as

manual data exchange. Based on the above background, the researcher is interested in taking the title "Analysis of the Application of Electronic Data Processing (EDP) in the Accounting Information System at Tanjung Pura Regional General Hospital, Langkat Regency".

RESEARCH METHOD

In this study, the authors used a descriptive qualitative research method. The subjects in this study were EDP staff and other staff who used computers in the regional general hospital of Langkat district totaling 5 people. The object taken by the author is in the form of data that already exists in the regional general hospital of the district of langkat such as flowcharts and charts about the EDP system. Descriptive qualitative research conducted by this author is intended to present or describe the application of electronic data processing (EDP) accounting information systems in improving the quality of financial reporting at the regional general hospital of the district of langkat. Data collection techniques and instruments used are observation, interviews, and documentation. The data analysis technique used is by 1) Collecting qualitative data and studying the application of the Electronic Data Processing (EDP) system at Tanjung Pura General Hospital (RSUD) Langkat Regency. 2) Evaluating the Electronic Data Processing (EDP) control system whether it is in accordance with the components of the Electronic Data Processing (EDP) control system. 3) Draw conclusions and provide advice and input to the General Hospital (RSUD) Tanjung Pura Langkat Regency regarding the Electronic Data Processing (EDP) system.

RESULTS AND DISCUSSION

Application of Electronic Data Processing

Regional General Hospital (RSUD) Tanjung Pura Langkat Regency has used computers as a tool to process data. The program used by RSUD Tanjung Pura is SIMRS (Hospital Management Information System), an integrated computerized system to handle the entire management process of the hospital, ranging from diagnostic services and actions for patients, patient medical records, pharmacies, pharmaceutical warehouses, finance, to control by management. Regional General Hospital (RSUD) Tanjung Pura Langkat Regency uses a batch system in processing its data, namely by collecting transactions into one and then processed at the end of the period. In connection with the explanation above, the following will explain the processing process.

a. Data input

Financial data is processed by the accounting department and in inputting data each recording is carried out based on proof of transactions obtained from the finance department and other related sections. Before the data is inputted, it must first be authorized by the Spending Treasurer and Budget User (Director) for expenditure transactions and authorization by the Receiving Treasurer for revenue transactions. The input stage begins with receiving all the authorized transaction receipts, which are then entered into Excel by the person receiving the transaction receipts and then submitted to the data input officer to be entered into the program. The data input officer enters the data into the SIMRS

program by typing in the password first. After the password is accepted by the computer, then the data input officer enters the data received into their respective groups. The sections of the SIMRS (Hospital Management Information System) program are as follows:

- 1) Master data
 - a) Official name
 - b) SKPD details
 - c) budget team
- 2) Financial budget
 - a) SKPD (Regional Work Unit) activities
 - b) Budget input
 - c) Preview of RKA report
 - d) Perda number and date
 - e) Cash budget
- 3) Administration
 - a) Counterparty contract
 - b) Payment request
 - c) Pay order
 - d) Treasury cash mutation
 - e) Administration process report
 - f) Tax sector
- 4) Accounting
 - a) Account setting
 - b) Starting balance input
 - c) General journal input
 - d) Accounting report
- 5) Data transfer
 - a) Master
 - b) Budget
 - c) Administration
- 6) Tools
 - a) Back up data
 - b) Restore database
- 7) Exit

After the data is entered into the SIMRS program, it will then be processed by the computer to produce output. If the data input officer is absent, then the section that has entered the data into the general journal will input the data into the program. This shows that there is no control in inputting data, whereas according to Bodnar (2006: 149), only one or two people should input data to avoid errors or data theft. If anyone can input data, of course, no data can be kept secret so that data theft or data input errors can occur. Therefore, the data input section should be separated from other sections and only a few people should be responsible for data input.

In the absence of input control, of course, existing passwords can also be known by other parts. So that the use of passwords according to Nugroho Widjajanto (2001: 239) which should protect the security of computer data no

longer exists. The data input section should be limited to only a few people, so that the password really functions to maintain data security.

b. Data processing

The data processing process at Tanjung Pura Regional General Hospital Langkat Regency has been automated by computer. Any data inputted will be processed directly by the computer so that if the process is complete it will produce output (information) and can be printed to be checked by the head of the finance department which can then be used by the section that needs it. If there is damage to the program that causes the processing process to be hampered, it will be immediately reported to the control section to be repaired by the technician assigned to it. In addition, once a month the program used by each section will be checked by the control section to reduce the risk of damage. This shows that the data process at Tanjung Pura Regional General Hospital, Langkat Regency, is already going well. The form of control carried out by this hospital is in accordance with the process control according to Sasongko Budi (www.akuntan.org) which says the need to check a data processing program to avoid errors and prevent damage.

c. Data Output

After the data processing stage is complete, the next stage is printing the report (output) that has been processed by the computer at the end of the accounting period. In hospitals, output can only be issued by the data input section. The reports produced are:

- 1) Balance sheet
- 2) Budget and budget realization
- 3) Budget realization report
- 4) SPP LS salary and allowances
- 5) Non-tax deposit letter
- 6) Tax deposit letter
- 7) Employee salary list

Reports that have been printed are then re-examined by the data input section, then submitted to the head of the accounting department for authorization based on existing evidence. If there are errors in the reports made, direct corrections will be made to the reports and correct them back to the application program to be reprinted after being corrected. After the report is corrected and authorized by the head of finance, then the report is given a description of who will be submitted next. After a list of users of financial reports is made, it is then submitted to information users, namely the leadership, auditors, the finance department of the regional revenue office and the provincial government finance department by making serial numbers and signatures of recipients of reports which are then stored in the finance department.

According to Bodnar (2006: 154) the above is very important, because there could be errors after the data processed into information is printed. This control is called corrective control, which is control that is carried out to correct errors that have already occurred. Sasongko Budi (www.akuntan.org) says that controlling the reports generated by a company is very important so that there is no misuse of these important and confidential financial reports. The controls are:

- 1) Organizing a printed report media storage system
In this storage system, it is regulated how to print the report media, how to receive it from the printing press, who has the right to store it, how to get it and who can get it.
- 2) Control of access
Only certain people can take and get the printed report media with the intention that those who are not entitled cannot use it for purposes detrimental to the company. Computer operators should not easily and directly take printed report media themselves, but must request it through a predetermined procedure.
- 3) Sequential numbering
Printed report media should be numbered sequentially, so that if something is lost it will be easy to find out.

Internal Control System in Electronic Data Processing

a. General Controls

General controls include separation of duties, physical and logical access control, computer device control, and data security control.

- 1) Segregation of duties
According to Nugroho Widjajanto (2001: 236) separation of duties is important in general control so that duplicate work does not occur which can cause duplicate work. In the hospital, there is already a special section that handles data input into the computer as much as one person, but if this section is absent then anyone can replace it. With the accounting and EDP departments still combined, the control is not optimal because it is certain that even the accounting department can replace the data input officer if this section is absent. Therefore, the company needs to add an EDP section that is parallel to the accounting section in the company's organizational structure so that there is control and there is no duplicate work between the accounting section and the EDP section. The EDP department is only tasked with processing the data provided by the accounting department.
- 2) Physical and logical access control
Physical access at the hospital also does not meet the controls because the computer room as a data processor is not separated from other parts of the room, causing joint use to be unavoidable and data security will be disrupted. Logical access in the form of passwords is also not well protected because it cannot be kept secret by data input officers alone, because if this section is absent it will be replaced by another section, which means that the password must also be told to the other section. Nugroho Widjajanto (2001: 239) states that one of the physical aspect controls is to separate the data processing computer room from other parts of the room and provisions must be made that those who can enter the room are those who have the authority to do so and the number of people who have the authority is not too many in order to avoid abuse of authority for things that are

detrimental to the company. Logical access in the form of passwords also needs to be well protected, only the data input section can know it so that security is maintained. Therefore, the hospital should separate the data processing computer room from other parts of the room so that there is no joint use of the computer. People entering the room should also be limited to urgent needs only. Existing passwords should be kept secret to prevent misuse.

3) Control of computer devices

According to James. A Hall (2002: 387) computers also need to be protected to avoid damage that will harm the company. These controls include placing the computer in a building with strong construction, air conditioning so that the computer functions properly, a fire extinguisher and sufficient electrical power supply.

Tanjung Pura Regional General Hospital Langkat Regency has been equipped with air conditioning, fire extinguishers, stabilizers, generators and UPS. This UPS serves to provide power for a few moments for the computer in the event of a sudden power cut, thus providing time for employees to save their work. The time provided is approximately 1 hour, which is enough time to save important data.

b. Application Control

Application control consists of input control, process control and output control. Input control is to ensure that the data entered into the computer is correct and complete (Nugroho Widjajanto: 2001). This is evidenced by the authorization of data before it is input by the authorized department. Process control is carried out to avoid obstacles in processing data, while output control is control of information that will be used by users outside the company and within the company for decision making.

Input control at Tanjung Pura Regional General Hospital, Langkat Regency has met the control requirements, because there is authorization before the data is input into the program. In the process control is good, because there is already a periodic program check to prevent program damage that causes obstacles in the data process. Meanwhile, output control in public hospitals is also good, because the report is checked by the head of the finance department first and then submitted to the end user of the report.

From the description above, it can be seen that in the internal control system of the organizational structure, the hospital needs to separate the functions between the accounting department and the EDP department so that there is no duplicate work and there is no possibility of data manipulation that causes losses to the company. The use of computers used as data processing should also not be together, because it can cause the security of company data to be disrupted and cannot be properly protected. Furthermore, the hospital must also separate the financial data processing computer room from other parts of the room so that no one carelessly enters the data processing room and opens the computer that stores the data so that there is no loss or theft of confidential data.

CONCLUSION

1. According to the results of research conducted at the Tanjung Pura Regional General Hospital (RSUD) Langkat Regency has implemented EDP by using a computer and has a SIA (Accounting Information System) to handle the entire hospital management process including financial data up to hospital management control.
2. The application of EDP in the form of input, process and output in the hospital is actually quite good, it's just that the input part changes which is a problem. And the relationship between AIS and EDP is that the EDP system organizes every step in the accounting cycle from recording financial transactions to preparing financial reports.

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