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The Drug Management Information System in Mulia Pharmacy Web-Based

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Abstract
The web-based drug management information system at Mulia Pharmacy is a system used to manage drug data and process drug transactions online. However, currently the existing system still uses the manual method and has several problems, such as limitations in updating drug data in real-time; so it takes a long time to get drug information in an emergency, long report generation. Therefore, an information system is needed that includes drug data management starting from purchasing drugs to suppliers, drug sales to the general public as well as in preparing drug stock reports. The purpose of this research is to improve the old system by creating a computerized information system for managing drug data. The benefits of this system facilitate the process of recording drug data, be it buying or selling. The research methodology used in the development of a new system may include preliminary studies, system design, system implementation, and system evaluation and maintenance. In this study, a qualitative approach was used with the case study research method to obtain in-depth information about the web-based drug management system at Mulia Pharmacy and how the newly designed system can overcome existing problems. With the development of a drug management information system at Mulia Pharmacy that is web-based which is better and has been integrated, it is hoped that it will facilitate the management of drug data and the online drug transaction process, and can overcome other problems.

Keywords: *Drug, Information System, Data Management, PHP, MySQL*

INTRODUCTION

Based on RI Minister of Health No.1332/menkes/SK/X/2002 dated 29 October, that what is meant by the pharmacy is a certain place, a business entity or place where work is carried out pharmacy that distributes pharmaceutical supplies. As well as other supplies in order to realize and achieve the degree of public health. Whereas according to PP No. 51 of 2009, a pharmacy is a pharmaceutical service facility is a direct and responsible service to the patient relating to pharmaceutical supplies with the intent of achieving results sure to improve the quality of people's lives.

One of them is Mulia Pharmacy which is in the area of Sutera District, Pesisir Selatan Regency, which has some data, namely drug purchase transaction data, drug sales transaction data and drug sales reports as the management of daily transactions. Mulia Pharmacy also has one branch located in a different area, with a distance of approximately 30 km from the first Pharmacy. The supply of medicines at the pharmacy is good enough. but the system is still not good. The system used between the two pharmacies is still manual, so various problems arise. In data management such as drug receipts, drug supplies and drug dispensing unmonitored. because there are no records of dispensing drugs and the process of receiving drugs It is still done by recording on paper or ledgers. So informed It is also difficult to know the drug supply quickly, because it takes a long time to find out data search. Even the data needed is sometimes inaccurate and resultant errors in calculating the amount of drug stock, as well as in making reports drug sales.

Currently, the use of information technology is something that cannot be done separated again from any community activity. Especially for an organization or institutions, because it can be said to have become a basic need every day. Technology information functions to find information, record information, process information, send information, receive information and retrieve information. For To support a business, it is necessary to process data using a computer, because very helpful to improve performance for the better. Which job usually done manually, will be further improved by using the system computerized, so that the resulting data and information is faster and more accurate. One of An example is a pharmacy which also contains drug management information.

Therefore, it is necessary to create an information system that includes drug management starting from purchasing drugs from distributors, selling drugs to the general public as well as preparation of drug stock reports. Here the author makes the system information using PHP and MySQL. With the existence of an information system created, then the addition of drugs, reduction of drugs, and drug sales reports are generated system can be done automatically. So that the drug inventory in the warehouse can maximally monitored.

RESEARCH METHOD

The web-based drug management information system research methodology at Mulia Pharmacy can be carried out in several stages as follows : 1) Preliminary studies

The initial stages were carried out to understand the background of the problem and identify problems that occur in the drug management system at the web-based Mulia Pharmacy. Preliminary studies can be carried out by means of interviews, observation, and literature studies.

1 Observation Method : The observation method is carried out by direct observation of the field regarding the system that is currently running in several branches of the Mulia Pharmacy.
2 Interview Methods : One method of data collection to obtain information by asking directly to the correspondent. Interview is one of the most important parts of any survey. Without interviews, research will miss information that can only be obtained by asking directly to the correspondent, to find out data or information regarding related problems.
3 Literature Method : The literature method is carried out by collecting data, from data which supports the creation of programs and database creation using the PHP and MySQL programming language for drug data management at Mulia Pharmacy.

2) System planning

This stage was carried out to design a new web-based drug management system at Mulia Pharmacy that can overcome the problems that have been identified. System design may include needs analysis, database design, interface design, and business process design.

3) System Implementation

This stage is carried out to implement a web-based drug management system at the Mulia Pharmacy that has been designed. System implementation includes software installation, hardware configuration, testing, and user training.

4) System Evaluation and Maintenance

This stage is carried out to evaluate system performance and carry out regular repairs and maintenance to ensure the system can run properly. System evaluation and maintenance includes data collection, data analysis, and necessary system improvements.

In conducting web-based drug management information system research at Mulia Pharmacy, a qualitative approach can be used with the case study research method. In this case study, researchers can obtain in-depth information about the web-based drug management system at Mulia Pharmacy and how the newly designed system can overcome existing problems.

RESULTS AND DISCUSSIONS

Analysis of the running system is carried out in order to know the real problems faced by Mulia Pharmacy. This analyzer is useful for providing alternative forms needed. It is hoped that with these alternative forms, if so will provide a better form of report and easy to understand by system users or parties interested in system performance This. Before carrying out the design of a new system, it is necessary the existence of a picture that contains information or information that is related to the existing system or the current system running in the organization concerned. It is intended that makes it easier to analyze and design new systems later. In monitoring drug supplies and drug data management, transaction processing is required.

Analysis of the web-based drug management information system at Mulia Pharmacy was carried out to understand and evaluate the existing system. The following is an analysis of the web-based drug management information system at Mulia Pharmacy :

1. Drug Data Availability

The web-based drug management information system at Mulia Pharmacy has provided drug data that can be accessed online. However, there is a problem in updating drug data in real-time, so the recorded drug data is not always accurate. 2. Drug Transaction Process

The web-based drug transaction process at Mulia Pharmacy is well done. The system is equipped with features to record drug transaction data and available drug stock. However, the drug transaction process can only be carried out by users who have access to the system.

3. User Interface

The user interface of the web-based drug management information system at Mulia Pharmacy is quite simple and easy to use. However, the interface still needs to be improved to make it more user-friendly and make it easier for users to access and utilize the system.

4. Internet Network

The availability of a stable internet network is an important factor in drug management at the web-based Mulia Pharmacy. The problem of internet network limitations can hinder system performance and cause financial losses.

5. Human Resources

Limited skilled human resources can be a problem in drug management at the web-based Mulia Pharmacy. Experts who are skilled in managing drug management information systems are needed so that recorded drug data is accurate and drug transactions can run smoothly.

The following is the procedure for selling and buying currently at Mulia pharmacy are :

1. The customer provides a list of drug requests to the Pharmacist Assistant.
2. The Pharmacist Assistant checks the drug preparations requested by the customer. If inventory exists, then the goods requested by the customer are given to cashier. The cashier made two copies of the drug sales invoice, one in give it to the customer and the other one is archived to create sales report that will be submitted to the owner of the pharmacy.
3. If there is no inventory, the pharmacist assistant records the stock blank and make a drug order letter that is approved by the owner of the dispensary then gave the approved letter back to the assistant pharmacist and submitted to the supplier for drug orders.
4. Distributors process drug orders.
5. The pharmacist assistant receives the purchase invoice and the ordered drug beforehand from the supplier. Invoices for drug purchases are archived to create drug inventory report and drug purchase report and submitted to dispensary owner by.

Based on the above process, it can be described in the form information system flow in Figure 1 below :

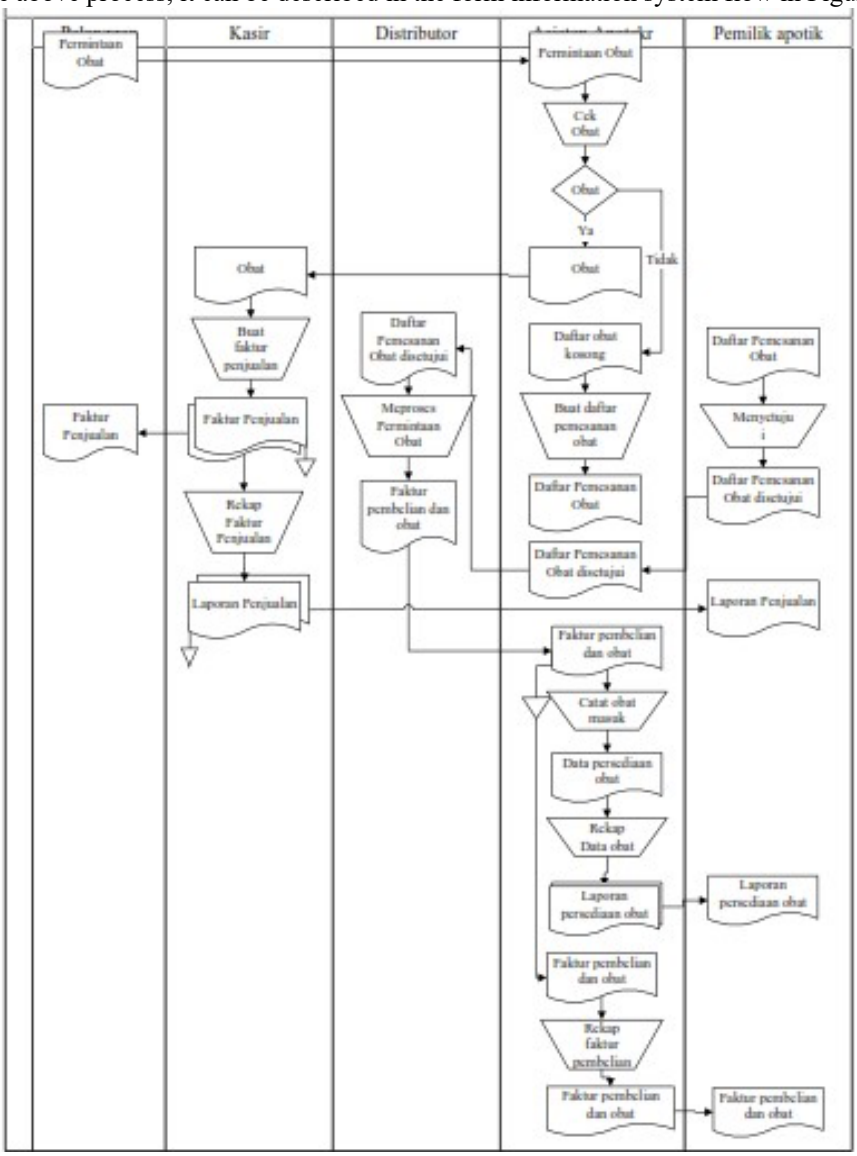

Figure 1. Old Information Systems Flow (Mulia Pharmacy, 2020)

After analyzing the flow of the old information system, a new information system flow was created, which can be seen in Figure 2 below :

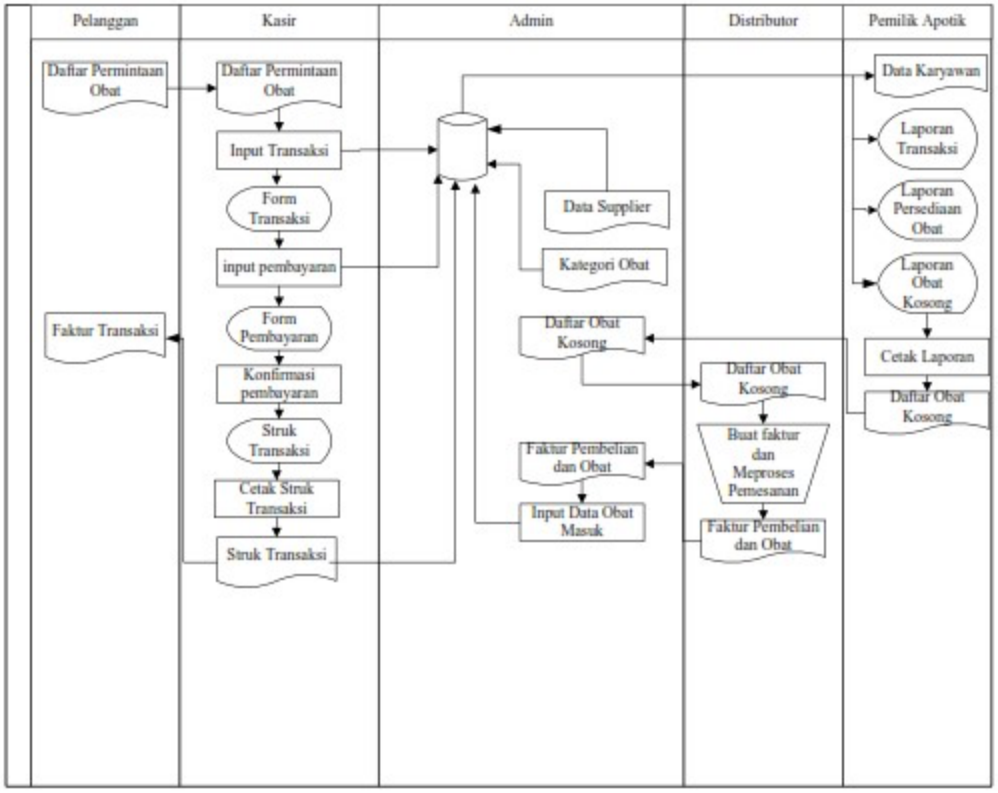

Figure 2. New Information Systems Flow

The flow of this new information system is not much different from the flow of the system old information. Just change the manual system to be computerized withdatabasesas a data storage medium. Here's the inside description this new system :

1. One entities changed name, Pharmacist Assistant changed as admin.
2. The owner of the pharmacy can see the transaction reports made by the admin and cashier and drug supplies.
3. Admin only inputs incoming drug data 4. The cashier only makes sales transactions.

The following is a description of the flow of the new drug management information system on Mulia Pharmacy proposed :

1. The owner checks the out-of-stock report, then the owner prints a list out of stock report. then handed over to the admin to diorder to suppliers.
2. Distributor processingordermedicine then send medicine and invoice orderdrug.
3. Admin acceptsorderdrugs that are inorderpreviously from the supplier. Then input the medicine that is inorder.
4. The customer provides a list of drug requests to the cashier.
5. The cashier inputs the drug request that the customer requests later print sales invoices and submit drugs and invoices to customer.
6. Then the admin submits a car rental and return report to owner.

After that it describes the system in a loop that presents all processes in one system, which is called a context diagram.

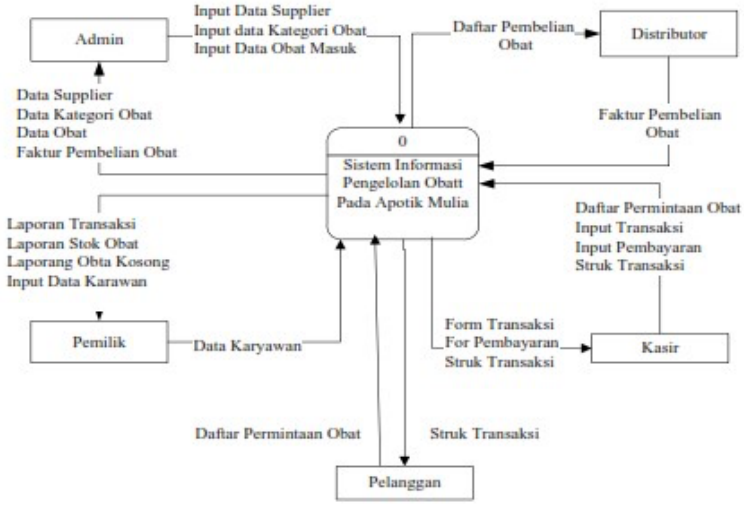

Figure 3. Context Diagram

Finally arrived at the stage of the entity relationship diagram.

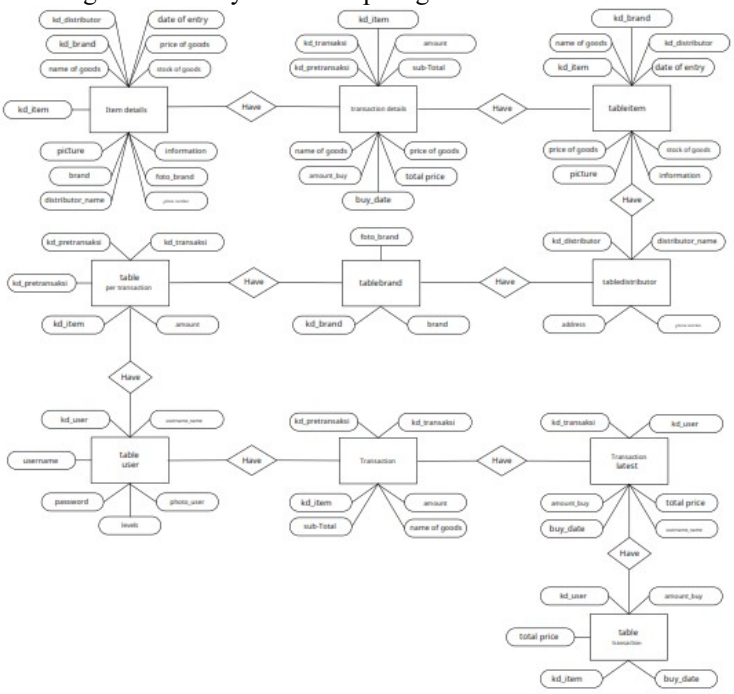

Figure 4. Entity Relationship Diagram

The following is the design of the drug management information system interface at Mulia Pharmacy using PHP and MySQL :

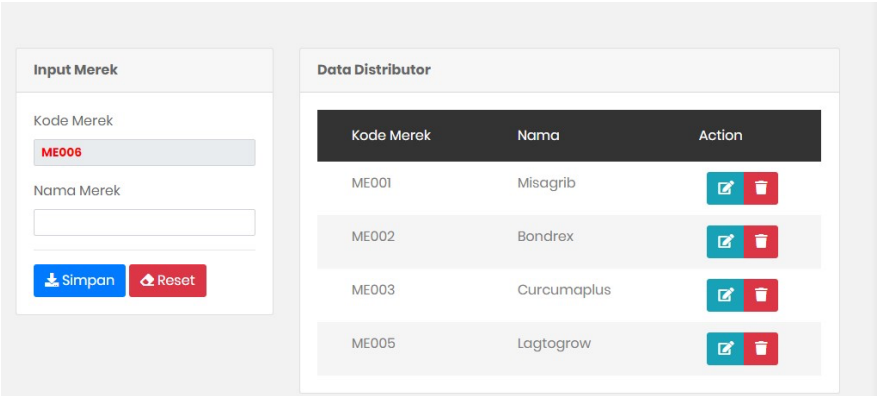

Figure 5. Display of Drug Brand Input and Output

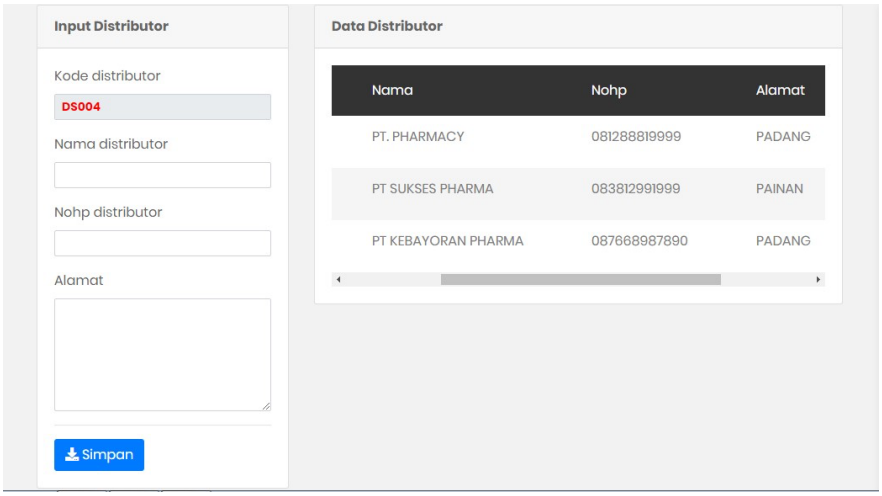

Figure 6. Display of Input and Output Suppliers

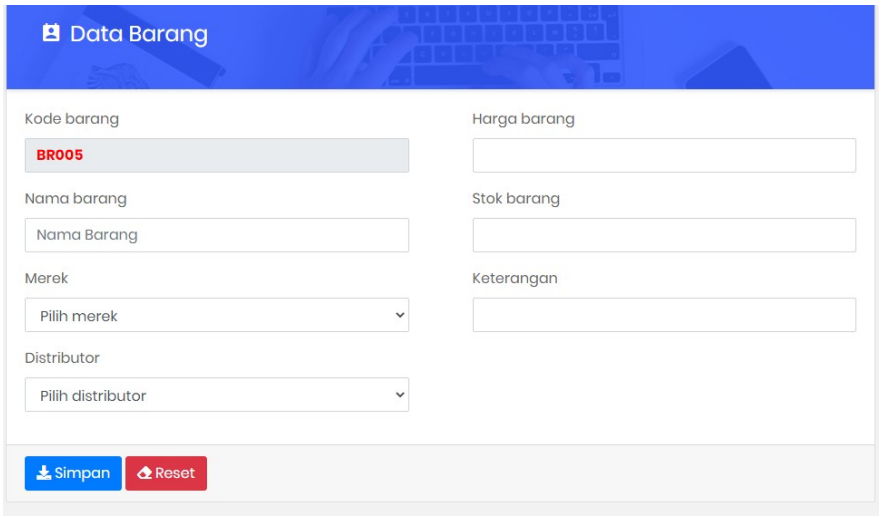

Figure 7. Display of Incoming Goods Input

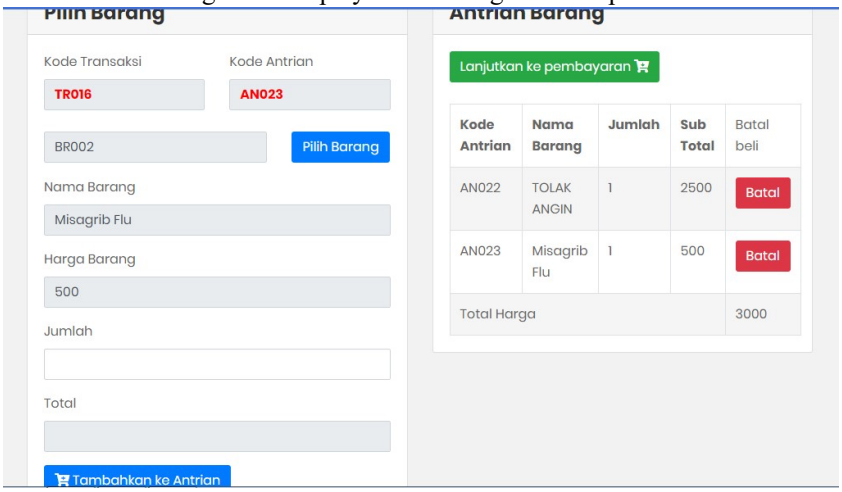

Figure 8. Sales Transaction Input and Output

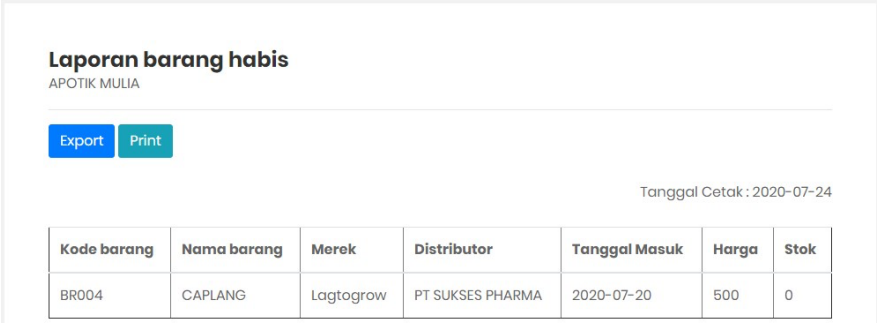

Figure 9. Display Out of Stock Report

CONCLUSION

Based on the analysis and methodology of the research conducted, it can be concluded that the web-based drug management information system at Mulia Pharmacy needs to be improved to overcome the identified problems, such as the limitations of real-time updating of drug data (both information such as drug receipts, drug supplies, drug sales). as well as reports drug sales), limitations of a stable internet network, and the availability of skilled human resources. Research methodologies that can be used in the development of new systems may include preliminary studies, system design, system implementation, and system evaluation and maintenance. In this study, a qualitative approach with a case study research method was used to obtain in-depth information about the web-based drug management system at Mulia Pharmacy and how the newly designed system can overcome existing problems. With the development of a better web-based drug management information system at Mulia Pharmacy, it is hoped that it will facilitate the management of drug data and drug transaction processes online, as well as increase the efficiency and accuracy of drug management at the pharmacy.

DAFTAR PUSTAKA

[1] Alda, Muhamad. (2020). *Sistem Pengolahan DataKependudukan Pada KantorDesa Sampean berbasis Android,* Jurnal Media Informasi Budidarma, Vol. 4, No. 1, Januari 2020.

[2] Al-Jamal, M., Al-Ebbini, L., & Qawasmeh, A. (2017). Web-based pharmacy management system. International Journal of Computer Science and Information Security, 15(5), 87-95.

[3] Anggraeni, Elisabet Yunaeti dan Irviani, Rita (2017). *Pengantar sistem Informasi,* Edisi Pertama,Yogyakarta : Andi.

[4] Anita, S. E., & Arfan, H. (2018). Implementasi Sistem Informasi Manajemen Obat Berbasis Web pada Apotek Terpadu di Indonesia. In Seminar Nasional Sains dan Teknologi (Vol. 1, No. 1).

[5] Destininggrum, Mara dan Adrian, Qhadli Jafar. (2017). *Sistem Informasi Penjadwalan Dokter Berbasis Web Dengan Menggunakan Framework Codeigniter (Studi Kasus : Rumah Sakit Yukum Medcal Centre),* Jurnal Tekinfo, Vol. 11, No. 2, 2017.

[6] Desyani, T. (2018). Perancangan Sistem Informasi Pengelolaan Data Obat Pada Apotek Sinar Mulia Berbasis Web. In *Prosiding Seminar Nasional Informatika dan Sistem Informasi* (Vol. 3, No. 1, pp. 51-60). [7] Hutahaean, Jeperson. (2015) *Konsep Sistem Informasi*. Yogyakarta: CV Budi Utama.