Desktop-Based Savings and Loans Data Information System at the Dana Mandiri Syariah Lambaro Cooperative

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Submission date: 30-Mar-2024 11:57AM (UTC+0530)

Submission ID: 2335170621

File name: 2._Desktop-Based_Savings_and_Loans_Data_Information_System_at_the_Dana_Mandiri_Syariah_Lambaro_Cooperative_7-15_.docx (1.14M)

Word count: 2556

Character count: 13790

JIEM : JOURNAL INFORMATIC, EDUCATION AND MANAGEMENT
Vol. 5, No. 1, February 2023, pp. 7 ~ 15
ISSN: 2716-0696, DOI: https://doi.org/10.61992/jiem.v5i1.70

Desktop-Based Savings and Loans Data Information System at the Dana Mandiri Syariah Lambaro Cooperative

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Article Info
Article history:
Received 10 February 2023
Revised 12 February 2023
Accepted 13 February 2023

Keywords:
Information Systems, Savings and Loans, Cooperatives, Data.

ABSTRACT
The savings and loan information system at the Dana Mandiri Syariah Cooperative is a business entity that operates in the savings and loans sector, where data processing still uses Microsoft Excel or bookkeeping, so it is less effective and efficient. Therefore, the author here takes the problem in the field of savings and loan data itself. By creating a more effective and efficient system, namely the xampp system, it is hoped that it can help cooperatives to improve services more quickly, as well as to store data or other important documents that must be stored properly so that the presentation of information is relatively fast and accurate. The savings and loans information system development method was created using the prototype method using system development tools in the form of Flow maps (Document flow charts), context diagrams (Contex Diagrams), DFDs (Data Flow Diagrams) and design tools, the proposed database is in the form of ERD (entity relationship diagram) table relationships. As well as data collection techniques using research methods by means of observation, interviews and data collection. Program implementation uses a desktop programming language with a database using xampp. The savings and loan information system designed aims to build a computerized information system to make it easier for employee cooperatives in the Syariah Mandiri Fund employee cooperative in managing member data, savings data, loan data, application data.

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1. INTRODUCTION

Savings and loan cooperatives or credit cooperatives are a type of cooperative whose main activity is to provide deposit and lending services to cooperative members with the aim of advancing the welfare of cooperative members and the community. At this time, many people still do not understand how important the role of cooperatives is, many people think that cooperatives are just ordinary financial institutions. Based on article 1 paragraph (1) of Law Number 25 of 1992 concerning Cooperatives, "a cooperative is a business entity consisting of individuals or cooperative legal entities that bases its activities on cooperative principles as well as being a people's economic movement based on the principle of kinship." Sharia cooperatives are not only required to be halal for their survival. In economic development strategy theory, the progress of cooperatives and community businesses must be based on two pillars: the establishment of a healthy market system and mechanism [1]. Its function is to regulate effective economic equality. Therefore, research is needed that is in accordance with sharia procedures.

This is needed because the savings and loan information system is not yet fully computerized. This makes it difficult for admins to manage data. Meanwhile, the Savings and Loans information system still uses a manual system. Manual systems such as data archiving and goods credit reports which are only stored in the form of written documents, can allow the loss of records or damage to records, which will make it difficult for admins if at any time the data is needed [2]. By conducting this analysis, it is hoped that it will provide knowledge, be able to overcome the problems that will be faced, as well as make decisions that must be made and by conducting this research the problems will be resolved quickly.

It is hoped that the design of this application can help Admins in managing data, making information systems that are still manual computerized, making reports easier, and the resulting data is clearer. In the future, it is hoped that this cooperative can continue to develop in its data management. It is hoped that the development of the new information system will increase performance, quality of information, and effective and efficient data control in serving its members [3]. To overcome this problem, the Lambaro Syariah Mandiri Fund Cooperative needs an information system that is faster and more accurate in managing data, as well as more secure in terms of security in archiving documents, so that its business activities can be carried out optimally and in accordance with what is expected.

2. THEORETICAL BASIS

a. Savings and Loan

Savings and Loans is one of the programs from PNPM, namely Women's Group Savings and Loans (SPP). Lending and borrowing in Islam is called Ariyah. According to some opinions, 'ariyah comes from the word "at-ta'war" which has the same meaning as "exchange and replace" namely in the tradition of lending and borrowing. Legal Basis for Lending and Borrowing As is known, sariyah is a means of helping or helping each other between people who are capable and incapable. In fact, it does not rule out the possibility that there could be 'ariyah' between people who are equally capable. The legal basis of the text which means is "And please help you in (carrying out) virtue and piety, and do not help in committing sins and transgressions. And fear Allah. Indeed, Allah is very severe in punishment. (QS. AlMaidah: 2)" Apart from the Qur'an, the second legal basis is hadith, in this legal basis, 'ariyah which means "Whoever borrows human property with the desire to pay it, Allah will pay it, whoever Borrowing will destroy him, then Allah will destroy his wealth. (Bukhari's history)".

b . Coperasi

Cooperatives are associations of people who voluntarily unite themselves to strive to improve their economic welfare through the formation of a democratically managed business entity. Meanwhile, Cooperatives are an association founded by people or cooperative legal entities who have limited economic capabilities, with the aim of fighting to improve the welfare of their members [4] From the definition above, several main ideas that can be drawn regarding the meaning of cooperatives are as follows:

- The form of cooperation in cooperatives is voluntary.
- Cooperatives are formed through a democratically managed business entity.
- Each cooperative member has the same rights and obligations.
- Cooperative members actively participate in cooperative activities.

c . Information Systems

According to the Big Indonesian Dictionary (KBBI), a system is a set of elements related to building a totality. Judging from this definition, a system is a combination of several elements that are related to achieve a goal. An Information System is a system within an organization that brings together the needs for managing daily transactions, supporting operations, material and strategic activities of an organization and providing certain external parties with the required reports [6]. Based on the definition that has been described, an information system is an interconnected system that requires information processing to provide the reports required by parties using the information system. The relationship between data and information can be seen as in the image below:

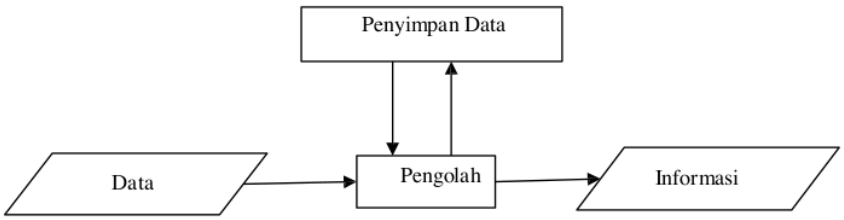

Figure1. Transforming Data Into Information

From the above it can be explained that data can be in the form of symbols, which can be letters and numbers which are processed into information (output) and the results of data processing can be stored in a storage medium, and the information must:

- Accuracy: Information must be free from errors and not misleading. Accurate also means that the information must clearly reflect its intent.
- Timely (Time Lines) Information that comes to the recipient must not be late. Information that is outdated has no value anymore, because information is a basis for making decisions, where if the decision is made too late it will have fatal consequences for the organization.
- Relevance (relevance) The information has benefits for the user. The relevance of information for each person is different. Conveying information about the causes of damage to production machines to the company accountant is certainly less relevant. It would be more relevant if it were addressed to the company's technical experts. On the other hand, information regarding the cost of production provided to technical experts is less relevant information, but will be very relevant for a company accountant.

A system has certain characteristics that can differentiate one system from other systems. These characteristics or traits are:

- System Components (Components)
- System Limitations (Boundaries)
- External Environment of the System (Environment)
- System connector (Interface)
- System Input (Input)
- System Processing (Process)
- System Output (Output)

d. Desktops

Desktop is an application that can run independently on a computer with a certain operating system or platform without using a browser or Internet connection. In the application there are several pages, namely:

- Member Page The member page is needed to enter and display the member's personal data, to find out the member number that will be used for each transaction on BMT, making it easier to search for transactions.
- Savings Menu Page The saving transaction page is needed to enter and display data for each member who makes a deposit. Each savings is differentiated with a savings code SW (mandatory savings) and SS (voluntary savings).
- Loan Menu Page The loan transaction page is required to enter loan transaction data submitted by members. Loan data is needed so that BMT can know the details of the borrower's name, loan amount and length of installments made by members, and BMT management can find out the daily employees who receive member loan transactions.
- Installment Menu Page The installment transaction page is used to record installment transactions from member loans, transaction data records the loan number, installment nominal and the third installment paid by the borrower. The loan amount will automatically decrease after the installment data is saved.
- Report Menu Page Reports in the application

3. RESEARCH METHODOLOGY

This research aims to design a new system in the form of desktop- based data to make it easier for officers to make reports. This research is included in Research and Development (R & D) research. This research method is used to produce data and assess the effectiveness of the data. Research and Development (R & D) is a process or steps to develop application data. As a development function where the resulting application data can be in the form of software or hardware. The data that will be generated in this research is in the form of a Savings and Loans data collection application in Cooperatives.

The desktop-based Mandiri Syariah Lambaro Cooperative information system uses the waterfall system System Development Life Cycle (SLDC) method. The Waterfall model is a method in SDLC which has the characteristic that each phase in Waterfall must be completed first before continuing to the next phase. This means that focus on each phase can be maximized because there is no parallel work, which is the reason why this method is used in working on this system. The stages of the waterfall method are shown in Figure 2:

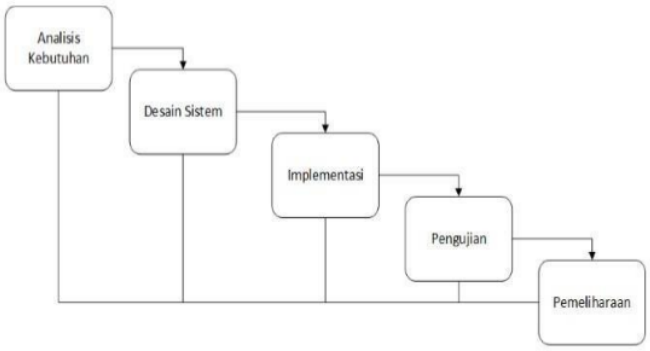

Figure 2. Waterfall Method Model

a. Needs Analysis

Includes hardware, software and material requirements for menus in applications. Before creating a desktop-based application program, data collection was first carried out by conducting interviews and observing cooperative administrators.

b. System design

Before the application is created, the author designs the application design. This design is intended so that the system created meets the specified needs.

c. Implementation

The designs that have been made previously are translated into coding which forms a desktop-based application. Desktop application creation is carried out using equipment that has been determined from the needs analysis.

d. Testing

The system will be tested according to predetermined requirements. Desktop application testing is carried out using the functional testing method.

e. Maintenance

Software maintenance includes development. When the software is run there may still be errors or features that need to be added. Development also needs to be done to improve the software to be better.

4. RESULTS AND DISCUSSION

The desktop-based data storage information system at the Dana Mandiri Cooperative starts with a login page, which consists of a username and password. Basically, the Dana Mandiri Cooperative Desktop can only be accessed by certain people, who are officers who do their respective jobs. If the admin or operator enters the username and password correctly, it will go to the main page, but if it is wrong, it will return to the login page. After going through the login stages, then go to the main page, namely the Admin Dashboard, which can be seen in the following image.

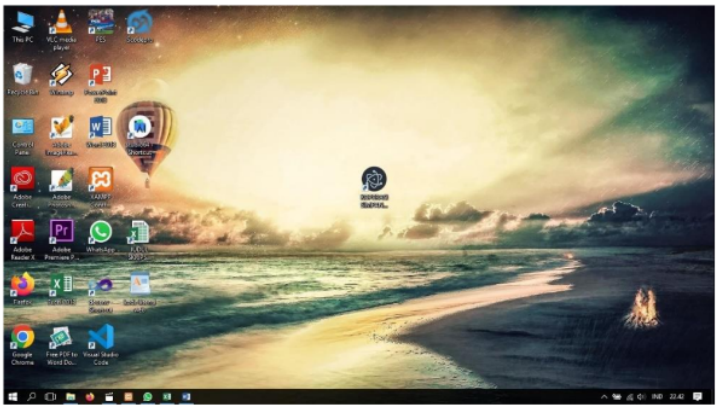

Figure 3. Desktop Application Display

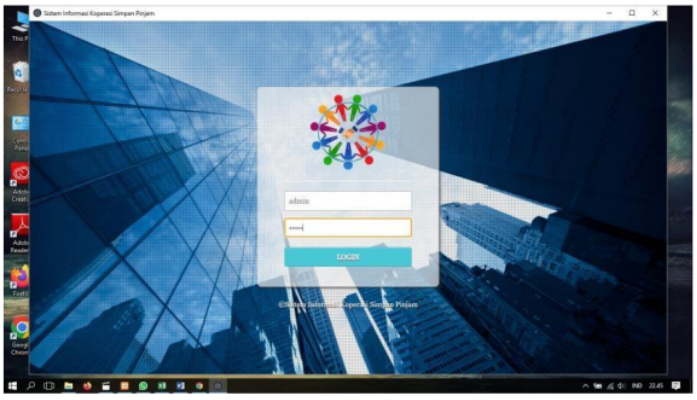

Figure 4. Login page

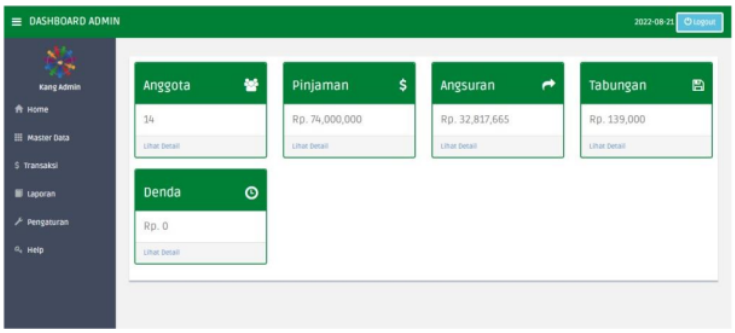

Figure 5. Admin Dashboard Display

The admin main page can edit master data, transactions, reports, settings and help. On the admin dashboard menu there are several menus, namely the Master Data Menu, Transaction Menu, Report Menu, Settings Menu, Graphics Menu, Backup Menu and Help Menu. The admin dashboard also shows the number of members, loans, installments, savings and fines. The Master Data menu consists of Officer Master, Member Master, Savings Master and Submission Master.

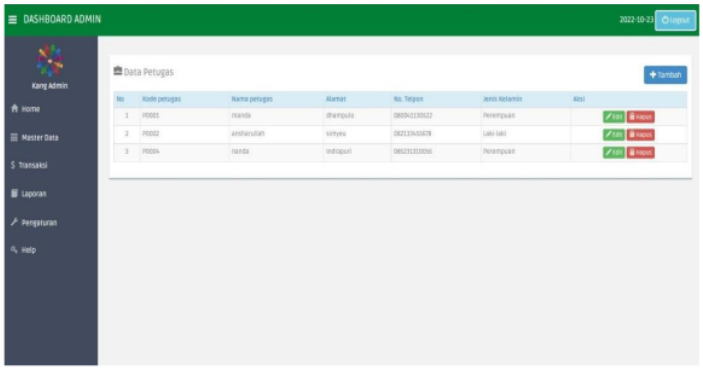

Figure 6. Officer Master Data Display

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The Officer Master menu can be seen in Figure 6, in this menu there is data on officers who manage the Syariah Mandiri Fund Cooperative, which consists of Officer Code, Officer Name, Address, Username, Password and Action.

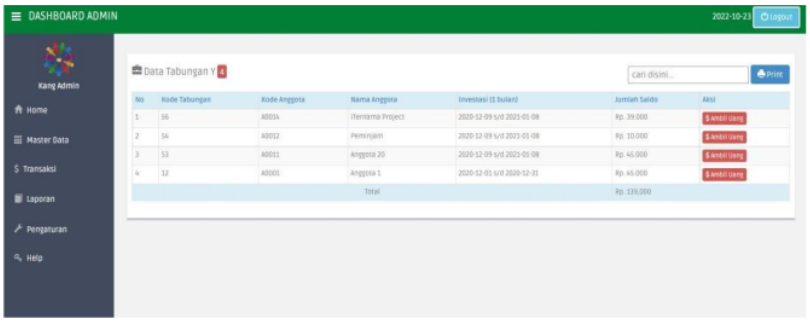

Figure 7. Savings Master Data

The Savings Master Menu is shown in Figure 7. This menu shows the savings of several members of the Syariah Mandiri Dana Cooperative, which consists of Savings Code, Member Code, Member Name, Investment, Balance Amount.

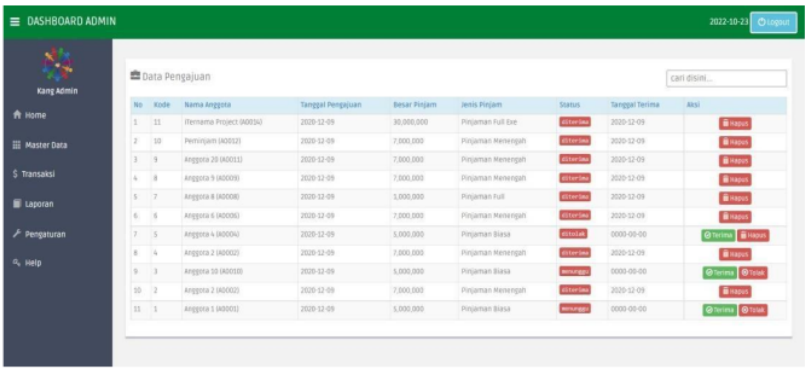

Figure 8. Submission Master Data

In the image above is the Submission Master Menu. This menu is used to find out which members of the Dana Mandiri Syariah Cooperative are applying for a loan. The officer can accept or reject the loan.

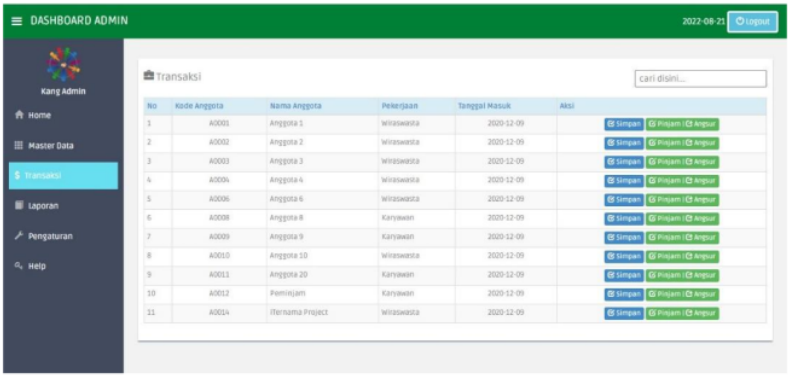

Figure 9. Main Transaction Display

The Transaction Menu is shown in Figure 9. This menu shows the names of members who make transactions at the Dana Mandiri Syariah Cooperative and can also find out which members are borrowing, paying in installments or saving.

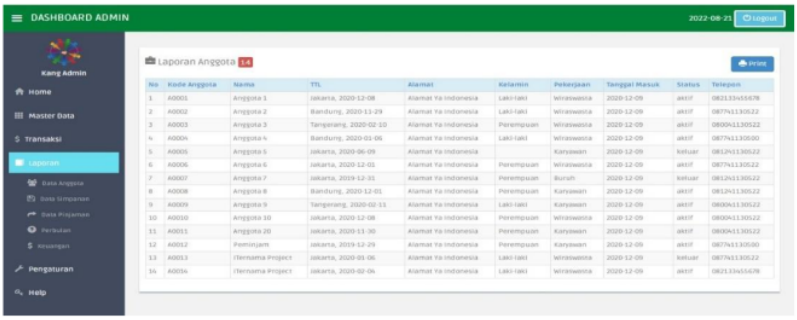

Figure 10. Report Display

The Financial Section Report Menu can be seen in Figure 10, which is the result of transaction activities of all members of the Dana Mandiri Syariah Cooperative.

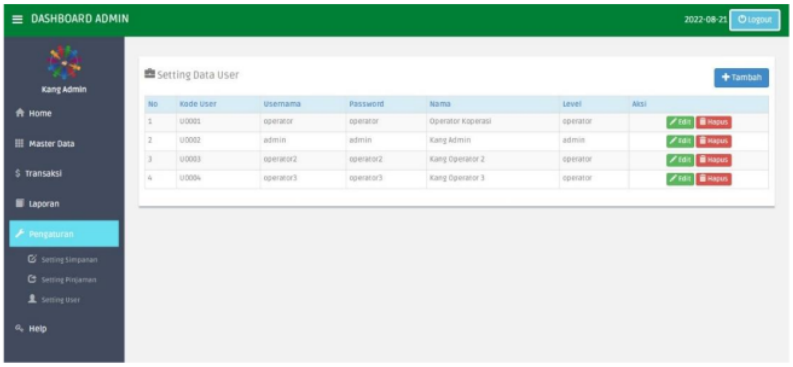

Figure 11. Display of Savings and Loans and User Settings

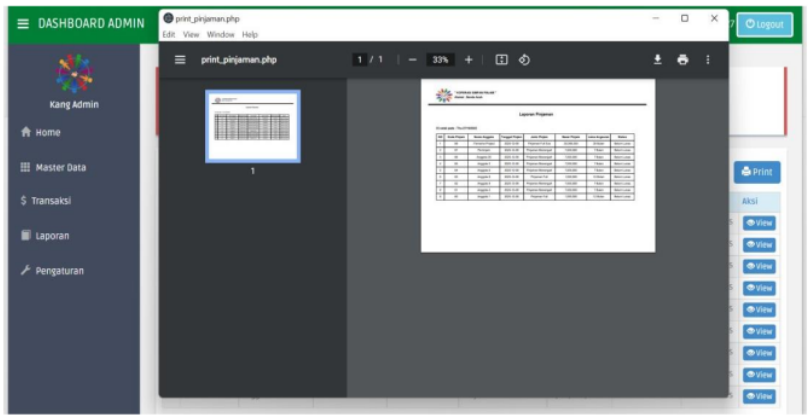

Figure 12. Printed Savings and Loans Report Display

5. CLOSURE

With this information system, work can be accelerated more effectively and efficiently. The computerized system makes it easier to calculate loans and total payments as well as the process of disbursing member funds if they are still making savings or loans because the data is already in the database. The development of the expanded system is not only limited to the activities of processing member loan transaction data but also discusses how to process loan repayment transaction data. For this system, a cline/server system has been developed where the loan process uses this system.

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