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# Community Service Information System Capital Lending at the Aceh Cooperatives, Small and Medium Enterprises Service

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**Abstract:** The aim of this research is: 1) To find out the public service information system in lending capital at the Aceh Cooperatives, Small and Medium Enterprises Service, and 2) To design a public service information system in lending capital at the Aceh Cooperatives, Small and Medium Enterprises Service. The design of public service information system software in web-based capital lending at the Aceh Cooperatives, Small and Medium Enterprises Service which the author designed consists of several stages, namely input design, output design, process design, control design, labor design, and cost design. This design later the author hopes to make it easier for every user, especially the capital loan section of the Aceh Cooperatives, Small and Medium Enterprises Office for more detailed design stages. At the application development stage using the agile development method. Based on the results of observations and the author can draw a conclusion which include the following; 1) The use of the Community Service Information System in Lending Capital at the Aceh Cooperatives, Small and Medium Enterprises Service is expected to help create accurate and effective loan information data, 2) The existence of an information system provides convenience for the Aceh Cooperatives, Small and Medium Enterprises Office because it speeds up general information and reduce errors, and 3) Sales Information System at the Aceh Cooperatives, Small and Medium Enterprises Service which the author designed using various web-based programming languages consisting of; HTML, CSS, Jquery, Java Script, JSON PHP, and for database processing the Structure Query Language (SQLL) is used. The supporting software used is XAMPP version 5.6 (Support MySQLi), NotePad ++, and Google Chrome Browser.

Keywords: Information Systems; Service; Public; Capital Loans; Aceh SMEs Office.

## 1. Introduction

Article 33 of the 1945 Constitution stipulates that the economy is structured as a joint effort based on the principle of kinship [1,2]. Based on the article, the economic form that is suitable to be applied in Indonesia is cooperatives [3,4]. One of the important substances in the Cooperative Law no. 17 of 2012 which must be socialized to the public and the cooperative movement which was formulated jointly between the Ministry of Cooperatives and SMEs, the Ministry of Law and Human Rights and the House of Representatives, namely the provisions regarding Savings and Loans Cooperatives (KSP) covering management and guarantees [5,6]. In the future, KSP can only collect deposits and distribute loans to members. Savings and Loans Cooperatives must be service-oriented to members, so that investors who do business with cooperative legal entities can no longer abuse it [7]. The cooperative savings and loan unit within 3 (three) years must change into a KSP which is a separate legal entity for cooperatives [8,9]. In addition, to guarantee savings, KSP members are required to guarantee member savings.

In this regard, the government is mandated to establish a Deposit Insurance Corporation for Members of the Savings and Loans Cooperative (LPS - KSP) through a Government Regulation (PP). This is intended as a form of government partiality which is very fundamental in empowering cooperatives, so that cooperatives can increase the trust of members to save their funds in cooperatives. Cooperatives need to create a savings and loan information system, so that errors that occur in the manual system can be minimized, so that the level of member trust can be increased. This study aims to determine the savings and loan system that is already running at the Cooperatives Office of Cooperatives, Small and Medium Enterprises in Aceh and to design a savings and loan information system at the Cooperatives Office of Cooperatives, Small and Medium Enterprises in Aceh. Research is limited to the process of member savings and loans as well as savings reports. The objectives of this research are; 1) To find out the public service information system in lending capital at the Aceh Cooperatives, Small and Medium Enterprises Service, and 2) To design a public service information system in lending capital at the Aceh Cooperatives, Small and Medium Enterprises Service.

#### 2. Research Method

The design of public service information system software in web-based capital lending at the Aceh Cooperatives, Small and Medium Enterprises Service which the author designed consists of several stages, namely input design, output design, process design, control design, labor design, and cost design. This design later the author hopes to make it easier for every user, especially the capital loan section of the Aceh Cooperatives, Small and Medium Enterprises Office for more detailed design stages. This input design consists of several program files, namely; 1) Member Data Entry Program, 2) Deposit Data Entry Program, 3) Loan Data Entry Program, 4) SHU Data Entry Program, and 5) User Data Entry Program. Design The output of the capital loan process design system at the Aceh Cooperatives, Small and Medium Enterprises Office consists of several program outputs, namely; 1) Member Recap, 2) Deposit Recap, 3) Loan Recap, and 4) SHU Report.

The process of processing capital loan data at the Aceh Cooperatives, Small and Medium Enterprises Service is basically very different from the old system, the difference being the media and equipment used. In inputting capital loan data and other data, the new design system uses a computerized application. The way the system performance obtains the results of inputting the data listed in a file. For more details, the new system design can be seen in the following figure:

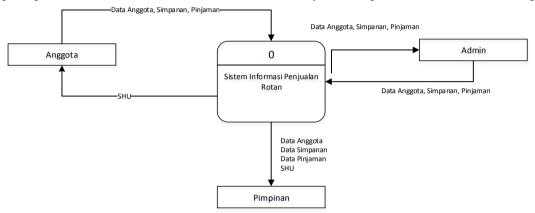


Fig 1. Context Diagram of the Design System

From Figure 1, it is clear that in the Context Diagram of the Design System, starting with the admin inputting member data, then members inputting biodata, after all the data is processed, the file recap of the members is sent to the leadership, after that the system provides a recap of deposit transactions, and borrowing along with SHU every certain period. Then the data that has been stored in the respective files will be processed in the report generation process where the results of the report will be submitted to the leadership. For more details, the tiered diagram of the new design system can be seen in the following picture:

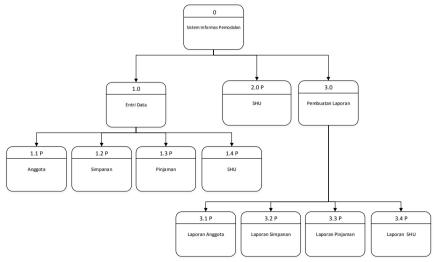


Fig 2. Staged Diagram of a Design System

Based on Figure 2 above, it can be seen that the tiered diagram of the design system above consists of three processes, namely the data entry process, member transaction processes and report generation. In data entry, there are eight subsystems, while in the reporting process there are four sub-systems.

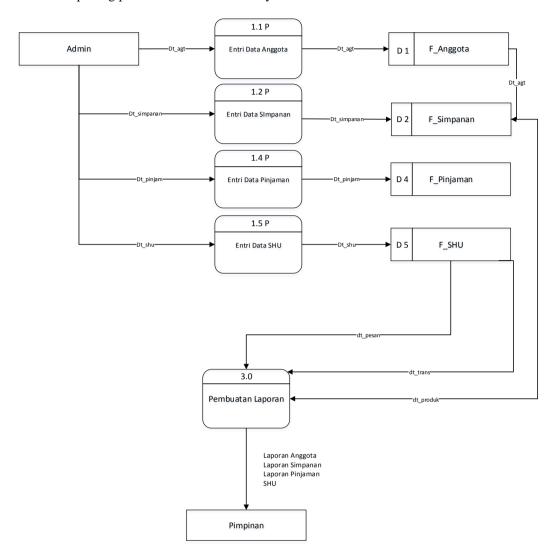


Fig 3. Design Data flow diagram level 0 System Design

Based on Figure 3, In the Level 0 Data Flow Diagram of the Design System, Starting from the Admin inputting data, where the data is stored in their respective files, after that members input member data, where all of this data will produce member transactions to be recorded into several files, where the file This will be a report that will be submitted to the leadership. For more details about the process of designing capital loans at the Aceh Cooperatives, Small and Medium Enterprises Office, it can be explained in the level 1 data flow diagram, process no. 1 design system.

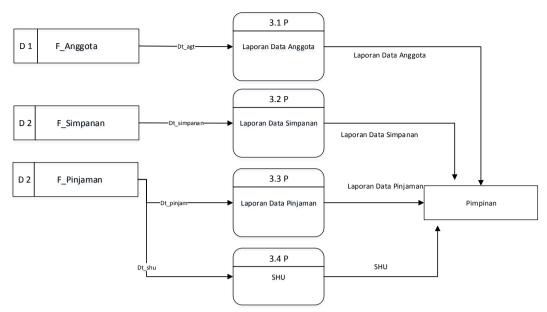


Fig 4. Data Flow Diagram Level 1 Process No. 1 System Design

Based on Figure 4, Level 1 Data Flow Diagram Process No. 1 System The design above consists of six processes. Furthermore, the data is recorded and stored in their respective datastore files for processing in the next process [10]. At the application development stage using the agile development method [11,12], which is a software development methodology based on an iterative process where agreed rules and solutions are carried out with collaboration between each team in an organized and structured manner [13,14,15].

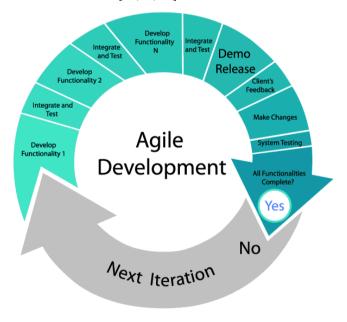


Fig 1. Agile Stages

# 3. Result and Discussion

The use of the Design of a Public Service Information System in borrowing capital at the Website-Based Aceh Cooperatives, Small and Medium Enterprises Office, seen from the design of the application into the form of an application display. The results of the design consist of; login form, main menu, members, savings, types of deposits, loans, remaining operating results (SHU), and application settings:

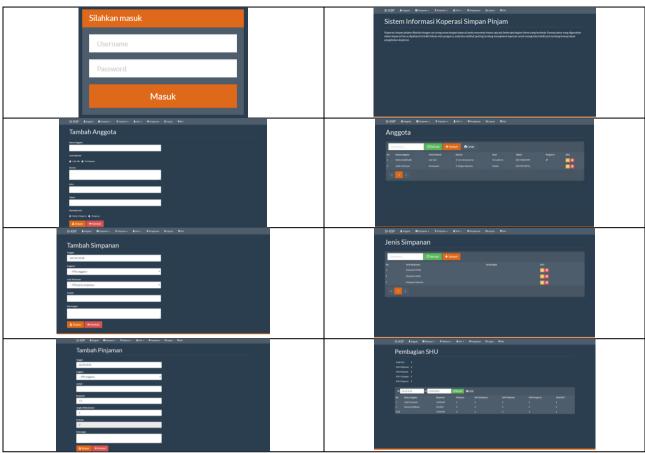


Fig 6. Application Design Results

#### 4. Conclusion

Based on the results of observations and the author can draw a conclusion which include the following; 1) The use of the Community Service Information System in Lending Capital at the Aceh Cooperatives, Small and Medium Enterprises Service is expected to help create accurate and effective loan information data, 2) The existence of an information system provides convenience for the Aceh Cooperatives, Small and Medium Enterprises Office because it speeds up general information and reduce errors, and 3) Sales Information System at the Aceh Cooperatives, Small and Medium Enterprises Service which the author designed using various web-based programming languages consisting of; HTML, CSS, Jquery, Java Script, JSON PHP, and for database processing the Structure Query Language (SQLL) is used. The supporting software used is XAMPP version 5.6 (Support MySQLi), NotePad ++, and Google Chrome Browser.

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