Design Of Administrative Service Information System With Waterfall Method At Balohili Gomo Village Office Based On Web

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ARTICLE INFO	ABSTRACT
     Keywords: Administration Public Village Method Waterfall, Web Email:	The era of the industrial revolution 4.0 as it is today, there has been a rapid development in the field of technology in various countries including in Indonesia itself. The development of technology in computer networks caused a rapid increase in the field of telecommunications marked by the emergence of the internet. This technological advancement requires agencies to follow technological developments and continue to improve their ability to manage data and information. Villages as the smallest part of the administrative government system in Indosenia, are required to be able to follow technological developments and continue to improve their ability to manage population administration data. Public services in Balohili Gomo Village include all services in the village or village such as the administrative field that serves the community in making a letter or other mail carrier. There are many types of public services in the village, especially in making correspondence and other matters related to the community in a village and in its implementation it is still not neatly organized, making it difficult to find letters needed by the community. Designing an administrative information system at the Balohili Gomo Village office is one of the objectives of this study.

INTRODUCTION

The era of the industrial revolution 4.0 as it is today, there has been a rapid development in the field of technology in various countries including in Indonesia itself. The development of technology in computer networks caused a rapid increase in the field of telecommunications marked by the emergence of the internet. The internet also boosts the economy with the rise of trade through the internet today. This technological advancement requires agencies to follow technological developments and continue to improve their ability to manage data and information. A government agency needs an information system that supports the needs of government agencies in creating efficiency and effectiveness of work in managing population data.

The development of the industrial revolution today increasingly encourages the development of technology to be more advanced. The development of technology causes almost everything to be done digitally. As a result, human power is increasingly replaced by robots / machines or systems, but on the other hand this also causes a positive impact on the production system, namely by increasing the level of effectiveness and efficiency of production and the costs incurred for production are also getting lower.

Villages as the smallest part of the administrative government system in Indosenia, are required to be able to follow technological developments and continue to improve their ability to manage population administration data. Public services in Balohili Gomo Village, Boronadu District include all services in the village or village such as administrative fields that serve the community in making a letter or other letter carriers, such as services regarding public services in the village through a recommendation or introduction to letters. So in a village or government in the village, the task is to serve the people in the village so that the community will be easier to undergo or get services in the village.

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There are many types of public services in the village, especially in making correspondence related to the community in a balohilil gomo village and in its implementation it is still not neatly organized, making it difficult to find letters needed by the community. Therefore, the author feels the need to create a computer-based waterfall method administrative service information system that can overcome the weaknesses and shortcomings of the previous data processing system.

METHODS

In order for this research to be carried out and run in accordance with the steps and procedures of the study, the author designed a process / flow of research stages, namely:

1. Stages of research planning
   The stages that the author does are defining the problem, determining goals and making comparisons with existing research.
2. Data Collection Stage
   It is an activity to collect data needed for improvement, either by direct observation or by conducting interviews
3. Stages of Analysis
   Conduct analysis activities on the data collected with the problem to be researched
4. Planning Level
   It is an activity that the author does before the author makes programming.
5. Test Stages
   The stage of testing the validity of the data collected with the data desired by the agency
6. Report Creation Stages
   Make a documented report from the initial stage in the form of existing problems to the results of the proposed system development.

RESULTS AND DISCUSSION

Currently the system for administrative services uses a semi-computerized system (using the Microsoft Word 2010 application), which uses a computer as a data storage tool, but in the process of making it takes a long time. Administrative service data such as correspondence is documented in the filling cabinet. This makes it difficult to see the full information about the information sought, and getting it takes a long time.

The current system does not maximize the availability of computers that already exist at the Balohili Gomo Village Office. The process carried out seems very slow and inefficient in terms of time use and ineffective in its activities. To make a report is done by recapping using Microsoft Office applications, especially Microsoft Word which of course requires special time to make it.

Data Processing Procedure

The procedures for processing mail data at the Balohili Gomo Village Office are:
- The secretary noted that based on the report that had been approved by the new village head, the secretary had the right to issue a letter.
- The secretary department makes a recapitulation of the letter and records based on incoming and outgoing reports.
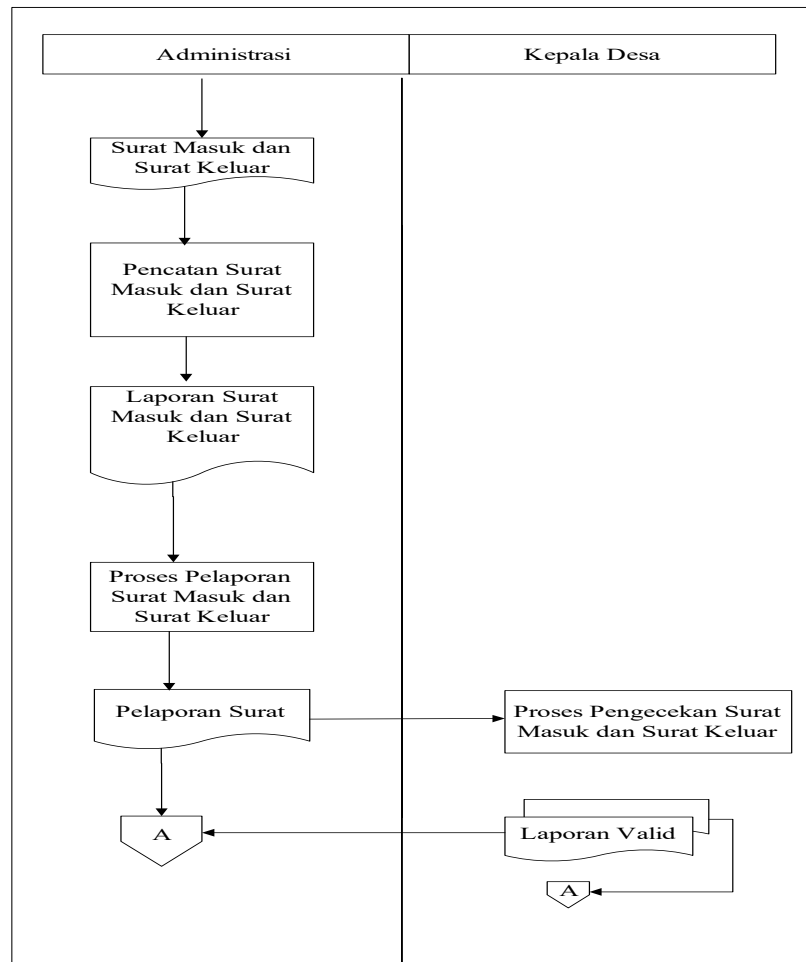- The secretary makes a report as evalasui material to the village head.

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Figure 1. Flow Of Document

The input and output forms that are currently running at the Balohili Gomo Village Office can be seen as follows:
1. Input Form. The input form for submitting an outgoing letter is in the form of proof of responsibility for the units that request submissions to the Village.
2. Output Form. The output form at the Balohili Gomo Village Office is the receipt of incoming and outgoing letters.

Input / Output Form Weakness Analysis

Based on the author's analysis where the system that is currently running in Balohili Gomo Village records the receipt of incoming and outgoing letters, where the system used for recording letters is still done manually in word for outgoing letters using manuals or is still handwritten so that there are often errors in recording both incoming and outgoing letters in Balohili Gomo Village and lack of computerized information.

Discussion
System Planning

The system design carried out is a computerized change in the system of recording incoming and outgoing letters which uses the php (Personal Home Page) programming language. The process of designing the incoming mail system starts from the process of making DFD and designing the

system interface so that the implementation of the incoming and outgoing mail system in Balohili Gomo Village. The following is the system design design that will be implemented in the incoming and outgoing mail systems in Balohili Gomo Village.

Global Design

The system to be designed is a change from the current system. In operation, this system also uses a computer, but in terms of computer users here is a little bit different. This is because the application program that will be used for this new system uses a web application program. To improve the company's performance, Balohili Gomo Village needs to design a correspondence system. The mail system that will be designed is not much different from the current system, it's just that the development of this new system is more effective and efficient using web application programs.

To assist in the design of the proposed system, the author has described a data flow diagram (DFD) of the system to be designed.
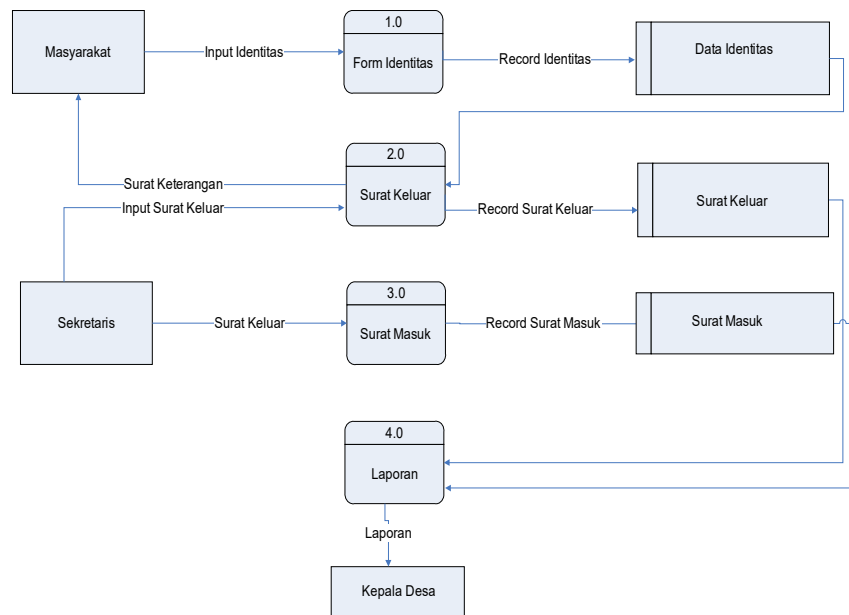
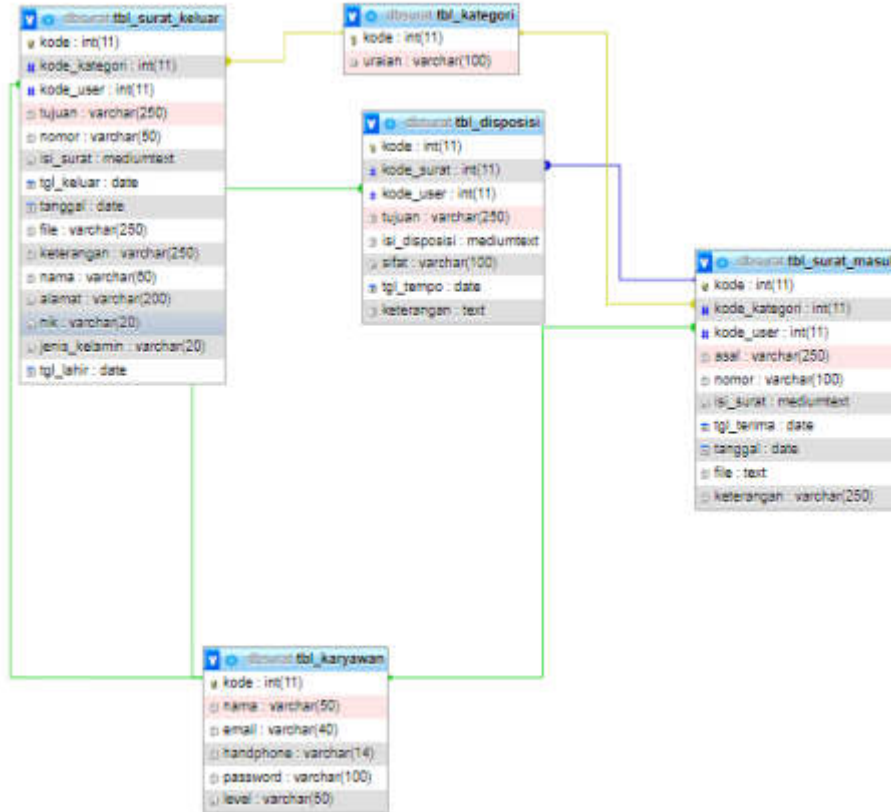**Figure 1.** Context Diagram

Figure 2. DFD Level 0

Figure 3. Table Relationships

Detailed Design

Figure 4. Incoming Letter Report Planning

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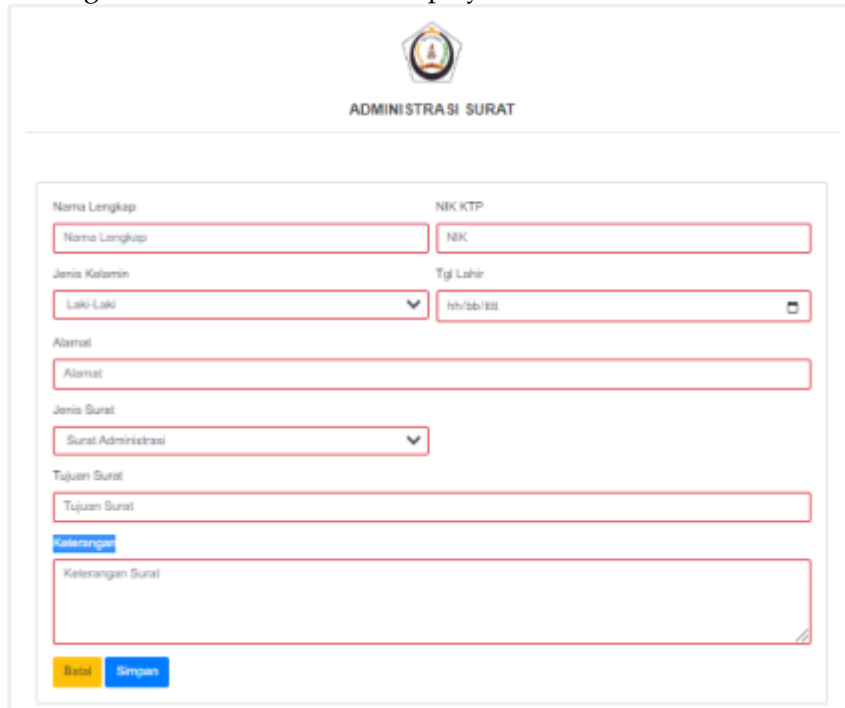
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Figure 5. Outgoing Letter Report Planning

Figure 6. Designing the Main View Before Login

Figure 7. Designing the Display of the Mail Request Main Menu

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Table/File Designing
1. Tabel Disposisi digunakan untuk menyimpan data disposisi surat masuk pada sistem.
2. Tabel Karyawan digunakan untuk menyimpan data pengguna user pada sistem.
3. Tabel Kategori digunakan untuk menyimpan data kategori pada sistem.
4. Tabel Surat Keluar digunakan untuk menyimpan data surat keluar pada sistem
5. Tabel Surat Masuk digunakan untuk menyimpan data surat masuk pada sistem

The Program Module is a single unit that can measure objectives, by grouping related code from the system design made in the form of a display.

Figure 8. Mail Request Page Display

CONCLUSION
The web-based system has the ability to store and share data with the people of Balohili Gomo village because it can be accessed using a web server. With the information system that has been built, it will help the Balohili Gomo Village Office to optimize its performance in its duties and obligations, especially in administrative services to Balohili Gomo Village residents.

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