Incoming Mail Archiving System Using the Waterfall at the Regional Secretary (SEKDA) of the Mayor's Office of Medan

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ABSTRACT

Mail archive management is a crucial aspect of efficient administration, but it often requires a structured system to ensure data accessibility and accuracy. This journal discusses the use of Microsoft Excel as a tool for mail archiving, with a focus on the application of systematic and practical management methods. Excel, as a commonly used spreadsheet application, provides a variety of features that support the management of mail archives, including table creation, data sorting, and applying filters for quick searches. In this study, we outline the practical steps in composing a mail archive using Excel, from creating appropriate templates to filling in data and utilizing Excel functions for analysis. By using Excel, mail archive management can be done at a low cost and efficient process, allowing users to track and manage mail effectively. These findings are expected to provide practical guidance for organizations looking to utilize Microsoft Excel in their mail archive management systems.

Keyword : Microsoft Excel, Data Processing, Mail Archive

INTRODUCTION

The Regional Secretary (Sekda) is a high-ranking official in the government structure of a region who is responsible for the coordination and management of local government administration. Regional Secretaries are usually selected based on their qualifications and experience in the field of government administration, as well as having in-depth knowledge of local government regulations and dynamics. The role of the Regional Secretary is very important in maintaining the stability and progress of local government, as well as in ensuring that public services can be carried out effectively and efficiently for the welfare of the community.

The Regional Secretary of Medan City plays a crucial role in maintaining the stability and progress of the city, as well as ensuring that the policies taken are in line with the public interest and long-term development vision.

In the current era of digitalization and globalization, information and communication technology has become an integral part of human life. The use of technology that is growing rapidly has also affected almost all aspects of life, including in the world of work. Technology has made work easier, increased productivity, and opened up new opportunities for companies to grow faster. Such as the development of the Microsoft Excel application that makes it easier for a person to do a job such as entering mail archive data, recording incoming mail, and so on.

The word archive in Indonesian is absorbed from the Netherlands *archief* which etymologically comes from the Greek archium which means a chest where things are stored. The definition of archive originally indicated a place or space for storing archives, but now the definition of archive is more likely to be a record or letter that has a useful value that needs to be stored with an archival system. While in Latin, the word archive is called felum (bundle) which means thread or rope. At that time, thread or rope was used to tie a collection of writing sheets or notes to make them simple and easy to find if needed.

According to the National Archives of the Republic of Indonesia (ANRI), the definition of archive is any paper, file, manuscript, photo, film, microfilm, sound recording, map drawing, chart or other document in all kinds of forms and natures or copies and by all means of creation, and produced or

received by an agency, as evidence of organizational objectives, policy functions. Archives have a function to support administrative activities, decision-making tools, proof of accountability, sources of information, and a means of communication.

Previously, the SEKDA may have faced obstacles in managing data manually or with software that is less integrated. Manual processes tend to be prone to human error, difficult to monitor, and often take quite a long time. Therefore, a solution is needed that can improve the process of entering letters and archiving letters.

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METHOD

In the methodology of building the system as a whole, it is necessary to carry out several stages. In this study, the author uses the Waterfall Method. This method is carried out with a systematic approach, starting from the system needs stage and then moving to the analysis, design, *coding, testing/verification*, and *maintenance* stages. The steps that are passed must be completed one by one (cannot jump to the next stage) and run sequentially, therefore it is called *a waterfall*.

RESEARCH STAGES

The author uses the research stage based on the waterfall method. The steps used in this method are:

a. Requirement Analysis

Before developing software, a developer must know and understand how to inform user needs for a software. This method of collecting information can be obtained in various ways, including, discussions, observations, surveys, interviews, and so on. The information obtained is then processed and analyzed so that complete data or information is obtained regarding the specifications of user needs for the software to be developed.

b. System and Software Design (Desain Sistem dan Perangkat Lunak)

Information about the specification of the requirements from the Requirement Analysis stage is then analyzed at this stage to then be implemented in the development design. Design design is carried out with the aim of helping to provide a complete picture of what needs to be done. This stage will also help developers to prepare hardware needs in creating the overall software system architecture to be created.

### c. Implementation and Unit Testing (Implementasi dan Pengujian Unit)

The implementation and unit testing stage is the programming stage. The creation of software is divided into small modules that will later be combined in the next stage. In addition, in this phase, tests and checks are also carried out on the functionality of the modules that have been made, whether they have met the desired criteria or not.

d. Integration and System Testing

Once the entire unit or module is developed and tested in the next implementation stage, it is integrated in the system as a whole. After the integration process is complete, the system is then examined and tested as a whole to identify possible system failures and errors.

e.   Operation and Maintenance (Operasi dan Pemeliharaan)

In the final stage of the Waterfall Method, the finished software is user-operated and maintained. Maintenance allows developers to make corrections to errors that were not detected in the previous stage. Maintenance includes repairs   errors, improvement of system unit implementation, and system improvement and adjustment according to needs.
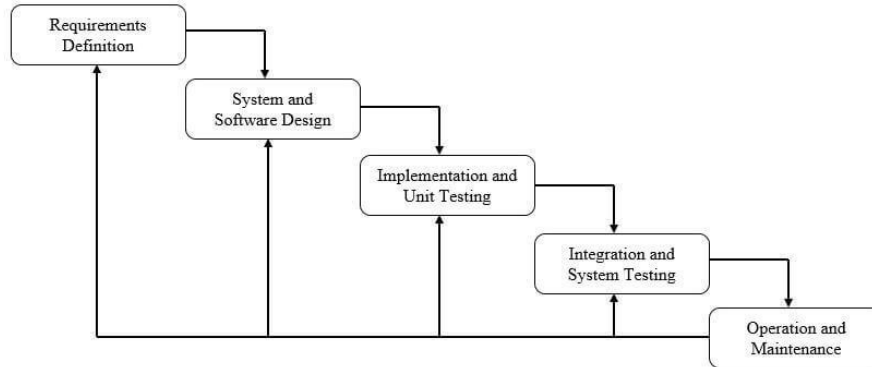
RESULTS AND DISCUSSION

According to the author, recording data manually is a difficult task tiring and time-consuming, this activity is not only time-consuming, but can also lead to physical fatigue and human error that may occur during the process. Recording errors can potentially lead to data confusion and inaccuracies, which in turn can hinder data archiving efficiency. In addition, writing data manually also presents challenges in terms of information management and organization. Searching and updating data can be a complicated and time-consuming process when certain information is needed.

In managing, the author recommends the use of Microsoft Excel as an efficient and fast tool. Microsoft Excel offers a number of advantages that can simplify and speed up the process of recording and searching for data. With the intuitive spreadsheet feature, users can easily create structured data tables, record incoming mail, and search for data that can save time.

Figure 1. Manual mail archiving process using books

Microsoft Excel is one of the most widely used office applications in the world of work. Even a company requires its employees to be able to master this application.
How to transfer incoming mail data to an excel table as follows:

1. Open the Microsoft Excel application

2. Create tables and columns

3. Make a table consisting of:

   • It

   • Origin of the Letter

   • Letter Number

• About the Letter

4. Input incoming mail data into the Microsoft excel application
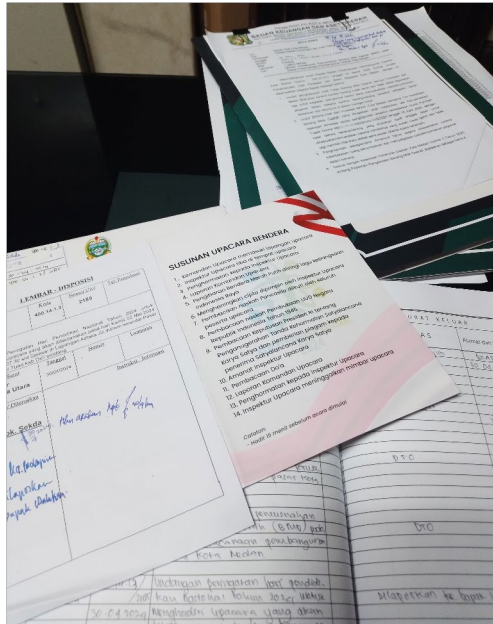
Figure 2. Process of data transfer Incoming mail to Ms Excel

Figure 3. Input Mail into Ms.Excel application

Figure 4. Archive of incoming mail that has been entered

Figure 5. Incoming mail archive

CONCLUSION

Data input using Microsoft Excel is a vital process in analysis Modern data that allows users to organize, store, and manage information with efficiency. In the context of journals, the use of Excel allows researchers and professionals to collect data systematically, as well as present the results in a clear and structured way. While it's important to ensure the accuracy and consistency of data inputs, Excel provides powerful tools for data validation, sorting, and filtering to facilitate informed decision-making. As such, Excel remains an invaluable tool in supporting research and data management across various disciplines.

SUGGESTION

Therefore, the author suggests that the Regional Secretary (SEKDA) using Microsoft Excel as a tool to input data and archive mail so that it can be more efficient in processing data, conducting data searches, and can save time.

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