Application of the Civil Service Management Information System and Archives in Optimizing Sustainable Development Goals in Glonggong Village, Dolopo, Madiun

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Abstract. The purpose of this research was to determine the management of personnel data in Glonggong Village using the Civil Service Management Information System and Archives application which will make it easier for employees to manage personnel data and familiarize employees with using applications in managing personnel data in optimizing achieving the Village SDGs. The method used in this research is descriptive qualitative. The focus of this research is on application of the Civil Service Management Information System and Archives at the Glonggong Village Government, Dolopo District, Madiun Regency. The results of this research indicate that the Civil Service Management Information System and Archives application design process uses the SMART method which has criteria including Specific, Measurable, Achievable, and Relevant. Then in its application, the Civil Service Management Information System and Archives application used in Glonggong Village, Dolopo District, Madiun Regency has several features available so that the display will suit the needs. It is hoped that the results of the Civil Service Management Information System and Archives application development can help the Glonggong Village agency in the data information processing system to be more effective and efficient in searching data and as a form of effort to advance the village in optimizing the Village SDGs.

Keywords: Personnel information system · Archives · Village SDGs

1 Introduction

One of the activities of government administration is personnel management, especially in public organizations and agencies, both central and regional. Apparatus resources are important assets for organizations so the management of employee history data must be handled specifically and requires skilled human resource management in managing employee data. Human resource management is the science and art of regulating the relationship and role of the workforce to be more effective and efficient so that they can help realize the goals of the company, employees, and society [1].

Innovation in personnel resource management is one of the institutional aspects that need to be done immediately through the use of technology [2]. These innovations can be carried out through the application of E-Government in all government administrations where the information data processing process involves technology. E-Government can be interpreted as the use of information technology by the government to provide information and services for its citizens. One of the innovations made by utilizing technology in employee management is the Personnel Management Information System [3].

Based on the Decree of the Minister of Home Affairs Number 17 of 2000 [4], the Personnel Management Information System is an integrated totality consisting of processing equipment including collection, procedures, processing personnel, and software. The implementation of the Personnel Management Information System in Indonesia is regulated in the Decree of the Minister of Home Affairs Number 17 of 2000 that all local governments must implement a computer-based data management process. This is in line with Law Number 43 of 1999 concerning amendments to Law Number 8 of 1974 [5] concerning the main points of employment, especially Article 34 (paragraph 2), that it is necessary to have an Information System developed through the Personnel Information System with the aim that the Regional Personnel Board can be able to manage and provide information on Civil Servants which includes planning, development of the quality of Civil Servant resources and personnel administration, supervision and control of personnel information.

Personnel Information System is a system that can provide information on employee data in a company or agency that interacts with each other in achieving the targeted goals. The Personnel Information System can improve the quality of human resources by providing accurate and efficient information so that decision-making can be carried out objectively. The Personnel Information System that is implemented properly, quickly, and accurately is intended to support the policies of civil servants, especially in the development of civil servants, and to support decision-making in government operations, be it administrative activities, services, or the processing of personal data [6].

Technology-based personnel data management does not only reach the local government but is expected to reach the village government level. Based on Presidential Regulation Number 59 of 2017 [7] concerning the Implementation of Sustainable Development Goals (SDGs) and Village SDGs, it contains the urgency of improving services in villages. One of the priorities for using village funds in 2021 in achieving the Village SDGs is the development of information and communication technology by the village authority. Management of employee data at the village office through the Civil Service Management Information System and Archives application is one form of embodiment of the Village SDGs. However, until now there are still village governments that do not yet have Civil Service Management Information System and Archives in managing their apparatus resources, one of which is the Glonggong Village Government, Dolopo District, Madiun Regency.

Glonggong Village, which is located in Dolopo District, Madiun Regency, does not yet have a personnel information system in which there is the management of employee profile data and position data. The data is still done manually, which takes time. Staffing data management is done by collecting data on employees who work in Glonggong Village in Microsoft Excel, and some of it is even written in a special book. So, when

village officials want to see the data they need for a purpose, they must ask the Village Secretary for help to find the data in the Village Secretary's archive.

So that the problems that exist in Glonggong Village regarding the management of employee data and employee reports are not optimal. Based on the existing situation, if personnel information management activities continue to be carried out manually without any changes, then this will certainly hinder the progress of the village and will lead to situations that are not effective or efficient. The village will also experience lagging among other villages because no medium helps to do work quickly and precisely so that its performance becomes ineffective.

Based on the background of the problem above, the authors conducted research related to the management of personnel data in Glonggong Village using the Civil Service Management Information System and Archives application which will make it easier for employees to manage personnel data and familiarize employees with using applications in managing personnel data. This research was arranged in research entitled "Application of The Civil Service Management Information System and Archives in Optimizing SDGs in Glonggong Village, Dolopo District, Madiun Regency".

2   Method

The research method used in this article is descriptive research with a qualitative approach. According to [8] descriptive method is a problem-solving procedure that is investigated by describing or describing the state of the subject/object of research which can be in the form of people, institutions, communities and others based on the facts that appear or as they are, while according [9] qualitative research methods are as key instruments, data collection techniques are carried out by triangulation (combined), data analysis is inductive, and qualitative research results emphasize meaning rather than generalization. This research uses a library research review or literature study. The purpose of the library review is to collect data, conceptualize and summarize the outlines and thoughts that already exist in previous thoughts that are combined with the author's thoughts and are related to the research topic [10]. In literature research is able to provide benefits to the problems and thinking concepts being discussed because it contains previous studies [11]. Researchers collect literature review research steps according to [12] as shown in Fig. 1:

According to Nasution [13], the research location depicts the concept of a place or research site that is characterized by the presence of things that may be observed, such as actors, places, and activities, and the research location reflects the social situation.
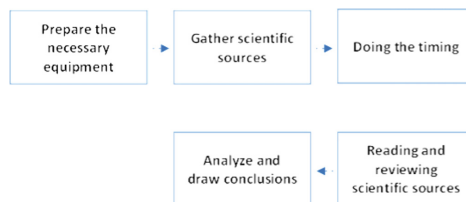

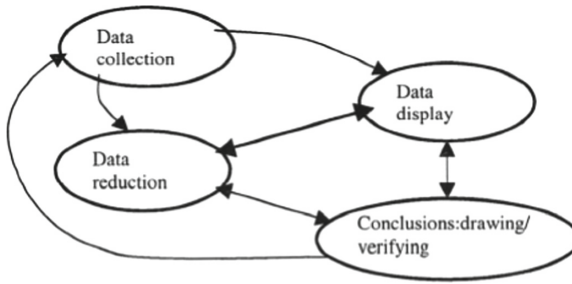**Fig. 1.** Research collect literature review.

Fig. 2. Data analysis by Miles and Huberman.

The research location was conducted in Glonggong Village, Dolopo District, Madiun Regency.

The focus of research serves as a limitation of the scope of research, although this limitation is very temporary in nature, it is very helpful for research, because a research cannot be started from something empty [14]. The focus of this research is on application of the Civil Service Management Information System and Archives at the Glonggong Village Government.

To produce complete conclusions, the researcher uses data analysis techniques from Sugiyono [9] which consist of collecting data related to topics similar to this article, the collected data is then reduced to produce data that is in line with the research question, then the data is presented, then Based on the data that has been presented, conclusions are drawn regarding the topic being discussed. The flow of data analysis can be shown in the Fig. 2.

3   Discussion

The Sustainable Development Goals (SDGs) are a global program aimed at improving people, prosperity, peace and cooperation. SDGs as a sustainable development goal strives for the entire world community to have a prosperous life, without any country being left behind in terms of welfare. In this case, the Indonesian government is also trying to make this program a success, one of which is integrating the SDGs into the national development policy agenda and regional development down to the village level. Quoting from Ministry of Village Regulation No. 13 Year 2020, there are at least 18 development goals and targets. Innovation and technology used by the government is a driving force for a more holistic or comprehensive approach and can solve problems by involving the roles of many actors in it. Based on this, researchers are trying to realize the acceleration of achieving the goals of the SDGs by focusing on a problem in the condition of a village that has problems that must be found a solution to be able to achieve sustainable conditions and development.

Glonggong is a village in the Dolopo District, Madiun Regency, East Java Province. The Glonggong Village Office has the task of carrying out government affairs which are the regional authority in the population sector. The Glonggong office is under and responsible to the sub-district. Not only responsible to the sub-district but also to coordinate with the sub-district in building and advancing the village led by the village head.

Glonggong Village is led by the Village Head who is assisted by the Village Secretary in carrying out his duties and responsibilities for the implementation of population activities, archiving files and managing staffing information in Glonggong Village.

Glonggong Village in carrying out personnel information management activities is still done manually which takes a long time. Staffing data management is carried out by collecting data on employees who work in Glonggong Village in Microsoft Excel and some are even written in a special book. So when village officials want to see the data they need for a purpose, they must ask the Village Secretary for help to find their data in the Village Secretary's archive.

The presence of the Civil Service Management Information System and Archives application can aid the Village Secretary and village employees in searching for personnel data. Employees can directly access the application by entering their respective username and password that has been provided to obtain the required data information without having to ask for assistance. As needed, the Village Secretary can automatically input data on the data input form.

Researchers must also consider the internal or external obstacles that may occur in planning and implementing the the Civil Service Management Information System and Archives application. The internal obstacle is when there is a lack of mastery of partner village employees on information technology, and to overcome this situation, researchers need to conduct regular socialization and monitoring to monitor the understanding of related parties (partner) on the application. The external obstacle is the lack of government support to help utilize village officials in implementing applications and not to mention if there is a change in the bureaucracy in the scope of Glonggong Village. Based on this, the researcher needs the village IT team to carry out special treatment in overcoming possible changes in application design, a team is needed to participate in witnessing the application creation process firsthand. Whose job is to repair the Civil Service Management Information System and Archives application if at any time there are problems that may occur in the application and there is a change in the contents of the form in the application. That way this application will still be able to be used for a long time and can adjust the conditions of the existing village bureaucracy.

3.1 Design of the Civil Service Management Information System and Archives Application in Glonggong Village, Dolopo, Madiun Regency

The application design stage, researchers used the elements of user interface approach, according to Jesse James Garrett, which was used in the layout design stage of the Civil Service Management Information System and Archives. With this approach, it produces an attractive design and is able to create a staffing system access process to obtain information quickly and accurately which will support the creation of effectiveness and efficiency in managing employee information. Researchers also use the SMART method in making applications. The SMART method is a multi-criteria decision-making method developed by Edward in 1977, and is also based on the theory that each alternative consists of a number of criteria that have a weight that describes how important it is compared to other criteria [15].

3.1.1 Specific

The Civil Service Management Information System and Archives application has the aim of being able to facilitate the work of the Village Secretary in carrying out personnel management in Glonggong Village from conventional to digital nature. In this case, it involves the participation of the Village Secretary, Village Head, and all Village Apparatuses to be able to realize this application for more benefit and also as a form of optimizing the SDGs Village.

3.1.2 Measurable

The benchmark for the success of the Civil Service Management Information System and Archives application when this application can be used by all apparatus village, and can be accessed so that it can provide village staffing information quickly and accurately. This application is also made with a simple operating system so that it can be used by all aperture village.

3.1.3 Achievable

To be able to implement the Civil Service Management Information System and Archives application in Glonggong Village, it is necessary to have the expertise of the Village Secretary and Village Apparatus in operating the application, therefore it is necessary to socialize and training the Village Secretary and Village Apparatus in using the application. Because human resource mitra also determines the success of the purpose of the Civil Service Management Information System and Archives application.

3.1.4 Relevant

Build a common perception on the purpose of the Civil Service Management Information System and Archives application to assist the success of the application so that it will be relevant to the desired target.

3.1.5 Time-Bound

The use of the Civil Service Management Information System and Archives application can be done when the partner village has received socialization of the application from the researcher. After that in the next stage there will be monthly monitoring by researchers to see how far the use of this application can be realized in the target recipients (partner villages). After the results of monitoring are collected, evaluation activities will be carried out on applications and application users to find out what obstacles are experienced in operating applications so that this application can be maximally used and can be developed again, not only for partner villages but for villages where employee information management is still manual.

The design of the Civil Service Management Information System and Archives application begins with the following stages:

3.1.5.1 Design Stage
The design begins with designing of the Civil Service Management Information System and Archives by using the Microsoft Access Application.

3.1.5.2 Assembly stage

1. Design of the application menu;
2. Creating tables, processing table designs and modifying tables for personnel data information in Microsoft Access;
3. Create and manage queries and process them;
4. Define relationship to determine the relationship between one table with another table;
5. Create forms and create control buttons on the form;
6. Create menu with switchboard manager and startup creation to run Applications;
7. Create a login menu with form design and run macros in Microsoft Access;
8. Check the results and run the application.

3.1.5.3 Test stage
After the assembly is complete, the next stage is the testing stage. The measure used to view and test the performance of the Civil Service Management Information System and Archives application is a function test of each menu in the application to determine the success of the applications that have been made.

3.1.5.4 Implementation stage
At this stage, socialization of the implementation of the Civil Service Management Information System and Archives application was carried out to the Glonggong Village apparatus. Then the application was launched so that it could be accessed by the village Apparatus.

3.2   Implementation of the the Civil Service Management Information System and Archives Application in Glonggong Village, Dolopo, Madiun Regency

In its implementation, the the Civil Service Management Information System and Archives application used in Glonggong Village, Dolopo District, Madiun Regency has several features available, these features are designed using the elements of user interface approach proposed by Jesse James Garrett, so that the display will suit the needs. These features include:
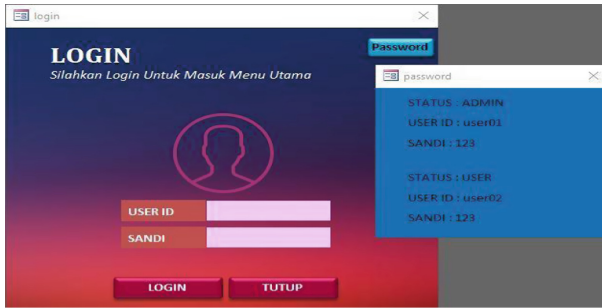
Fig. 3. The login view of the app.

Fig. 4. The main page view of the app.

3.2.1   Registration Feature (Login)

This feature will display a *login page* for users of the the Civil Service Management Information System and Archives application. Village Secretary as *admin* or employees as ordinary users. Information for *username* and *password* has also been provided by pressing the *password* button on the top right button (Fig. 3).

3.2.2   Main Page Fratures

On this home page, various menus will be displayed, including the Employee Data menu; Education and Training Data Menu; Rank Data Menu; and the Position Data menu where the contents of some of the menus contain employee data in Glonggong Village which can be accessed by Glonggong Village employees using the respective *username* and *password* that has been given. However, there is a slight difference in accessing, if you *login* as an *admin at the beginning, the Full Access* menu will be able to be used, but if you *log* in as a normal user (not *admin*) then the *full access menu* will not be able to be used because the status is only as a user, not an *admin* (Fig. 4).
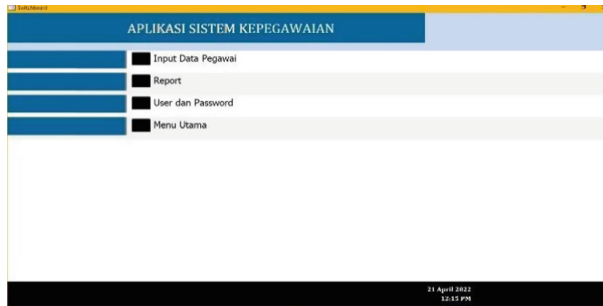
Fig. 5. The full access view of the app.
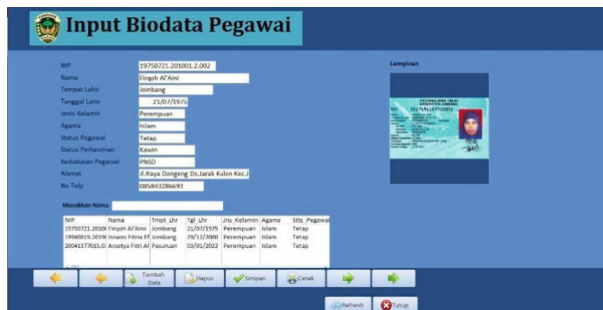
Fig. 6. The employee data input menu view of the app.

3.2.3 Full Access Feature

The Full Access feature consists of several menus including the Employee Data Input and Report menus. The Employee Data Input menu is used to input some employee data information (Fig. 5).

3.2.3.1 Employee Data Input Menu

On the Employee Data Input menu there are several menus that can be used to record employee data automatically as needed, including the following menus (Fig. 6):

1. Enter Employee Biodata
2. Enter Family Data
3. Rank Input
4. Position Input
5. Enter employee training
6. Employee Class Input

Fig. 7. The report menu view of the app.

The following is an example of the display on the Employee Biodata Input menu, where the *admin* can enter employee biodata according to the available form.

3.2.3.2 Report Menu

The Report menu display will display a report menu from some of the data that has been entered in the Data Input menu, in this section it will function as an employee data archive (Fig. 7).

4   Conclusion

The the Civil Service Management Information System and Archives is a system that is able to provide information on employee data in a company or agency that interacts with each other in achieving the targeted goals and can improve the quality of human resources by providing accurate and efficient information, so that decision making can be carried out objectively. The the Civil Service Management Information System and Archives application can help make it easier to manage digital-based employee management information to be able to search for personnel data that can be accessed easily by all employees without going through intermediaries in the village government. This is also one of the efforts in achieving a village SDGs where the sub-goal of the SDGs is especially at point 9 where this point is also needed by increasing access to information and communication technology. In addition, the development of information technology systems also encourages the implementation of E-Government in all government administrations where the information data processing process technology involves one which is the application of Civil Service Management Information System and Archives.

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