

Village Fund Transparency System in Kudus District Using the Information Retrieval System Algorithm Method

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Abstract-Kudus is a district in the province of Central Java. The capital of this district is the Kudus, located on the northeast coast line of Central Java between the City of Semarang and the City of Surabaya. Kudus, located 51 kilometers from the east of Semarang. Kudus, received a large allocation of village funds, the allocation of funds transferred to the village government in Kudus Regency, Central Java, to support rural development in 2017 reached Rp 219.89 billion. Problems that can arise in its use include: Errors due to ignorance (mechanism), Not according to plan or unclear designation / not according to specifications, Not in accordance with Guidelines, Operational Guidelines, technical guidelines (especially procurement of goods and services), Administration of financial statements: (Mark up and mark-down, double counting), Reduction of Village Fund allocations, for example, village funds are made into "coffers" of village heads and devices for personal gain, Cannot be accountable for use, misappropriation of village assets: Sales or swaps of Village Cash Land (Crooked), Village Cash Land Rental (TKD) which is not his right. These problems can be overcome by presenting good and transparent information, for this reason a Transparency of Information System for Village Fund Use (SIMDANDES) is needed for the management of village funds received by Gondangmanis Village, Bae Kab.Kudus District Using Information Retrieval System Algorithm System (SIMDANDES)) is very useful to monitor the use of village funds and uptake carried out by each village in real time, as well as information for the village head and policy holders in Kudus Regency to establish a policy.

Key words: *Information System, Village Fund; Algorithm Information Retrieval System*

I. INTRODUCTION

Villages have developed in various forms so that they need to be protected and empowered to be strong, advanced, independent, and democratic so as to create a strong foundation in implementing governance and development towards a just, prosperous, and prosperous society, empowerment of Village Communities is an effort to develop independence and community welfare by increasing knowledge, attitudes, skills, behavior, abilities, awareness, and utilizing resources through the establishment of policies, programs, activities, and

mentoring in accordance with the essence of the problems and priorities of the needs of the village community.

The Ministry of Villages, Development of Disadvantaged Areas (PDT) and Transmigration will channel village funds in the amount of Rp 1.4 billion for each village. The provision of funds is carried out in stages for the next five years. For 2015, the launch is approximately Rp. 9.2 trillion.

Kudus Regency is one of the districts that receive the village funds, with geographical conditions located at the intersection of the main transportation routes of Jakarta-Semarang-Surabaya and Jepara-Grobogan, Kudus Regency is a very strategic and fast-developing region and has a major role as the center of economic activity serving the surrounding districts. Kudus is the smallest regency in Central Java with an area of 2,516 hectares divided into 9 sub-districts, the number of villages in Kudus Regency is 123, this year received a village fund allocation of Rp 1.4 billion, according to the Head of Village Administration of Kudus Adi Regency Sadhono said the village fund allocation would not be shared equally. Allocation of funds for each village is adjusted to a number of criteria such as population, level of welfare, and a number of other criteria. [1]

Of the village funding problems that can arise in its use include: Errors due to ignorance (mechanism), Not according to plan or unclear allocation / not according to specifications, Not in accordance with Guidelines, Operational Guidelines, technical guidelines (especially procurement of goods and services), Administration of financial statements:

(Marks and mark-downs, double counting), Reduction of Village Fund allocations, for example, village funds are used as "coffers" of village heads and devices for personal gain. Unable to account for usage, misappropriation of village assets: Sales or exchange Village Cash Land (Crooked), Village Cash Land Rental (TKD) which is not his right.

In this publication will be published the results of research conducted on the analysis and design of village fund information systems in Kudus district with Information Retrieval System Algorithm method. as an

effort to assist local governments in the framework of managing funds so that information on village funds can be well informed.

II. METHOD

This type of research is applied research, the application is directed to practical use in the field of everyday life. This research was conducted in order to overcome real problems in life. This study examines the benefits of scientific theories and recognizes empirical relationships and analysis in certain fields. The implications of applied research are stated in the general formulation, not recommendations in the form of direct action. After a number of studies have been published and discussed over a period of time, this knowledge will influence practitioners' thinking and perceptions. Applied research focuses more on theoretical and practical knowledge in certain fields, not universal knowledge in this case is the field of technology. Applied research encourages further research, suggests new theories and practices and develops methodologies for practical purposes. Applied research can also be interpreted as a systematic study with the aim of producing applicable actions that can be practiced for solving certain problems

Approach used The method used in the model design used in building this system is to use OOD design (Object Oriented Design) and the tool used is the Unified Modeling Language (UML). OOD is the method that leads us to object-oriented decomposition. By implementing object-oriented design, we can create powerful software by minimizing the writing of expressions and reducing the risks inherent in the development of complex software systems [2]. Model designs included in UML are use case diagrams, class diagrams, sequence diagrams, activity diagrams, state diagrams, collaboration diagrams.

Data collection and analysis techniques in this study are using observation, literature study, and interview. Observations were made to the village location in Kudus Regency, interviews were conducted with data sources, namely the village apparatus in Kudus Regency as well as samples of research and literature studies conducted by searching for literature and journals on Information Systems.

Data analysis techniques are carried out in three stages, namely: (1) identifying and analyzing current system problems (problem analysis), in this case an analysis of the constraints in the process of receiving and managing village funds has been used so far, (2) identify and analyze the required system criteria and performance (requirements analysis), in this case an analysis of the criteria for the village fund system is needed, (3) provide alternative systems proposed (alternative generating systems). In this section, the system selection along with the input, process and output of the village fund information system that is adjusted to the needs is carried out. The stages of the research process are shown in Figure 1.

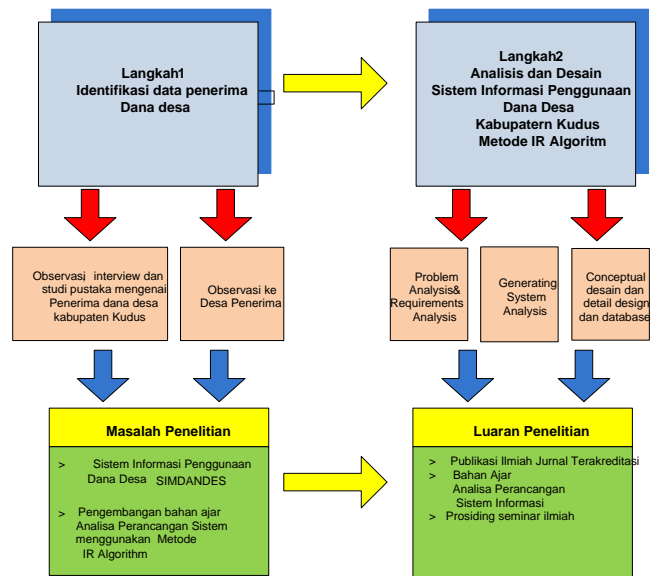


Figure 1. Research stage

III. RESULTS AND DISCUSSION

In accordance with the research methodology that has been established, here are the results of research that has been achieved.

1.1. System analysis

The concept of the village fund information system has been implemented using one parameter, namely the amount of village funds received and managed. The process of using the information system is not carried out on a scheduled basis, only if there is receipt and management of funds that have been given by the government, the use of the information system will be entered in the database and only written on the book.

In practice the use of information systems still needs a lot of improvement and further development, the improvements that still need to be is to change the manual-based into a computerized system so that not only system users can see and use this information system but policy makers and the public in general see and monitor whether the management and receipt of funds are in accordance with the needs of the community

Further improvement and development will certainly be very useful if further research is carried out so that the data will be more accurate and will be able to provide information to the service and the government so that the information process can be displayed quickly and accurately so that it does not take long to process data into information

1.2. Needs Analysis

After looking at the analysis of the above problems, the new criteria and system needed is a system that can help the Village in Kudus Regency to carry out the village fund management process, with the following system capabilities (1) The application system can process the budget funds obtained from the government Exactly, (2) The application system can also produce relevant funding reports, (3) Reports on the results of fund management can be displayed quickly and accurately, so that acceptance and management can be known for village progress. To analyze the criteria and systems needed, the steps taken are as follows.

1.3. Data Identification

Data of receipt by the village that received assistance from the industrial government used for village development The attributes of the data identified included (1) the amount of village funds received, (2) the plan for village development using village funds and (3) the implementation of village fund management made for village development.

1.4. Information Analysis

The information needed by the system user is village fund information. System users are village staff in Kudus district and policy makers in Kudus Regency.

1.5. System Design

The results of the analysis that have been carried out are then poured into the system model in the form of user diagrams, details of the data storage structure and the application display layout that will be generated.

1.6. Use Case Diagram

Use case is a specification of a collection of actions carried out by the system [3]. Use case diagram for village fund information system shown in Figure 2.

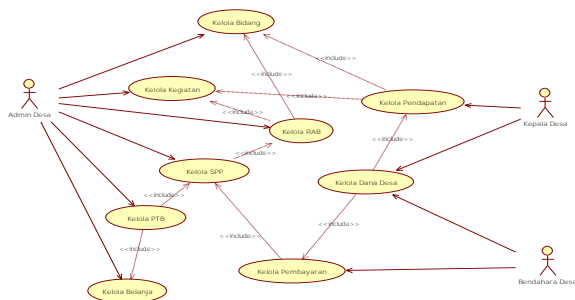


Figure 2. Diagram of village fund usecase

1.7. Layout diagram

This application was built using a web-based application. The display design will be adjusted to the application that will be used. In Figure 3 is shown one of the layout views for the user and Figure 4 from the main menu of the application.

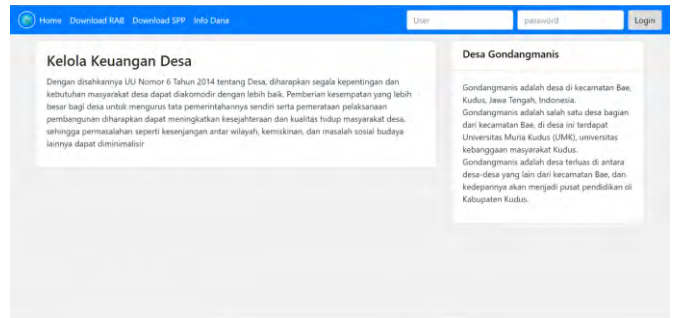


Figure 3. Display layout for users

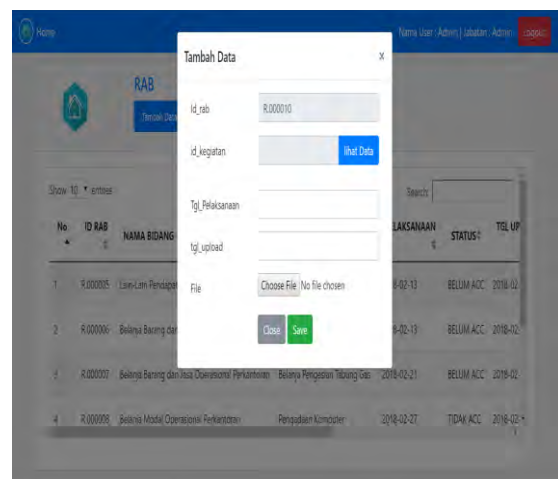


Figure 4. Display of RAB

III. CONCLUSION

From the research that has been done, it can be concluded that:

- (1) Analysis of the design of the village fund information system through the generated usecase diagram provides facilities to use the application in village revenue and funds.
- (2) Analisa designing village fund information systems provides an alternative for users to be able to complete their work using a computerized system.

Thank-you note

DRPM DIKTI with a contract letter No: 52 / Lemlit.UMK / B.07.11 / II / 2018 Year 2016
Muria Kudus University Research Institute

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