

Dissemination Model of Android Based Village Information Technology for Communities in Bireuen District

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Abstract: To empower villages in Bireuen District to have a Web Village that can support development towards an independent village in accordance with the Village Law Number 6 of 2014. Through this goal it is expected to achieve specific targets of technology dissemination to the community, namely (1) The existence of a database which is integrated between one system and another. Time service is faster and easier because it is online and android based; (2) Promote and develop potential and culture outside the region because it is already online; (3) Making a Village Website towards E-Voting through online village selection in the Village; (4) Empowering communities in the village to improve the results of village development online; and (5) the realization of the Village Website in accordance with the Village Constitution No. 6 of 2014. with the method of implementing the dissemination of Village Administration Information System (SIAGam) technology based on Android, namely: (1) Identification of Community Needs; (2) Preparation of dissemination programs; (3) Implementation of the dissemination program. Based on this method, this technology dissemination program can be rolled out as follows: (1) Providing socialization about Gampong information system (SIAGam); (2) Learning training on Gampong information systems (SIAGam); (3) Making seminars on Gampong (SIAGam) information systems; (4) Assistance to fill in the data to the Village website;

Index terms: Desimination, Web Village, Integrated, Android, Bireuen.

I. CHAPTER I INTRODUCTION

From the results of the research study the village administration information (gampong) has produced a technology that can be used by the community, namely the Village Administration Information System (SIAGam) which is based on android. This program itself is very supportive of the development towards an independent

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village in accordance with Law No.6 of 2014. in a system containing several menus consisting of: Village Profile, Village Potential, Village Products, Village Assets, Population Data, Financial Transparency, Letters Written and RPJMG Village[1]-[4]..



Figure 1. What and how is the Village Law (www.SiAgam.web.id)

A. Information Technology Dissemination Problems

Based on the analysis of the situation that we have described above, we can conclude that some very basic problems of partners are as follows:

1. Data and information about the potential of the regions spread in various villages in Peudada sub-district so that many interested parties, especially decision makers, experience difficulties in obtaining data. Based on these conditions, it is necessary to use a Data driven Optimization approach model for planning natural resource potential in Peudada sub-district.
2. There needs to be an effort in optimizing the potential of resources in an integrated manner to
3. support the improvement of economic development in Peudada District for the realization of community welfare[5]-[7].

B. Purpose of Implementation of Technology Dissemination Activities

Based on the identification of the above problems, the purpose of this dissemination is:

- 1) Encourage community participation in village development planning that is carried out transparently, easily and flexibly (Mobile Computing)

- 2) Develop village development planning in accordance with the priorities of potential and value of local wisdom.
- 3) Encouraging community participation in village policy making through village meetings.
- 4) This dissemination will assist agencies in developing information system models village management independently, integrated android based

Urgency (virtue) Dissemination.

In general the urgency (priority) of this dissemination is an information system design model from each of the following fields: Village potential, Village bureaucracy (decision making), Village, which eventually forms an integrated Android-based Village database with Cloud Computing and Mobile Computing devices. The existence of a village information system model, the village governance system becomes transparent in all fields and can be accessed by all people in need. The results of this dissemination are also very useful especially for the implementation team as knowledge and also very useful for the Central Government, the Government of the Republic of Indonesia, the Government of III, the District Government and especially in the Village Government and the people who need information.

II. LITERATURE REVIEW

A. Village

Law Number 6 of 2014 concerning Villages, affirms that the Village is the spearhead of the lowest government that has autonomy regulating development for the welfare of its people. Village Development based on the Village Law aims to improve the welfare of the village people and the quality of human life and poverty alleviation through the provision of basic needs, the development of facilities and infrastructure, the development of local economic potential, and the sustainable use of natural and environmental resources[8].

B.Strategic Issues Related to Village Development

Strategic issues in the Village Law regarding village development, finance, assets, governance, rural development, collaboration between villages and village community institutions. This can be described in the following scheme:



Figure 2.1. Village Self-supporting Components (Source of strategic issues: Budiman Sujatmiko., Indonesian House of Representatives of the PDIP Faction)

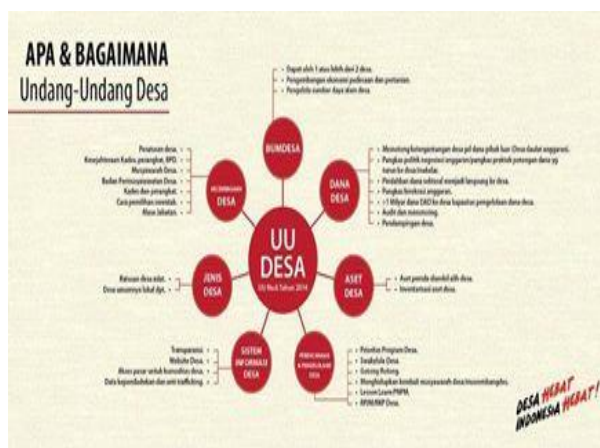


Figure 2.2. Basic Institutional Design of Village Governance (Source. www.Siagam.web.id)

C. System

In designing an information system directed to the maximum utilization of technology consisting of several elements or components that form a network and have the objectives to be achieved. The definition of the system according to Jogiyanto H.M in his book Analysis and Design mentions that: "the system is a collection of elements that interact to achieve a certain goal." (2005: 2).

D. Information Systems

According Sidharta (1995: 11), "An information system is a man-made system that contains an integrated set of components - components of manual and computerized components that aim to collect data, process data, and produce information for users".

E. Understanding Database

A database is a set of data files that are interconnected and organized in a way that makes it easy to get and process data. The database system environment emphasizes data that is not dependent (independent) on applications that will use data [3].

F. Android

The operating system based on Linux (open source) is used for smartphones and tablet computers. Android provides an open platform for developers to create their own applications needed by various mobile devices. Initially Google Inc. buy Android Inc. newcomers who make software for cellphones. Then to develop Android, software and telecommunications were formed, including Google. Source pusatteknologi.com/android-adalah.html

G. Cloud Computing

The definition of Cloud Computing (cloud computing) is a combination of the use of computer technology (computing) in a network with the development of internet-based (cloud) which has the function to run programs or applications through computers connected at

the same time, but not all are connected through internet using cloud computing. Internet access. Source: (<http://pusatteknologi.com/prehension-benefit-the-solutions-and-example-cloud-computing.html>)

III. IMPLEMENTATION METHOD

A. Implementation Method

A. Identification of Community Needs

In general, villages in Bireuen Regency need a database that is integrated between one system and another so that administrative service time is shorter and easier because it is online and android-based. In addition, the current village needs are able to promote the potential of the region online to be known by other people. In the end the community expects the realization of the village website in accordance with the Village Constitution No. 6 of 2014.

B. Program Preparation

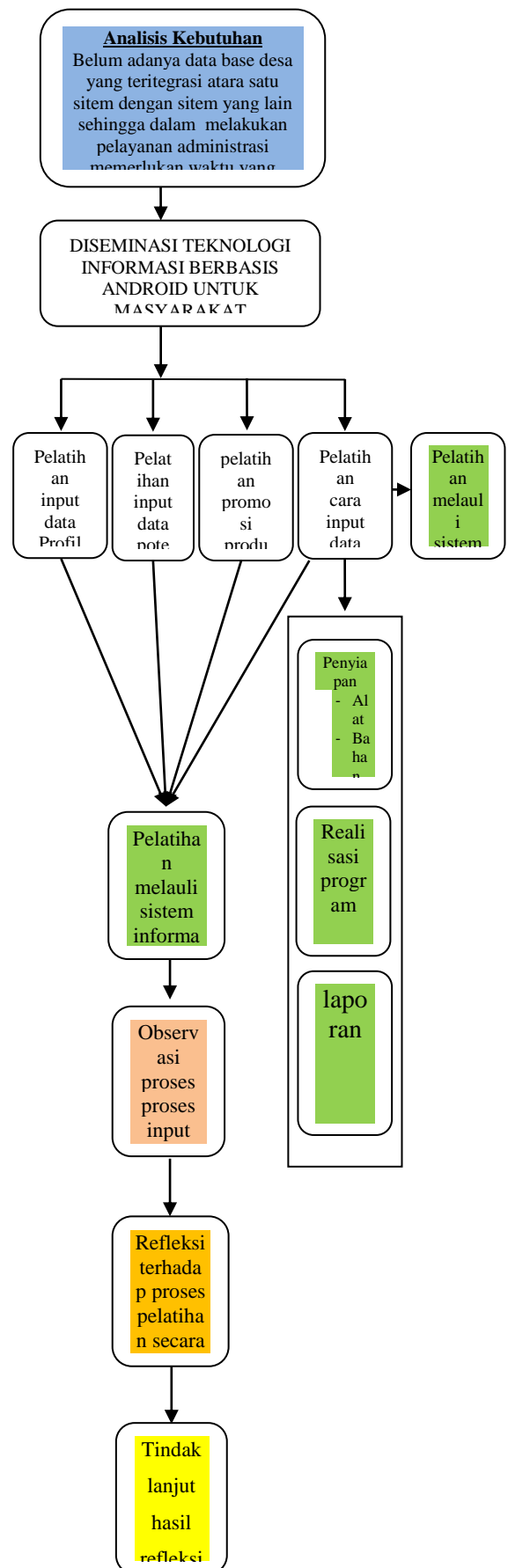
- a. Preparation
- b. Socialization to the community
- c. Training on the use of village websites
- d. MOM Training (Community Organization Management)
- e. Training in data collection through the village website
- f. Potential village training based on village product GIS
- g. Marketing and publication of potential villages
- h. Village website development so that it can be used to make decisions using the potential of the region with a data driven approach
- i. Supervision of the sustainability of the program to the target village community teams
- j. Evaluation of the program and the making of the final report
- k. So the system of decision-making systems for regional potential with a data driven approach in Indonesia

C. Program Implementation

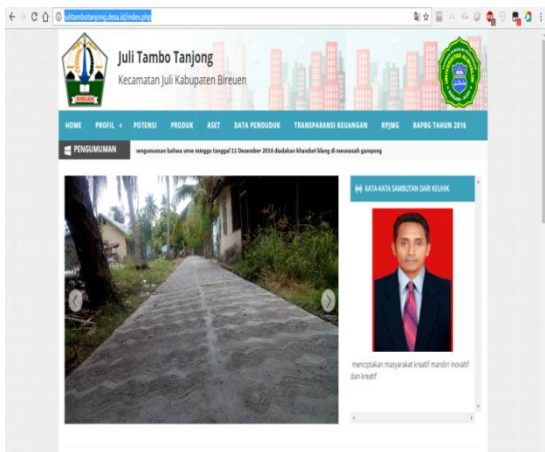
- a. Preparation In this initial stage, the implementing team has prepared all the materials needed for the next stage
- b. The socialization phase of the use of the village website at this stage, the socialization of the use of the village website was held
- c. Training phase for the use of village websites Direct practice is conducted on how to manage the village website. This activity will be held centrally in the village hall office. This training will be followed by village officials and the community.

D. Description of Technology that will Disseminate

Technology applied is an android-based administrative information system in which there are several menus in the system: Village profile, village potential, village products, village assets, population data, financial transparency, correspondence and village RPJMG. The following will show the technology that will be disseminated to the public. Description of technology that will be disseminated to the community



Picture. 3. Methods of Dissemination of Technology to the Community



IV.RESULTS OF DESIMINATION IMPLICATIONS

The picture below shows the results of the dissemination that has been carried out online in the village of Juli Tambo Tanjung, Bireuen Aceh district.

Figure 4.1. Display System Implications in Juli Tambo Tanjung Village
source:<http://julitambotanjong.desa.id/index.php>



Figure 4.2 Display of the Process of Dissemination Activity Implementation
Source www.siagam.web.id

V.CONCLUSIONS AND SUGGESTIONS

The conclusion of the dissemination in Bireuen District that has been implemented is:

1. Providing socialization about the importance of using the village information system application for the community (SIAGam) online.
2. Providing training on the use of village village information system applications (SIAGam) to the wider community.
3. Make a seminar on the village information system of gampong (Siagam) for the Community
4. Assistance to fill in the data on the village website with the SiAGam application.
5. Evaluation by the program implementation team as a continuation of this program for the wider

community in accordance with village law number 4 in 2014.

A.Suggestion

As the main partner in the implementation of this program, the Agency for Community Empowerment, Women and Prosperous Families (BPMKS) of Bireuen District is responsible for facilitating villages to actively participate from the beginning to the end of all information technology dissemination activities. Villages who are participants of this activity are obliged to implement and apply the concept for the welfare of the people according to the ideals of the village law /

B.Program evaluation and sustainability

To villages that have been socialized and received training on Android-based Village Information Administration System Information System dissemination program (SIAGam), they are then required to be able to implement this SIAGam. In this case the program implementation team will continue to monitor the target villages even though this program has been completed. Next if from the results of monitoring there are still villages that have not implemented this SIAGam, then we will recall the village and we will provide special training. To ensure the sustainability of this system for the villages that have implemented it, we will continually send our technicians to care for this SIAGam.

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