DEVELOPMENT OF VILLAGE CAPACITY BASED ON INFORMATION TECHNOLOGY AND COMMUNICATION (ITC) IN BONDOWOSO

By

Hermanto Rohman, Ali Badrudin, Alfian Futuhulhadi, Akhmad Taufik,

and Muhammad Hadi Makmur

Jember Universitas - Indonesia

SUMMARY

This article is a result of the performance of community service performed in 10 villages in Bondowoso District, East Java. The enactment of Village Law No. 6 of 2014 requires that village development should be developed with quality development planning and improved services in the village. Quality planning and development planning with accurate village data data and village potential.

Currently ongoing in the village are; 1) Development that is not in accordance with the needs and potential of the village this is accompanied by poor quality village development planning because less supported data problems and village potential that is accurate and available in the village; 2) in the service to the community there are limited resources, both human and non-human aspects, consequently the services it provides sober and many requests that can not be fulfilled in quick time; 3) There is a lack of information between local governments and villages this is no information that is useful in local development strategies in the village and information that attracts potential villages and between villages. Referring to this problem in the future capacity building program in the villages in the future requires adequate and supportive information quality in the village. The mandate of the Village Law suggests access to information.

Currently Bondowoso District has developed strategies and development of rural areas. The strategy to be able to access both to the village should be supported by adequate information quality. The University of Jember has the capacity and experience to develop a syntax Sufficient information for the village therefore through this program is expected to contribute to the development of information systems to empower villages in introducingtheir village's potential and quality environmental services

Keywords: *village*, *information*, *administration*, *Bondowoso*

I. Introduction

Bureaucracy reform can be understood as an attempt to create ideal bureaucratic conditions. Bureaucracy reform is a change to improve the governance system towards good governance. In this regard, the government has enacted nine programs to accelerate bureaucratic reform, one of which is the development and implementation of e-government.

The electronic government (e-gov) can be regarded as a system of governance by utilizing ITC (information, communication and technology) / Information and communication technology (ITC) as a tool to facilitate communication and transactions processes to society, business organizations and accountability to their communities Implementation of e-government in the governance process is expected to improve efficiency, effectiveness, transparency, and accountability of governance.

Entering the era of regional autonomy, important roles and functions in developing the potential that is able to realize the community in the region becomes more widespread. In creating good governance as well as the implementation of regional autonomy, the utilization of Information and Communication Technology (ITC) in every activity of government administration can not be avoided anymore. The application of integrated ITC in one unified system is a non-negotiable requirement in the framework of supporting data and information as well as news distribution quickly, accurately and safely. Mastery of information and communication technology will greatly support the implementation of

information which is a solution for the organization in every. ITC is a tool used in running a business or organization to provide an Information System (SI) that is used as a support decision-making

Recognizing the benefits of Bondowoso District Government's information technology is to create an Information and Communication Technology (ITC) network as one of the solutions to overcome barriers to inter-regional access. ITC network development initiatives implemented by the government of Bondowoso District through the Decision of Bondowoso Regent No 188.45 / 125/012/2013 on the implementation of the Online Village Program is the provision of training of village equipment and facilities in internet connection in village government consisting of 56 villages in 28 districts in all districts Bondowoso.

Through the Village Online Program the government must prepare the village network operator's staff with enough specifications for internet connection and budgeted subscription fee internet connection in APBDes per month every year. Bondowoso District Government then prepare with education and training on the village network operator's staff in its implementation involving professional third party in providing education and training.

The program has been implemented by the Government of Bondowoso Regency is a breakthrough and a good foundation in line with the enactment of Village Law No. 6 of 2014 in article 86 which states that the Village is entitled to access information through the village information system developed by the Regional Government District / City. Government and Local Government must develop Village information system and Rural Area development. The village information system as intended includes hardware and software facilities, networks, and human resources covering Village data, Village Development data, Rural Areas, as well as other information relating to Rural Development and Rural Area development that will be managed by the village government.

Hadwi Soendjoyo (2005) states that the implementation of e-government through ITC is not as easy as expected, many obstacles are faced in its implementation, especially in local government offices. Human resources that run the implementation of information technology on e-government is a major obstacle, in addition to the provision of facilities and infrastructure information technology, and institutions that handle the implementation of e-government. Referring to the background, especially in overcoming the problems in the implementation of programs that have been run by the Government of Bondowoso. The Bondowoso District Planning Agency (Bappeda Bondowoso) considered it important to conduct a review of information technology capacity development in village government institutions, through this study it is expected to be a recommendation of development of guidelines and portals in the development of village-based village information technology capacity to accelerate bureaucracy reform and to welcome the implementation of Village Law No. 6 of 2014.

1.1 Problem Formulation

The problem in this study is how the development of village-based village information technology capacity in providing village information in Bondowoso district as implementation of Village Law No. 6 of 2014.

1.2 Scope

Activity Focus

a. To examine the constraints and supporting aspects in Village Government Capacity Building based on information technology covering several aspects, namely: leadership, human resources, regulation, funding, application, data / information and network infrastructure, viewed from three dimensions: dimension individuals, institutions, and systems; and

b. Build the village government's "Information Technology Capacity Building" portal as a medium of learning and exchange knowledge / experience for capacity building.

1.3 Activity Lines

The study was conducted in the villages within the scope of the Bondowoso District Government, as the sample is the village targeted by the online village program as well as the comparison of villages that are not targeted by the online village program.

1.4 Goals and usage

The objectives of the Rural Communities Capacity Development Study based on Information Communication Technology (ITC) covering:

a. Know the description of constraints and supporting aspects in Village Government Capacity Building based on Information and Communication Technology (ITC).

b. Developing a Capacity Building Portal for Village Rural Development based on Information and Communication Technology (ITC) in an effort to accelerate bureaucratic reform and to welcome the implementation of Village Law No. 6 of 2014 in the provision of village information.

c. Prepare policy reference documents in the development of village-based village capacity of Information and Communication Technology (ITC) in an effort to accelerate bureaucratic reform and welcome implementation of Village Law No. 6 of 2014 in the provision of village information.

The usefulness of the Information Technology Capacity Development study in this village administration includes:

a. Optimizing the benefits of village government information technology in an effort to accelerate bureaucratic reform and welcome the implementation of Village Law No. 6 of 2014 in the provision of village information.

b. Provide references especially for policy-makers and practitioners, in the development of village-based information technology and communications (ITC) capacity in an effort to accelerate bureaucratic reform and to welcome the implementation of Village Law No. 6 of 2014 in the provision of village information.

II. RESEARCH METHODS

This study aims to find out the description of constraints and supporting aspects in Capacity Building of Village Government based on Information and Communication Technology (ITC) and to develop the capacity of village government based on Information and Communication Technology (ITC) in order to accelerate bureaucracy reform and to welcome the implementation of Village Law No. 6 of 2014 in the provision of village information. Based on the purpose of this type of research used is Action research (Action Research). Davison, Martinsons & Kock (2004), mentions action research, as a research

method, established on the assumption that theory and practice can be covertly integrated with learning from planned interventions after detailed diagnosis of the context of the problem.

This research is conducted in the village within the scope of Bondowoso District Government, as the sample is the village targeted by the online village program as well as the comparison of the villages which is not the target of the online village program. While the intervention and action on two villages targeted by the online village program (Andongsar and Tegalsari villages) while as the comparison of the village which is not the target of the online village program, especially the villages around the two villages.

In this study requires data both secondary data and primary data. The data collected includes aspects of the development of village government capacity based on Information and Communication Technology (ITC), namely: 1) Aspects of Leadership; 2) Regulation Aspect; 3) Human Resource Aspect; 4) Application Aspect; 5) Data / Information Aspect; 6) Aspects of network infrastructure.

The data were collected through observation, interview, Focus Group Discussion / Focus Group interview, Document / Literature study

The method of data analysis used is descriptive analysis, and policy recommendation analysis with comparison method. This method is done by comparing all policy alternatives that have been formulated based on agreed criteria, then selected one of policy alternatives that get the highest value. The criteria above are Technical Feasibility, Economic and financial possibility, Political viability, and Administrative operability.

III. DISCUSSION

3.1 Application of Information Technology in Bondowoso District Government

Management aspects of administrative and governmental activities of Bondowoso Regency can not be separated from information technology and the role of computers and also the availability of intranet and internet network facilities. Based on the observation that the use of computers in every work unit in the government environment of Bondowoso Regency is good even on average in each unit of existence of the computer between 25-50 units. Intranet and internet connections are well available this can be seen from several computers connected to the unit kerjan in Bondowoso district government is connected through the LAN network. Even the network has been supported by cable or wireless.

Almost all work units in the district government Bondowoso also been connected to the internet, which is connected through the server. In general, staff / employees only use the computer with the applications on their own computer (offline). Most of the use of computers in the work unit is used for data processing, for typing, and for presentation.

From the description of the data above shows that the existence of infrastructure of the use of information technology in Bondowoso District Government is already available adequately, this is indicated by the availability of computers in all units of work that the number is relatively, already available LAN, or wireless. Nevertheless, the utilization of information and communication technology infrastructure is still relatively low, but it seems there are efforts from various parties to support the application of ICT in this area.

The implementation of Information and Communication Technology in government in Bondowoso Regency can be seen from SIM Implementation which consist of 8 SIM (management information system) has been applied that is SIMPEG and SIM of integrated service, SIMKEU, SIM of residence, SIM archive, regional asset license or LAPDA SIM.

The implementation and development of the MIS to support the internal operations of the work unit will be sustainable if followed by the development of human resources in the areas of competence required by each SIM. To that end, the respondents agree the need for cooperation with higher education institutions in the application of Information and Communication Technology (ITC). Another thing that can be shown in the application of ITC is with the publication of information about Bondowoso Regency through the official website managed by the government of Bondowoso.

3.1 Application of Information and Communication Technology in Village Governance

Initial efforts to encourage the use of ITCs in village administration were the village internet program (2008) known as the Universal Service Obligation (USO) on Pinter Village Program, PLIK and M-PLIK, since then the internet medium began to penetrate the various villages selected to the region isolated. This program is also needed by Bondowoso Regency to declare internet access in every village.

In order to encourage the application of ITC in village administration, Bondowoso District Government through the Decision of Bondowoso Regent No. 188.45/125/021/2013 implements Village Online Program to 56 Villages throughout Bondowoso District. Through the Bupati's decision, the village government in implementing the online village program must be the village network operator (village Online) from village government apparatus, computer equipment with adequate specifications for internet connection and budgeted subscription fee of internet connection in APBDes per month every year.

3.2 Implementation of Capacity Building of Village Government Based on Information and Communication Technology in Bondowoso District

3.2.1 Online Village Program Implementation

As an effort to implement the Decision of Bondowoso Regent No 188.45 / 125/021/2013 on Village Online Program to 56 Villages in All Bondowoso District, Bondowoso district government prepares education and training activities to the operators or village officials to be budgeted through Bondowoso district part of the Village Administration Sekretarit District. Implementation of training candidate operators are followed by all villages in the District Government Bondowoso.

To implement the education and training activities Bondowoso Regency Government has built a partnership with Magistra Utama Bondowoso to provide training program mastery for each prospective operator, in the hope that all villages in the Bondowoso regency have been ready before the Online Village in Launching.

Through online village training participants get various material things about computer networks, basic internet, communication in the internet, to the creation of websites in the form of blogs. The two weeks of training are attended by village officials ranging from General Kaur, Kaur Pemerintahan, Sekretaris Desa, Kaur Keuangan, Kaur Kesejahteraan Masyarakat, where the training is 3 hours long in a non-stop day. The hope of this training, the village head office can be online in any case,

especially in the field of internet, namely browsing, search engines, email, communication with the internet to access data in the management of the accounts and news about the village.

3.2.2 Village Governance Capacity in Information and Communication Technology (ITC)

Village Government Capacity in the use of ITC in Bondowoso Regency can be viewed from 6 Aspects namely:

a. Aspects of Leadership

The vision of information technology development in Village Government implemented by the government of Bondowoso Regency is to increase the capacity of Human Resources (HR), knowledge and knowledge of Village Government Apparatus on Technology development to support governmental tasks, development and service to the villagers. The Mission is:

• village apparatus should be provided with Internet education and training so that they are ready to become the operator of the internet who is in charge of managing information and servants in the village.

• Villages must provide computer equipment with sufficient specifications for internet to support village services and information

b. Regulation

Institutionally Vision of information technology development in Village Government is implemented through Decree of Bondowoso Regent No. 188.45/125/021/2013 about Program Desa Online. In the implementation in the village village administration is expected to prepare the village device as the village network operator.

c. Human Resource Aspects

During this time HR becomes the main problem in the development of information technology in the Village Government. To overcome these obstacles through the Online Village Program conducted training on the village officials ranging from General Kaur, Kaur Pemerintahan, Village Secretary, Financial Kaur, Kaur Welfare Community training conducted for 2 full weeks and duration 3 hours in one day non stop. The trainees get various material about computer network, basic internet, internet communication, to website creation in blog form. The hope of this training, the village head office can be online in any case, especially in the field of the internet, namely browsing, search engines, email, communication with the Internet to access data in the management of accuracy and news about the village.

d. Aspects of Application

As an effort to develop information technology in Village Government conducted training on village equipment and one form of product in the training is the village can make an application in the form of media information system village or village website. From the search we conducted via the internet from the village target village program online (56 villages) that have the website can be identified 71 Villages by using WordPress domain and Blog. While from some media the content of the standard and almost all in the village are: village administration, village profile, village history, population, village administration, village gallery and village potency.

e. Data and Information Aspects

So far, the integrated data architecture between the village government and the new district government is limited to the aspect of village profile data collection. This is done as the implementation of Information System and Village and Village Profile Empowerment (SI-P2DK) implemented by the Government of East Java Province. While the integration of other information systems between villages and district governments has not materialized.

f. Aspects of Network Infrastructure

The development of information technology in the Government is expected to have connectivity between the village government and Bondowoso district government and this depends on the distribution of information and communication technology access in all corners of the village. After conducted research, survey, and information obtained from the PT.Telkom then obtained map distribution internet access point in Kabupaten Bondowoso.

3.2.2 Constraints and Problems in Implementing Village Governance Capacity Building in Information and Communication Technology (ITC)

To examine the only constraints that arise from the implementation of Village Governance Capacity Development in Information and Communication Technology (ITC) is done by Focus group Discuss (FGD) method amongst stakeholders such as Bondowoso District Government, Village Device (Sampling 10 Village both involved villages online village and not) and community empowerment activists or volunteers.

FGD (Focus Group Discussion) was held in Glingseran Village which was attended by representatives (3 people) from 10 villages in Cermee-Wringin sub-district Glingseran, Bukor, Banyuputih, Ambulu, Cermee, Bercak, Ramban Kulon, Ramban Wetan, Suling Wetan, and Grujukan. In addition, the FGD was also attended by the coordinators and facilitators of Bappeda who were village counselors, as well as officials from the District Government represented by Assistant I of Bondowoso District, Bappekab Head of Bondowoso Representative Office, and the Muspika of Ambulu Sub-district. In addition, also representatives of GDM (Village Movement Build) which became a resource in question and answer through teleconference.

Based on the FGD results from several aspects studied in relation to the implementation of the development of village government-based ITC capacity such as leadership, human resources, institutional, application, data and information and network then formulated as follows:

- Leadership

The absence of understanding for the village head and village apparatus for the importance of information technology in supporting the development and service of the village. Low commitment of village apparatus in the application of information technology in supporting the development and service of the village; and

- Human Resources

The number of village apparatus that have the capacity to implement ITCs is still little to see from the village apparatus capable of operationalizing laptops or computer programs.

- Institutional

The absence of special officers in the village internet operation although it is regulated through the Decree of the Bupati which mengahruskan there is a village device that handles the village Internet operations. The absence of a special organizational structure / unit that handles the village's internet operations and there are no specific village regulations on village information systems.

- Applications

There are still some villages that do not have the application of Information Technology such as Village website. The village website used still uses wordpress domains and blogs (not paid) that still have not described the official domain of the village as an institution or official government agency.

- Data and Information

The absence of access to raw information data to be informed village or in up date village this can be seen from the village website application is still not standard information content provided and update information less run

- Network Infrastructure

Distribution Map distribution of internet access points in Bondowoso regency is still uneven only centralized in the city center so that there are some areas that are far from the distribution of internet access points into the internet network is weak and even blankspot (can not access internet).

3.2 Analysis Results of the study

Based on constraints arising from FGD results as well as surveys and field observations. Analysis of the implementation of ITC-based village governance capacity building is related to two things; 1) constraint factor, ie the factors that become obstacles in the implementation process of ITC-based village governance program; 2) enabling factors, ie factors that become opportunities / enablers / supporters in the implementation process of ITC-based village governance program.

Meanwhile, to realize the village-based ITC governance is reviewed from three dimensions that must be considered are: individual dimensions, institutional, and system. By taking into account the dimensions of the capacity building program in order to realize future ITC-based village governance which can be recommended to be implemented, among others, as follows:

Based on the results of the analysis and the recommendation of the study then conducted comparison method by comparing all the alternative recommendation of the study has been formulated based on the criteria of Technical Feasibility, Economic and financial possibility, Political viability, Administrative operability, it can be understood as follows:

1. Capacity building at the individual level is the easiest to implement. Therefore, individual capacity building activities can be implemented in the short term.

2. For institutional capacity building, the constraint is waiting for breakdown of the rules of the village law. In addition, regulatory arrangements have complexity and require political support. However, without regulation as soon as possible, efforts to realize ITC-based village administration will be difficult to achieve. Therefore, capacity building at the institutional level should be implemented in the medium term.

3. While efforts to overcome the blank spots and the integration of all websites under the Government Kabepaten Bondowoso is the most complicated. Therefore, the program is put in the long run.

IV. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Capacity Building The village government based on information and communication technology (ITC) in Bondowoso Regency has been implemented through the Decree of Bondowoso Regent No 188.45 / 125/012/20013 which one of the contents The village administration must prepare the village network operator personnel from the village apparatus previously given education and internet training and provide funding space through APBDes. But in the course of the program is not running optimally because there are some obstacles in the implementation.

Based on the results of the study, the description of the constraints that emerged in the Village Government Capacity Development based on information and communication technology (ITC) as follows:

• The absence of understanding for the village head and village apparatus for the importance of information technology in supporting the development and service of the village;

• Low commitment of village apparatus in the application of Information technology to support rural development and service;

• The number of village apparatus that have the capacity to implement ITCs can still be seen from village apparatus capable of operationalizing laptops or computer programs;

• The absence of special officers in village internet operations although it is regulated through a Bupati's Decree which enforces a village apparatus that handles village Internet operations;

• The absence of a specific organizational structure/unit that handles the village's internet operations and there are no specific village regulations on village information systems;

• There are still some villages that do not have Information Technology application such as Village website;

• The village website used still uses wordpress domains and blogs (not paid) that still have not described the official domain of the village as an institution or official government agency;

• The absence of access to raw information data that should be informed village or in up date village this can be seen from the village website application is still not standard information content provided and update information less run; and

• Distribution Map of internet access point distribution in Bondowoso Regency is still uneven only centralized in downtown so that there are some areas that are far from internet access point distribution become weak internet network even happened blankspot (can not access internet).

3. These constraints can be reduced and eliminated through the development of individual, institutional and system capacity

4. To support the success of capacity building Village government based on information and communication technology (ITC) requires synergic cooperation among stakeholders ie village government, village communities through ITC volunteers, distrITC government, universities, NGOs, and Private

1.1 Recommendations

Based on the results of this study's review review, there are three groups:

1. Short-term programs or policies should be undertaken namely capacity building at the individual level that includes:

• Conduct village Information System training based on web management for villages that already have the web

• Encouraging people to IT literacy by contributing to the provision of village information through citizen journalism training for villages that already have web

• The establishment of ITC Volunteers in each village

• For villages that do not already have Web The local government can replicate ITC-based village development training

2. Medium-term programs or policies to be undertaken are institutional capacity building that includes:

• Issue a derivative or derivative rule for the village to establish a Village Information System

• Issuing regulations or provisions to establish special organizational units managing Village Information Systems such as the structure of Village Information Management Tool (PPID)

• Emphasize to villages that APBDes and ADD allocations can be used for ITC-based village capacity development or management of village information systems

3. Program or policy in the long term that must be done is the development of system level capacity which includes:

• For already Web-Owned and IT-enabled Villages Government should encourage the development of village IT through the program of building a Village Net Hotspot or RT RW Net Hotspot

• Establishment of Tower riley by involving provider provider (PT Telkom, Indosat, And XL) or through cooperation program with Kemeninfokom, PT Telkom in overcoming Blankspot

• Establishment of Integrated System between Regency Government and Village Government

Bibliography

Firmansyah Lubis. Optimizing E-Government in Indonesia. Ministry of Communications and Informatics RI

Hartono, et al. 2010. Electronic Government, Government Empowerment and Potential Web-Based Villages. Journal of Information Technology, Volume 6 No. 1, April 2010.

Institute of State Administration. 2008. Final Report: Development of Information Technology Capacity of Central and Regional Government Institutions for the Acceleration of Bureaucratic Reform. Jakarta: SIOAN PUSLITBANG.