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Policy Model of E-Desa in Indonesia

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Abstract: Now a days "Internet" has changes everything in the world. Internet plays a major part in daily life. Its impacts on society. Indonesia have many citizen. The government have to give them some public service. "Desa" is a local government which more nearest with citizen. We must be start to thinking about some policy model in desa based on information technology through internet. Base on that phenomena, we do this research. This research used development theory from presilla. We used qualitative approach with descriptive research method. Data collecting is interview and literature study. The result of this research is policy model which used information technology, we called "E-Desa". This research has been done 3 year ago. The Ist year resulted academic draft about "E-Desa" policy model. The 2nd year is developing "E-Desa" application and the last year we have been trying to socialize this model to government apparatus and society. We have get HAKI to this application.

Key words: Policy model, E-desa, information technology, government, apparatus

INTRODUCTION

Internet is no longer becomes a novel and sophisticated thing for us. Technology has been applied in all business sectors including school (education), health care (hospitals), private sector (industry and trade) and government. Internet has brought easiness to our daily activities, both social and business activities as well as government services (Silva, 2016; Biju, 2016; SI and Priyanwada, 2016).

One of the sectors that utilizes Internet technology is rural government. Village is part of governance body in national government that has the authority to regulate its own territory (autonomous) in the framework of Republic of Indonesia (Siagian, 1989).

In study 1 of Law No. 6 of 2014 on Village, it is mentioned that village is a community unit which has borders with the authority to regulate and manage the government affairs, the interests of the local community based on people initiatives origin and/or customary rights recognized and respected by the state governmental system.

E-desa is a web-based service aimed at facilitating the village to manage data and deliver information to the wider community as well as other parties. By the use of E-desa, it is expected that conventional data management of village will runs efficiently, easily and securely. The information submitted can also be accessible to everyone, both the local community and other stakeholders. Web-based E-desa can be used as a promotional media for the village to introduce village's potential and achievement. Innovation targeted for E-desa system includes data processing to be more organized and secured. The implementation of E-desa can be equipped with some features related to public administrative service for rural communities including the applications of SKK (Surat Kartu Keluarga-Family Card), SKTP (Surat Kartu Tanda Penduduk-Letter of Identity Card), SKP (Surat Keterangan Pindah-Certificate of Domicile), SKKL (Surat Keterangan Kelahiran-Certificate of Birth), SKKM (Surat Keterangan Kematian-Certificate of Death), SKKB (Surat Keterangan Kelakuan Baik-Statement of Good Behavior), SKSG (Surat Keterangan Serbaguna-Certificate of Multipurpose), SKU (Surat Keterangan Usaha-Certificate of Business), SKNA (Surat Keterangan Nikah-Certificate of Marriage) and SKTM (Surat Keterangan Tidak Mampu-Certificate of Disadvantaged) so as to facilitate villagers in document management.

Based on the duties, functions and responsibilities of village as it is mentioned in law on village as well as the development of information and communication technologies, especially the Internet, E-desa is a strategic step to realize public welfare through efficient and transparent management system of village government. The operation of village administration by utilizing E-desa will create a technology-based information and communication system. E-desa can be an accountability tool for village government to allow independent, transparent and accoun authority. The enactment of law of provincial information commission on village website is a concrete manifestation of the implementation of

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information management and means of interaction, encouraging community participation and allowing the transactions, collaboration and transformation of science and technology and reduce digital discrepancy and boost the public economy.

The study on E-desa Policy Model Development is conducted in Bandung with a pilot project in Cibeureum village, Bandung regency. Considering the area width which covers 31 districts, 270 villages and 10 sub district with the total area of 176,238,67 ha also include mountainous slope. These conditions cause large control range of Bandung Regency government control.

Literature review: The word 'kebijakan' in bahasa Indonesia is derived from English "policy". Most people consider 'kebijakan' has similar meaning with 'kebijaksanaan-wisdom' whereas it is actually different. Kebijaksanaan is related to further consideration while kebijakan is about rules which include political context. According to Anderson (cited by Wahab) wisdom is an intentional action by one or more actors in relation with any problem that being faced (Anderson, 1997).

Rural government is the organization of government affairs by rural governance and rural consultative board to regulate and manage the interests of local communities based on the origin and local customs that are recognized and respected by the administration system of republic of indonesia government.

Village/sub district profile is a comprehensive picture of village characteristics which include basic family data, natural resources, human resources organization, infrastructure and facilities as well as the progress and problems faced by the village and sub district. Village/Sub Potential is the overall resources owned or used by village including natural resources, human resources and organization, infrastructure and facilities to support the acceleration of public welfare. The scope of Village/Sub Potential data consists of 4 variables:

- Potential of natural resources
- Potential of human resources
- Potential of organization
- Potential of infrastructure

Government as the organization of authority should be able to apply variety of things including the implementation of e-Government that provides services in electronic form. Heeks (Winardi, 2005) defines e-Government as the activity undertaken by the government with the use of information technology to provide public services. Based on the definition, we know the main purpose of e-Government is to improve the efficiency and quality of services which according to Heeks, almost all government institutions in the world have experienced inefficiency, especially in developing countries (Kartasasmita, 1994).

Village potential mentioned above can be incorporated into E-desa policy model that can be accessed by the public. E-desa policy model use cloud computing technology (Miller, 2008). The key of cloud computing lies in the word "cloud" it can also be said as internet which is a quite large environment with some interconnected computers. The computer can be a personal PC or a computer network. Previously in desktop computer, the software running on the computer. All documents (files) are created, processed and stored on the same computer, this is known as PC-centric. While cloud computing provides storage and software on a server on the Internet, known as document centric (Wahana, 2011).

The e-Government is a service provider via the Internet can be divided into several levels including the provision of information, one-way interaction, the 2-way interaction and transaction with full electronic services (www.defkominfo.go.id). The 1-way interaction can be realized in the facility to download the required form. The process/collection of online form is an example of a 2-way interaction. While the full electronic service is in the form of decision and delivery (payment).

Center for democracy and technology and infodev state that implementation process of e-Government is divided into 3 phases which neither interdependent nor must be done in orderly manner. However, each phase describes the purpose of e-Government. The stages include.

First phase is publish: This step uses information technology to expand the access for governmental information. For example, by making an information website for each institution, train human resources, socialization of information website both for internal and public as well as preparation of easy access tool.

Second phase is interact: This phase expands public participation in government. For example, by making public interactive website as well as connected link with other institutions.

Third phase is transact: This phase provides online government service. For example, by making public transaction service site as well as the interoperability of applications and data with other institutions.

According to Holmes (2001) from various measures and strategies implemented by some countries, in general the implementation stages of e-Government include: establish e-mail system and network; increase the ability of institution and public in accessing information; creating 2-way communication between the government and society; starting a value exchange between the government and the public; setting up an informative portal. Establishing e-mail system and network can usually begin by installing an application to support the basic administrative function such as payroll and personnel data system.

Thus, the 3 stages of Government service development is as follows: the first step is publishing the information about the institution for the benefit of public and business sector (via web/internet) and also provides 2-way communication. The 2nd step is an intranet application that allows data collection (online) process and distributed in a new form (to be more efficient); although some of the service process remain offline, the public can monitor the performance by online. The 3rd step includes extranet application that allows the citizens to fill the application form online (via the Internet).

MATERIALS AND METHODS

Reseach model: The method used in this study is descriptive method with qualitative approach. Qualitative approach is used as the researcher acts as the planner, data/information interpreter as well as the presenter of the research results. Purposive informant determination technique is chosen (informant determination by the objective). In this case, the researcher determines the informant based on the research objective and purpose. The informants of this study include village chief and the instruments, BPPMD apparatus, Bapapsi of Bandung District and the community. Data collection techniques in this study include:

- Library research by data collection in the form of materials from several writings, books, documents or data of related research
- Field studies by field observation to find out the policy model development of E-desa in Bandung regency which becomes the research object. Field studies is conducted by observation and in-depth interviews
- Documentation by looking for data related to things or concepts in the form of note books, magazines and other sources associated with the development of E-desa policy model in bandung regency

Data analysis: Data analysis is conducted by descriptive qualitative method. Data collected then interpreted through the general stages of qualitative data processing procedures as follows:

- Data reduction which to confirm, shorten, focus, omit less important and organize the data so it can be inferred
- Data display, information arrangement which allows the information to be inferred, making it easier to understand what is happening
- Conclusion verification, a conclusion that is verified by observing and questioning the field notes to gain an understanding (Siagian, 2008).

The data in this study is validated using triangulation. Triangulation is done by checking the data accuracy regarding the development of E-desa policy model in Bandung by comparing it with data obtained from other sources in various phases of field research, conducted in different times and methods.

RESULTS AND DISCUSSION

From the research we found some evidences that the condition of Bandung encourages the development of E-desa policy models to be realized in order to improve public service but in practice, there are some constraints including:

- The difficulty level of implementation technique in the development of E-desa policy in Bandung which include limited computer facilities and support, telephone network, villager's dependence to the government there has been no specified group to train the people about technology and less leading sector support
- Low plurality level of target group in the development of E-desa policy in Bandung. The majority of people live from agriculture, especially as peasant. Villager tends to be homogeneous in occupation, religion and customs

The proportion of target group in the implementation of E-desa policy in Bandung regency can facilitate the spread of information about village. Web-based and online technology allows the village to spread information relating to activities, region's potential and other matters about the village. In addition, it facilitates administrative process of village government as the village administrative process (public services such as the issuance of KTP, IMB, Domicile origin, SKTM, marriage certificate, etc.,) in the village becomes automatic, so that it can provide accurate fast, easy and inexpensive service. In communication studies, we know the concept of

Fig. 1: Main page of E-desa

Fig. 2: Village registration form page

Prosocial behavioral effects. In this case, it means that the community has the will and ability to using online facility of E-desa. However, the behavior staging should be preceded by awareness, knowledge and a good understanding of online E-desa facility. In Bandung, media and communication facilities such as television, radio, telephone (or mobile phone), newspapers, books, magazines and so on have reached the capital of villages. In addition, in Bandung regency there are also social groups and rural economic institutions such as school, saving and credit cooperation, rural banks, village barns, agricultural supply stores and other non-formal institutions.

The results in the 2nd year shows that village officials in Bandung Regency interested in the application of information technology. It shows confident and action-oriented attitude they have the drive to always improve self-quality well as responsibility. Commitment is required in order to modernize the village administration, especially in providing public services. The 3rd observation conducted through analysis and design of the next steps is the implementation of E-desa system for data processing and other functions. The users of the E-desa system include:

E-desa administrator (cloud provider): Agencies institutions given access to manage the registration and management of the villages that will be part of E-desa system

Village administrator: Village officials in charge of managing data and information responsible for E-desa system (Table 1).

Table 1: E-desa system requirements

System	Requirement
E-desa system management	Village
Hosting in ISP service	Computer set
E-desa system domain (e-desa.com)	Internet connection

Visitor: Outside users to access data and information on E-desa system. The technology used is web so that E-desa can be accessed online by the user. The requirement to use E-desa system is as follows in. The following is the interface of E-desa system: main page of E-desa system is the gate which contains the information on the website and village registration form village registration form page is used by the village administrator to register the area. Used by village officials who will act as the manager of village data. These data will be verified by the Admin of E-desa System and once verified then it will be given access to the system

The next stage in the development of E-desa system is direct implementation to users, in Cibeureum village, Kertasari Sub District, Bandung, as the user of E-desa system. In the future, E-desa system can be used by other villages in order to provide information and services through website technology so that the village potential, services and other matters can be more easily accessed by the people.

CONCLUSION

Conclusions about the policy model of E-Village in Indonesia are: E-desa is a strategic step for the welfare of the community through village governance management system efficient and transparent as mandated by the Act village. E-desa can be a vehicle for the village government accountable on governance so that the government will create an independent, transparent and accountable. E-desa will create demographic data is always updated and certainly if all integrated with the Internet network from village to provincial and central government all data will be connected to facilitate the government in various ways. Public policy always contains at least (Abidin, 2004). The 3 basic components, namely a clear goal, specific objectives and how to achieve those goals. The policies created by the village government regarding the governance of village resources is still very low and have not supported database accurate and complete. To support government policies that govern the village of resource governance villagers then do some activities such as village resource mapping demographic base data (individual and family) events and regions which produce document profiles village. Based on the conclusion, formulated the following advice:

- Training related to the development of E-desa that will run in the District Kertasari environment Bandung regency
- Socialize intensely about the E-desa to the public
- Perform regular evaluation whether the integrated rural management system can be continued or not as a model of modern public service policy

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