

# Analysis of E-Government Application on The Government of West Halmahera District

Rita M Saleh

*Abstract— Information communication technology promises efficiency, speed of information delivery, global reach and transparency. In the era of regional autonomy to realize good governance one of the efforts is to use information communication technology popularly called e-government.*

*In Law No. 32 of 2004 on local government, the efficiency and effectiveness of local governance needs to be improved by paying more attention to aspects of inter-governmental and intergovernmental relations, the opportunities and challenges of global competition by giving the widest authority to local governments.*

*The Government of Indonesia has also issued the Inpres of 2003 on E-Government policy and development strategy, this is one of the government's commitments. Information and communication. The West Halmahera district government also deems it necessary to have an e-strategy in utilizing information technology to support the activities of the West Halmahera district government.*

**Keywords:** E-Government, Information Technology

## 1. INTRODUCTION

Information communication technology promises efficiency, speed of information delivery, global reach and transparency. In the era of regional autonomy to realize good governance one of the efforts is to use information communication technology popularly called e-government.

In the 21st century where information plays an important role, to deal with it we are required to build national assertiveness in all fields. The public demand for better service or excellent service makes the West Halmahera District government must follow technology technology that promises high efficiency and better service.

The purpose of this strategy is how to make policies and strategies of a country in utilizing and utilizing information and communication technology, so as to help the country make a significant change in its development.

The Government of Indonesia has also issued the Inpres of 2003 on E-Government policy and development strategy, this is one of the government's commitments. Information and communication. The West Halmahera district government also deems it necessary to have an e-strategy in utilizing information technology to support the activities of the West Halmahera district government.

*Manuscript received Jul, 2017.*

Rita M. Saleh  
Program Studi Magister Teknik Informatika, STMIK Amikom Yogyakarta  
Jl. Ring Road Utara, Condong Catur, Depok, Kec. Sleman, Daerah Istimewa  
Yogyakarta, Telp: (0274) 884201, Fax : (0274) 884208

## 2. The Definition

### 2.1 Electronic Government

Implementation of e-Government does not mean just implementing the system of government electronically or in other words system automation, but have a deeper understanding of it, where that is expected from the application of the concept of e-Government is the restructuring of existing governance system for the results achieved By applying e-Government can be maximized. This means there are working system problems, personnel, and work culture to be considered before deploying e-Government. After that in the context of e-Government, then we will talk about the computer-based Information System, because to realize e-Government there is no other way that should be done first is to automate all the elements contained in the Information System and to facilitate the automation Then ICT is used as a supporting factor.

The progress of information communication and technology (ICT) enables, while encouraging government initiatives in various countries to do the best, cheap and fast by putting the service center closer to the client and the flexibility of interaction time

This is similar to e-commerce, which allows businesses to transact with each other efficiently (Business to Business) and bring customers closer to the company (Business to Customer). So E-Government aims to create a more intimate, comfortable, transparent and cheap interaction between government and society (Government to Citizen), government and business (Government to Business), as well as between government agencies (Government to Government).

Governments will be easier to engage in interactions between employees, citizen / business, or inter-government to better improve the quality of service or community relationships. However, according to Burn and Robin's observations (2003 p.26), it says: "The government not only lays down" online "forms and services, but must also provide opportunities to evaluate services provided by the government and how to bring them together Serve the needs of users ".

In carrying out its duties and authorities, the government needs all the information available and will then be used to carry out its functions such as planning, policy makers, state administration, and so forth. Information relating to the exercise of government functions and authorities is processed by an information system constituting a collection of systems used to: (a) collect information; (B) classifying information; (C) processing information; (D) interpreting information;

(E) retrieving information from storage; (F) transmission (delivery); (G) the use of information.

## 2.2 Organization and Information Systems

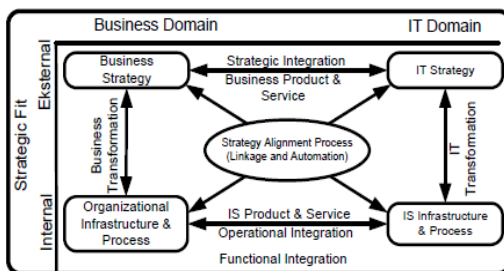
The organization has a goal as a target of what will be achieved. Every organization has strategies and often adopts existing technologies in its era to achieve that goal. In addition to having goals, the organization also has a way of making managerial decisions, which are useful for issuing policies to be taken by the organization.

Information systems can be defined technically as interconnected component units that collect or retrieve, process, store, and distribute information to support decision making and control within an organization.

There are three main goals of S / IT implementation efforts within an organization. First, improve work efficiency. Second, improve the effectiveness of management by satisfying the information needs for decision making. Third, improving competitiveness / enhancing the organization's competitive advantage by changing the style and way of doing business (Ward & Peppard, 2003).

## 2.3 SI Strategy and IT Strategy

There is a difference between having an S / IT strategy alone by having an S / IT strategy that can contribute to generating business value to a company or organization. For that we need a boundary that connects between business strategy and S / TI strategy so as to achieve an alignment (alignment). With the Strategic Alignment this will be able to facilitate in providing the right direction in the process of Strategic Information System Planning. Strategic alignment is used to explain the interaction between Business Strategy, Information Technology Strategy, Process and Infrastructure Organization, and Process and Infrastructure Information System. A model of Strategic Alignment proposed by Henderson and Venkatraman (1993) as in Figure 2.1 below



Gambar 2.1 Strategic Alignment Model (Henderson & Venkatraman, 1993)

## 2.4 e-Government Strategic Planning

PSSI is built to ensure the successful utilization of S / TI. It can not be denied since the end of 1990 private or corporate parties have compiled PSSI supported by several researches, among others, Board (200); Balutis and Kiviat (1997); Ward and Griffiths (1996); Weill and Broadbent (1998); Neiderman, Brancheau, and Weatherbe, 1991. The e-Government Strategic Planning Model was adopted by a government that serves the public interest of PSSI originally developed and initiated for private or corporate interests. The utilization of SI between private and corporate parties is clearly different, where the private sector is triggered by

economic drivers especially profitability and strategy to have a competitive advantage that has nothing to do with goals and performance Achieved by government (e-Government). Private or corporate organizations protect SI and Information as proprietary assets, while Government Information through e-Government is public property. The more revolutionary e-Government model developed is assessed to increase public participation. Strategic planning requires a strategic thinking to produce strategic and rapid action through e-transformation. Public sector strategic planning models should continue to be developed and modified to keep pace and focus on the current needs of the era of web services.

## 2.5 Stages of E-Government Development

Good e-Government implementation should integrate strategy, human resources, processes and technology, and to get to the highest level required an e-Government development model. In the following table 2.1 is a phasing model from World Bank, Gartner Group, United Nations (UN).

Tabel 2.1 The E-Government Phasing Model (e-Indonesia, 2006)

| TAHAP 1   | TAHAP 2  | TAHAP 3   | TAHAP 4   | TAHAP 5  |
|---|--|---|---|--|
| World Bank  |  |   |   |  |
| <i>Publish</i>  | <i>Interact</i>  | <i>Transact</i>   |   |  |
| Publikasi informasi pemerintah secara on-line (peraturan, kebijakan, dokumen, form) | Komunikasi dua arah (e-mail) untuk menjangkau opini masyarakat.      | Transaksi pelayanan masyarakat online (registrasi, dll) |   |  |
| Gartner Group   |  |   |   |  |
| <i>Presence</i>   | <i>Interaction</i>   | <i>Transaction</i>                                      | <i>Transformation</i>   |  |
| Kehadiran situs web (visi-misi, alamat, layanan, dokumen publik)                    | Searchable, downloadable Forms, e-mail institusi, link situs terkait | on-line Service (perijinan, pajak, SIM), e-Procurement  | One-stop service, e-referendum, e-voting, intranet-extranet (workflow-kolaborasi) |  |
| United Nations  |  |   |   |  |
| <i>Emerging</i>   | <i>Enhanced</i>  | <i>Interactive</i>                                      | <i>Transaction</i>  | <i>Seamless</i>                                  |
| Komitmen e-gov Situs web (statis) Informasi kontak                                  | Informasi dinamis, Link situs terkait, Search, Alamat e-mail kontak  | Interaksi dua arah Informasi utakhir downloadable form  | Secure log-in, Layanan on-line (ijin, registrasi)                                 | Layanan on-line public terintegrasi (satu pintu) |

Meanwhile, based on the nature of information transactions and public services provided by the Government of Indonesia, the development of E-Government in every government agency based on guidance on the preparation of master plans for E-Government development institutions, has outlined the development stage into four levels of e-Government development.

## 2.6 Review of E-Government Implementation

E-Government is an online service for integrated citizens and business communities to improve services, accessible from anywhere and anytime, easy to use, safe, high quality and responsive to its citizens. Ultimately it will enhance the image of government and increase public trust, contribute to unite the public sector, a comfortable place to work.

With the improvement of automated services using information and communication technology, e-Government is expected to provide advantages and benefits including:

1 Increase trust in technological innovation to produce a government that is more reliable, transparent, and able

to absorb the public aspiration of a process covered by e-Government.

2 Improving the efficiency and quality of services, as well as increasing the amount and quality of information accessible to the public and allowing for useful feedback on a policy.

## 2. WRITING METHODOLOGY

In conducting this research, researchers refer to the swot analysis methodology and are modified according to the needs and characteristics of governmental organizations.

Methods of data collection used are: Observation, interview and Documentation

## 3. ANALYSIS AND RESULT OF RESEARCH

### 3.1 Analysis Research

The discussion will begin by reviewing the business needs and organizational information, the E-Government planning strategy, a more detailed and in-depth discussion of each analytical activity and the techniques used will be described.

### 3.2. Blueprint Development

To integrate all e-Government implementations, we need standard and supporting rules that can be the main reference in developing e-Government for all agencies. In order that these standards and guidelines can be adapted by all agencies in West Halmahera District Government more systematically and integrated, it needs to be translated into a more detailed form of documentation and makes it easier to follow the key stages that enable the results to be achieved more measurable. Blueprint e-Government is one of the more detailed guidelines that facilitate the West Halmahera District government to plan, implement and control the development of e-Government. The basic Blueprints that should be available are blueprints of human resource development, blueprints of network infrastructure development and application development blueprints. In order for blueprint to become a standard reference that can anticipate changes due to technological advances and dynamics of regional autonomy, blueprints are designed with a balance principle between flexibility (consistent but modifiable in accordance with specific needs and policies) and standardization.

#### Blueprint HRD

The purpose of creating a document The blueprint for this system is:

Guidelines in human resource development planning that manage e-Government

Guidelines on the size or standard of knowledge and skills possessed by human resources managing e-Government

Guidelines in the management of functional positions of the Computer Institution

#### Blueprint Application System

The purpose of creating a document The blueprint for this system is: Uniform mandatory application development planning

Standardization of e-Government application system functions

Providing a rationale for the development of a comprehensive, efficient and effective e-Government application system.

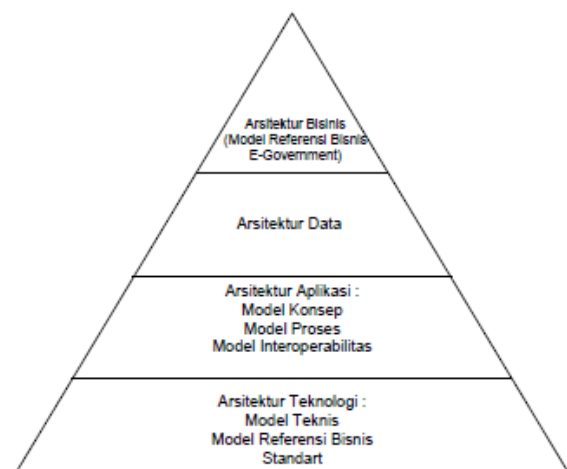
### 3.1 Implementasi

Blueprints of e-Government application systems are structured based on a functional service approach of a governance system that a Local Government should provide to its people, and administrative and other functions related to the Local Government institution, necessary for the implementation of a regional governance system.

On the other hand, Blueprints of e-Government application systems are also structured based on approaches to service orientation provided by the system, whether for internal government or community. Also whether the main function of the system is primarily presented to meet the specific needs of a particular government agency or for needs that are general and / or fundamental.

The general basis used in the preparation of e-Government refers to the following matters (FEAF, 2002): Standard, Investment, Data Collection, Security, Functionality, Access to Information, Quality-tested technology, and Privacy,

From these considerations, the model and architecture of e-Government Applications can be seen in Figure 3.2



Gambar 3.2 Model dan Arsitektur Dasar Aplikasi e-Government (FEAF 2002)

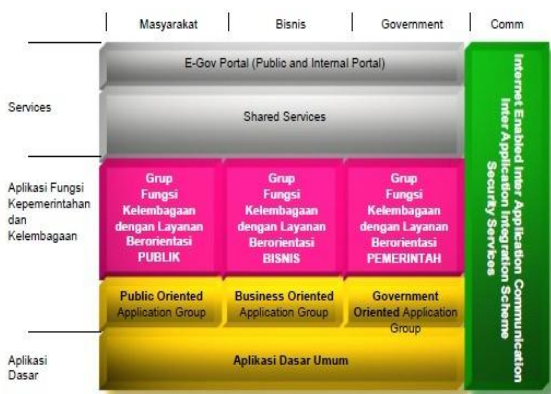
The basic design of e-government application architecture and model refers to 4 main layers: Business architecture (E-Government Business Reference Model), Data Architecture, and Application Architecture.

The Function Block group and its parts (Module components) are arranged in a Functional Chart next in the Blueprint document called the Functional Framework of the Governance System.



Gambar 3.3 Gov Framework

On the other hand, application system-application systems are developed for the purpose of meeting the needs of governance functions as defined and grouped in the Functional Framework of the Governance System mentioned above. Considering the functionality of the application system and its services, the application system systems are then organized and grouped into an architectural framework system, which in the Blueprint document is hereinafter referred to as the e-Government Application Solutions Map.



Gambar 3.4 Peta Solusi E-Government

- In the map of e-Government application solutions, the application system is grouped through a matrix approach between the service function orientation and the nature of the application system's functionality. Through this approach, the application system is grouped into 3 (three) groups as follows:
- Group of application systems whose function orientation directly provides services to its users (front office applications)
- A group of application systems whose function orientation is mostly aimed at providing administrative work support, as well as official and institutional functions (back office applications).
- Group of application systems whose service functions are fundamental and common,

### 3.2 Analisis SWOT

In addition to conducting a comprehensive analysis of the survey results, in order for the results of the preparation of e-Government plans for the development of e-Government can achieve ideal conditions expected SWOT analysis needs to be done. There are several basic components that will be analyzed ie human resources, hardware, software / applications, computer network / Internet, Data and Information, community services, organization. The components are analyzed for their strengths (Strengths), weaknesses (Weaknesses), opportunities (Opportunities) and challenges (Threats). This SWOT analysis is used as the basis for determining e-Government development plan.

From this analysis it can be done self-evaluation to improve themselves to build a reliable and integrated e-Government system. In addition, with the SWOT analysis can be identified some major issues that need to get attention to be able to achieve conditions that allow to build and develop e-Government. The e-Government development strategy according to priority can then be built based on SWOT analysis that has been prepared, adapted to the real conditions in West Halmahera District Government.

The SWOT analysis compiled follows in addition to the results of the questionnaire as well as the results of a direct survey of communities, businesses and government agencies as well as the results of a survey of supporting documents (secondary data) contained in West Halmahera District Government.

## 4. CONCLUSION AND SUGGESTION

### 4.1 CONCLUSION

E-Government strategic planning is quite comprehensive and systematic in solving E-Government problems at West Halmahera District Government. SI strategy that must be done is through the mission of E-Government to execute existing business strategy by improving the old system and continue development of E-Government in accordance with existing national program and improve public service process to achieve good governance. IT strategy that must be done is with the development of ICT infrastructure in all fields and sub-fields that exist and utilization of ICT by existing human resources.

### 4.2 SUGGESTION

The E-Government strategic planning process involves government, community, college, private and community practice. Therefore the following suggestions can be considered: Leadership support is needed in the control and supervision of the implementation of the established strategy. The establishment of an ICT expert team will assist in the development of E-Government in evaluating and reviewing the results obtained from the preparation and application of E-Government.

## REFERENCES

- Agarwal, P.K., “*Portals: the path to everything,*” Government Technology, www.govtech.net, March 2000.
- Center for Democracy and Technology (CDT) and InfoDev, “*E-Government Handbook: Part 1 - The Three Phases of E-Government*”, <http://www.cdt.org/egov/handbook/part1.shtml>, [online], 15 Maret 2005.
- Depkominfo, *Panduan Penyusunan Rencana Induk Pengembangan E-government Lembaga* [Online], Available: <http://www.depkominfo.go.id>, [5 April 2007]
- Earl, M.J., *Putting Information Technology in Its Place: A polemic for the 1990's*, Jurnal of Information Technology, Volume 7. 1992.
- Hermawan Kartajaya, M. Hermawan, Yuswohady, Taufik, Sonni, H. Anwar, H.H.
- Joewono, J. Mussry. 2002. *MarkPlus on Strategy*. PT Gramedia. Jakarta.
- Instruksi Presiden Nomor 3 Tahun 2003 tentang *Kebijakan dan Strategi Nasional Pengembangan e-Governmen*. Jakarta.