# Journal of Public Administration Studies

# Evaluation of E-Government Implementation in Indonesian Local Government (Case Study of the Implementation of Electronic Monitoring and Evaluation in Balangan Local Government)

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## ARTICLE INFORMATION

## ABSTRACT

The rapid growth of technology has turned the government policies and strategies toward e-government. The e-government somehow believed will enhance the performance of governments. The objectives of this study are to examine the practice of e-government system in Indonesian Local Government. Although Balangan Regency has adopted e-government, however the system is not developed as expected. This research concludes that, critical issues face in the application of e-government in local government is not just technical problems, but more to the management of the system and people awareness. Central government is need to intervene for a better adoption of e-government in local government.

## 1. Introduction

Information and Communication Technologies (ICTs) provide a powerful tool in development strategies and the establishment of efficient and effective governance systems. E-government used as a method that utilized the most innovative information and communication technologies, such as web-based programs, to provide citizen and businesses with more appropriate access to government's information and services, to improve the quality of the services and to provide greater opportunities to participate in democratic institutions and processes. Facing the fast growth information and communication technology (ICT) evolution, government of Indonesia announced and encouraged implementation of this technology in every institution in Indonesia, in Central Government or Local Government. This research aims to analyse the factors inhibiting the implementation of e-government in Indonesian Local Government particularly in the application of Electronic Monitoring and Evaluation System of Local Budget Realization in Balangan

Regency. this case study concludes that the implementation of e-government in Balangan Regency were constraint by lack of funds, lack of strategic planning, lack of support from top management and lack of qualified personnel.

## 2. Theory

### E-government

According to World Bank, "E-Government" refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The resulting benefits can be less corruption, increased

transparency, greater convenience, revenue growth, and/or cost reductions.

Traditionally, the interaction between a citizen or business and a government agency took place in a government office. With emerging information and communication technologies it is possible to locate service centres closer to the clients. Such centres may consist of an unattended kiosk in the government agency, a service kiosk located close to the client, or the use of a personal computer in the home or office.

Analogous to e-commerce, which allows businesses to transact with each other more efficiently (B2B) and brings customers closer to businesses (B2C), e-government aims to make the interaction between government and citizens (G2C), government and business enterprises (G2B), and inter-agency relationships (G2G) more friendly, convenient, transparent, and inexpensive.

Heeks (2005:4) defines e-government as the use of ICT by public sector organization. E-government means not only just internet, but also office mechanism and internal management information systems and expert systems, including client-facing websites. To better understand e-government, we have to know about ICT. The core of ICT is manipulating data to produce information, storing data and make it useful for users. Later, as this traffic of data happens, it can be called a system. E-government therefore is called a management information system.

*E-government in Indonesia*

The application of e-government in Indonesia began with the issuance of Presidential Instruction Number 3 of 2003 about Telematics (Telecommunication, Media and Information), which states that Government Apparatus should use e-government strategies by utilizing ICT to support Good Governance. The application of e-government will improve the efficiency, effectiveness, transparency, and accountability of government organization. E-government is expected to support the realization of good governance (good and clean government) by organizing an effective and efficient public service. As suggested by Ndou (2004), ICT is believed as offering the important potency to develop sustainable e-government. In practice, however, the implementation of e-government has not run optimally despite it being promulgated as a national policy.

*Introducing e-government in Balangan regency*

As the attempt of implementing e-government in providing effective and efficient government's work, Many Indonesian Local Government are creating electronic system, including Balangan regency. Balangan Regency through Local Development Planning Board has created Electronic Monitoring and Evaluation System (e-Monev), a digital system to simplify the management of data / information. This Information system connecting all agencies in one digital space through a website, where it stores and manages all data / information.

Electronic monitoring and evaluation System in Balangan regency is design to ease the process of monitoring and evaluation on local budget realization, which still manually operated all this time. In the era of digitalization and internet, a web based program / application will suit the best for it. The adoption and use of the ICTs can provide significant benefits for government in the delivery of more effective and efficient information and services to all e-government sectors. It improves efficiency in processing large quantity of data, share information and ideas between agencies to build one big database. It is clear that implementation of information and communication technology save not only resources, effort and money but also increase quality levels and reduce time spent. This system will help the agencies in storing and managing development program and activities data that their institution does. Besides, this system also helps the agencies in reporting their program and activities progress to local development planning board. Simple interface, prepared form, and automatic data processing really does ease the process, mostly users only need to click, type to input numerical data and sometimes short notes.

## 3. Research method

This research based on qualitative approach, using in-depth interview technique. This qualitative research produces descriptive data, speech or writing and behaviors that can be observed from the subject itself. This research aims to develop a systematic description, actual, accurate about the facts, and characteristic of the subject or object.

The location is choosing to picturing the actual condition from the investigated object, so the research in located at Balangan Regency, South Kalimantan Province, Indonesia, especially at Local Development Planning Board (BAPPEDA). The chosen of this location is based on some considerations, such as: Indonesia as a developing country still has many regions that need to improve the development of e-government. Balangan regency as one of them is trying to improve the development of it by implementing the electronic monitoring and evaluation of local budget realization.

Data collection is using in-depth interview. In depth interview involves intensive individual interviews with a small number of informants to explore their perspectives on a particular idea, situation or program. Interviewing 8 Local Government Official and Staff who is associated with the program about their experiences and expectations related to the program, any thoughts from them as a result of their involvement in the program or situation. The main informant is the Head of Control Subdivision in Local Development Planning Board (Bappeda), since he is the project leader who responsible to runs the electronic monitoring and evaluation system, the other respondents are another government official and staff member who are program participants who's involved in this system. The interview is taken for a few days on June 6th – 10th, 2016. Every informant interviewed for around 30 – 60 minutes, and no more than 10 open-ended questions.

## 4. Results

### E-monev in general

e-Monev allows Balangan Local Government to measure and evaluate agencies performance in more simple ways. If the system works properly, the administration for monitoring and evaluation will be faster, efficient, and comprehensive in collecting data from all agencies. Make it easier to storing the data, processing it, corrections, and can presenting many form of data/information. All data stored will be complete and actual, unlike the old system where storing happened every three months and usually not complete. It will be paperless, so no more printing a document for reporting. This system should be transparent, and the system will make more transparent in the operation and management of the government, so public can see what was their government is doing.

However, these kinds of advantages not always smooth as it is, there will be few barriers faced in the implementation, challenges that can hampered the process of e-government implementation. Besides technical barriers, challenges can be summarized to be organizational barriers (policy and regulation, leader support), human aspects barriers (personnel qualification and Awareness) and financial constraint.

### Financial constraint

One significant challenge to implement e-government project is lack of money. E-government application is not cheap, more expensive that can be imagining. Since every government budget is overburdened with every possible expenditure, it is a dilemma in funding e-government programs. Moreover,

in Indonesia, even though Central Government encourage Local Government to utilize the information and communication technology to support the good governance, there is no specific financial support comes along with it. Central Government only allocated regular budget to the Local Government like usual, but not for this specific purpose for introducing of e-government system. Whereas in order to realize the goals in developing e-government, there should be at least a financial support from central government, because local government can't develop e-government by just depending on their regular budget.

Financing e-government is not the same with other government programs or activities. Adopting information and communication technologies (ICT) is a plan to set the hardware and software to be ready all at once, which no doubt will need large amount of money. Fail to prepared the funds, will cause certain bad things to be happens, such as incomplete web-based program application, or cannot provide a specific hardware in needs, which will hamper the process of monitoring and evaluation in this case. Central Government should put more concern to this, if they want to achieve a certain goal in developing e-government, they can start by allocating special budget for developing e-government to the local.

### Organizational and management difficulties

E-government implementation barriers are not just only technical, but also organizational issue. These difficulties are also from lack of support from the top management, resistance to adapt the electronic ways, and lack of skilled staff and training.

E-government systems are new technology for many countries, especially in Indonesia and to use this technology in an effective manner its needs supporting policy and regulation. Making it more effective, laws and regulation should cover are application and all related functionality such as agency website or government's e-finance system. the presence of this laws will give users confidence and assurance to use the application and will recommend others to use it.

Promotion is one of the significant factors of successful e-government system. Because this is a new technology, there are steps to introduce and encourage people, including all local government in Indonesia, to adopt and use it, so a special advertising from central government will be a significant help to complete this task. Cited from the interview, one informant commented: "I did not hear about any e-government adoption agenda from central government through any

kind of promotion from them, I just read about it in the internet". From the comment, it suggests that no promotion from central government to the local about this adoption of e-government, whereas this some kind of campaign or promotion can raise awareness of e-government and other things related.

E-government projects are huge, costly and long-term projects that therefore require a clear strategy from the central government. Without a clear plan and a consequent lack of clear objectives, then progress will lack of direction. According to Al-Soma (2008), the lack of strategic planning is one of the major problems affecting the adoption of information technology by many organizations in Saudi Arabia. In short, it is important for Central Government in Indonesia to create their own strategic plan i.e. National ICT plan and its vision to align every local government which adopting e-government.

The support from high level official is vital to e-government development, the acquiring of required resources and training. But in Balangan local government, even though the top leaders are supporting this electronic monitoring and evaluation system, it is still not enough if only a moral support for the development of it. They just giving order because it is necessary to adapt new technology, but they did not want to get involved directly. They did not pay attention on how important to change management, policy, process, laws and regulation. Those things are not some medium-low level official can do, only the top leaders can do such things.

The design for the implementation of electronic monitoring and evaluation is required to have at least 6 new civil servants who understand information technology in Local Development Planning Board to act as administrator of the applications, including managing the fluency and security of the application program. They must have experience on ICT and at least have a bachelor's degree on computer science. Also, they will be on a new division specifically to manage this program. However, there is no such thing. In reality, only three and not new civil servants, and also without experience or computer science graduates, which only act as an administrator, and not program maintainer or securer. To do that, they still overly dependent on the programmer who created it, which when something happens to the application, it will cost more money and time.

*Human factors*

A new phenomenon called e-government in the work place is the shifting from manual to electronic ones. These new changes create an advanced work environment which completely different with the previous one. The employees of Balangan local government found this new system as a threat because they thinking this will make their work become hard and more complicated. From the interviews, it is found that they are resist to change the old system with the new one.

A literature review by Murthy & Mani (2013), they investigate phenomenon of technology rejection at the level of individual, emphasizes the fact that people are willing to learn to use new technology, but this willingness tends to diminish over time, depending on the time and effort it takes to keep pace with that technology. For example, if apiece of technology demands continued learning to be applied, it is likely that people will reject it gradually. Beside that, they mention other reasons as well, such as technological complexity, technology fatigue, level of flexibility, altering user-base.

No incentive due to financial constraint also making the local staff is less motivated to do monitoring and evaluation with this system.

## 5. Discussion and conclusion

Central Government has a very important role in increasing the use of e-government for the betterment of Indonesia. there should be counselling and knowledge transfer to the community about the benefits of the implementation of information technology. This is done to increase the knowledge of Indonesian society in the utilization of information technology. Employees in each institution are also needed to be trained in order to manage development through the information technology medium, thus no more needed special personnel for the maintenance of IT media and the cost incurred will be reduced.

From previous chapter the fundamental problem in implementing electronic monitoring and evaluation of Balangan Regency would be the financial and organizational barriers. There should be more things to persuade the employees to use and utilize this technology or a substitution for the existing management, so the system can work optimally.

For the best practice in adopting and implementing e-government for every government in Indonesia, some conceptual framework must be made. Framework with a

certain path of communication, information and chain of command.
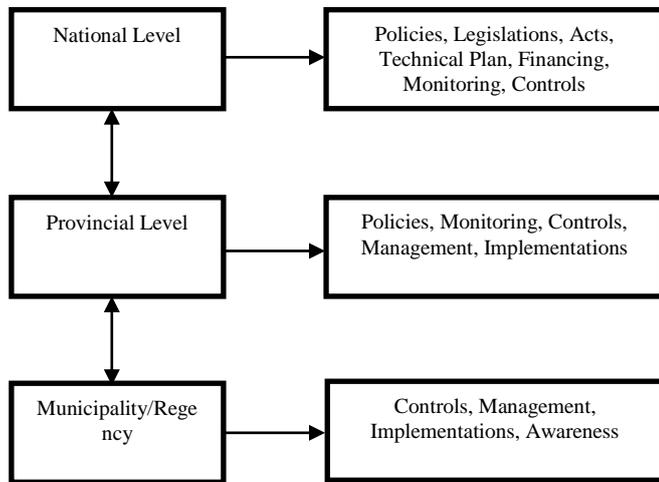


(Source: author based on field research, 2017)

This figure shows the nature of support from in each level with an additional vertical communication path. From the figure above, central government provided all local government needs, from funds, policy, act, standard operating procedure as well as doing monitoring and controls so the implementation in the local level are well managed.

*Recommendation to achieve best management in adopting E-government*

Central Government should promote same vision about e-government to all governments in Indonesia. The clearly stated vision through particular campaign or promotion will inspired all local government, the top leaders and all, to change their mindset and move their government toward e-government. Besides promoting the shared vision among governments and agencies in Indonesia, a strategic action plan should be created. Plan that delivering clear guidelines to follow in implementing e-government initiatives. Should be considered, the action plan must be examined all aspect of challenges that mention in the previous chapter. So, those challenges that occurred in Balangan regency can be overcome.

Since local government are limited in budget, to ensure the program objectives of the e-government action plan realized, all the funds for the e-government adoption in local government should be allocated from central government. Besides that, special budget also must be set up for promoting e-government in the whole region of Indonesia, by making a national campaign, or

e-government seminar in every region, or establishing an institution that focusing on that matter of e-government things, central and locally. Since the budget comes from the Central government, they can monitor and manage the local government's e-government development thoroughly.

Some Bureaucratic structure should be established to assist all local government in their bid toward adoption of e-government. One role if it can be providing Standard Operation Procedure (SOP), so local government will have clear guidelines in implementing e-government.

*Management policy changes*

E-government is not just about technology, management, policy, process, laws and regulation changes are the part of it. E-government initiatives require changing in the behaviour of the personnel involved, as well as changing the structural and process of government. In order to do so, strong and consistent leaders would give sufficient attention to change the management, policy, process, law, regulation and structure. Political and bureaucratic leaders had to ensure that all people involved understood and believed that this system is a priority and if implemented will bring many benefits.

The availability of appropriate skills is crucial for e-government implementation to be successful. To address human resource development issues, knowledge management are required. Focusing on staff training in order to create and develop the basic skills for e-government usage. Educate personnel about the scope and use of the specific e-government initiatives as well as convincing them that e-government has value for them. In general, it is vital to focus on training and education programmes to improve the progress of e-government project. Training is a basic requirement in order to catch up the rapid increases of technologies. Training also can overcome knowledge gap, between old and new users of this system. therefore, regular training is important. The training itself won't guarantee the system operated by every staff members, but at least it would eliminate the inequality of knowledge about this system. Some incentives should be introduced to the staff to motivated them.

Holding a meeting concerning about this monitoring and evaluation with agencies leaders also good things. So, every leader will know what his/her agency situation in this monitoring and evaluation system. if they found out their agency is not in a good situation, they can motivate or encourage their staff to be more active in

doing this thing, and if necessary provide a reward if their staff already done a good job in monitoring and evaluation system.

Another issue in implementing Electronic Monitoring and Evaluation System are unwillingness and lack of motivation from the local staff to the job. To overcome that, certain rules must be made. The rules are not just guidelines but must be mandated, which may not be ignored in any circumstance and whose violated it is punished.

In sum, this study concludes major issues and problems for operating the Electronic Monitoring and Evaluation system are as follows:

- Financial Constraint, that leads to difficulties in maintenance and dissemination of the operational guidelines for developing e-government, and lead to the lack of motivation of the personnel involved.
- No promotion about e-government from central government made the local government, not just the government staffs but the entire local have less information about the benefits and advantages.
- Lack of strategic plan, made local government lost in direction to adopting the e-government system.
- Less support from top management in local government make the adoption of e-government becomes hard.
- Lack of qualified personnel and training, and also less awareness of the e-government system made the process of e-government is not work properly.

To address the above problems, the author suggests some recommendations to build better electronic monitoring and evaluation system in the future. Some recommendation to be taken by central government such as:

- Central government should create an institution with bureaucratic structure as a central of e-government information in Indonesia, to creates Standard Operating Procedure and Strategic Planning for local government to implement e-government system.
- Adoption of e-government is central government must fund every local government.
- Funds are centralized, and Central Government handles all controlling management.
- Central Government should promote and share the same vision toward e-government with all

local government. Besides that, must provided some funds for promoting the benefits of e-government through some campaign or seminar in whole region of Indonesia.

Central government full support is indispensable, especially in the financial support. Without special funds distributed by central government, local government is struggling in developing e-government. For local government to overcome their issues such as managerial issue and human factors issue, some recommendation can be as follows

- In the local government, certain rules should be established. No local staff must ignore, if they violated that they will be punished.
- Ensure strong, consistent and active leadership by Balangan Regency top leaders in changing the management and structure to assist the e-government project.
- Educating and training the employees about the benefit of this electronic monitoring and evaluation system and how this system works will eliminate the knowledge asymmetries between them.
- Convince the employees that e-government has value for them by trainings and meetings about this system.

The above explanation provides some important conclusions that need to be considered in the development of e-government systems in Indonesia. E-government is potentially will enhance how government works internally and how its operates with society. E-government is not just a tool for improving efficiency in any ways, its much more than that. It is a tool for shifting or transform the government. E-government is not basically about automation of everyday works, which may be effective or not, but about reform the way in which government do their works, business or delivering services.

What we can learn from Balangan regency are, although now many local governments in Indonesia have developed e-government, however still many e-government developed as a provider of information only. Even it can be said that still lots are classified as half way or not as expected, like what happened in Balangan Regency with electronic monitoring and evaluation system. In number, the development of e-government in Indonesia has shown a significant progress but in a qualitative way is still inadequate.

For further improvement of the implementation of e-government in Indonesia, in terms of quantity and

quality, it is necessary to improve the development especially in information and communication technology (ICT) infrastructure and human resources, drawing some better regulations and socialization in all regions of Indonesia also to the society, and improvement in the management of governments.

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