

Conference Paper

Constraintsof E-Government Implementation in Public Service – A Study on the Application of SIAKAD in STAIN Ponorogo

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Abstract

This research aims to analyze the factors inhibiting the implementation of e-government in public service particularly in the application of SIAKAD Program in STAIN Ponorogo. First, it describes how e-government become a national policy since the issuance of Presidential Instruction Number 3 of 2003 was applied in STAIN Ponorogo, particularly in SIAKAD program. The factors that affected the implementation of e-government are explained using theory of policy implementation adapted from Edwards and Van Horn Van Meter's model. This case study concludes that the implementation of e-government in public service were constrained by poor communication between executors, limited resource available and limited support from the bureaucratic structure of the SIAKAD Program.

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Received: 09 April 2017

Accepted: 17 May 2017

Published: 12 June 2017

**Publishing services provided
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Selection and Peer-review under the responsibility of the ICoSaPS Conference Committee.

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Keywords: e-government, implementation, public service, SIAKAD

1. Background

Information and Communication Technologies (ICTs) provide a powerful tool in development strategies and the establishment of efficient and effective governance systems. Electronic tools can significantly improve service delivery, transparency and accountability and two-way communications between administrations and their constituencies [6]. Globally, information and communication technology develops rapidly in various sectors, including government. One of the ICT uses in government is e-government (electronic government) to provide more efficient public service to the citizen and organizations.

The public sector, which includes the Higher Education (HE) sector, is transformed accordingly to enhance efficiency. Under the influence of both managerialism and neo-liberalism, the Keynesian welfare state is being reformed according to the 'New Public Management' (NPM) model to highlight efficiency, effectiveness and evaluation of performance [12]. In Thailand, the government adopted the idea of good governance

(GG) in its Five Year Strategic Development Plan (2002-2007) that has seven strategies: 1) business process redesign, 2) a major overhaul of restructuring of government units, 3) budgetary and financial processes reengineering, 4) human resource rewards and incentive redesign to attract and retain the best and talented people to the service, 5) reconceptualization of bureaucratic culture, 6) modernization of public service, and 7) public participation [10].

In relation to the use of ICT or information and communication technology in college, Indrajit and Djokopranoto [9] suggested that the first role of ICT is to be an enabler, the tool enabling the college to create the cheaper, better, faster education process. There are two types of ICT functions known related to this move: back office and front office. The function of back office is ICT use to support the administration process of high education organization or often called operational activity.

E-government is a term defined varyingly by some people; UNDP defines e-government as *the application of Information and Communication Technology (ICT) by government agencies*. Communication and Information Ministry defined e-government as: "the application of internet-based information technology and other digital equipment managed by the government for the purpose of online information delivery from government to society, business partner, personnel, enterprise, and other institutions. Essentially, e-government is the process of using information technology as the instrument of helping run the government system more efficiently" [8].

E-government is a website that provides reliable content based on a strong infrastructure of a digital network, application servers and internet, an extensive database and other supporting services [2]. There are at least three similar characteristics of each e-gov definition. Firstly, the implementation of e-gov is a new (modern) mechanism of interaction between government, and society and other stakeholders. Secondly, the implementation of e-gov involved information technology use (particularly internet). Thirdly, the implementation of e-gov aimed to improve the quality of government service to the public [5].

E-government can be defined in many ways, but this work identifies it as the composite trend of governments at all level, mainly through their operational arm, the administration and, subsidiarily through the access of citizens to public affairs, aimed at promoting: 1) a better and more efficient administration, 2) more effective inter-administration and administration-enterprise relationships and 3) user-empowering servicing and more transparent access of citizens to political decision-making [6]. The development of e-government is the only means left to boost the country into a corruption-free developed nation [4].

There is no doubt that e-government is here to stay and is the way of the future. Also, there is no doubt that e-government impacts on bureaucracy in various ways.

However, there is also a danger “that organizations could be tempted to adopt the ‘idolized’ approach to the use of ICTs (information and communications technologies) to achieve organizational transformation [4].

E-government still faces significant challenges as it continues to develop. Low uptake becomes problematic as greater efficiency and returns on investments are only possible with a widespread use of e-government services [1]. A key problem among e-government practitioners and policy-makers is a lack of awareness of these costs. Most costs are intangible; few are ever measured in the event of e-government failure [6].

E-government services in China are not that advanced to address the actual expectations of the communities. There is a general mismatch between what the governments wish to provide online with what the communities see value in. Inadequate promotion, lack of content and the design of the websites are some of the factors that limit the value of the e-government services [11].

The following areas and key factors should be carefully analyzed in order to examine the risks and assess the obstacles that may need to be overcome before entering into e-government:

- a. **Political conditions and leadership:** Good governance, as a condition for sustainable development, requires genuine commitment from political leaders, the private sector and organizations of civil society.
- b. **Regulatory framework:** A proper regulatory framework is needed in order to enable secure information exchanges within government and between government, citizens and businesses.
- c. **Organizational conditions:** To guide transformation process, appropriate management and co-ordination mechanisms are needed.
- d. **Cultural and human resources conditions:** Positive attitudes, knowledge and skills need to be in place to initiate, implement and sustain e-government.
- e. **Financial conditions:** Proper resource planning and access to innovative financing mechanisms are critical for e-government sustainability.
- f. **Communication environment:** E-government needs to be accepted and understood by all stakeholders to ensure that its benefits flow to the society as a whole.
- g. **Technological Infrastructure:** Lack of technologies is a major bottleneck for countries aiming to implement and maintain e-government.

- h. **Data and information systems:** Management systems, records and work processes must be in place to provide the necessary data to support the move to e-government [6].

The application of e-government in Indonesia began with the issuance of Presidential instruction Number 3 of 2003. 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, ICT is believed as offering the important potency to develop sustainable e-government [7]. In practice, however, the implementation of e-government has not run optimally despite it being promulgated as a national policy.

As the attempt of implementing e-government in providing good service to students and lecturer, STAIN Ponorogo created a site (www.stainponorogo.ac.id). Central to the site is the Academic Information System (thereafter called SIAKAD program). SIAKAD is designed specifically to fulfill the College's demand for computerized education service to improve the performance, service quality, competitiveness, and quality of Human Resource produced. This SIAKAD is used to facilitate service to students and lecturers particularly. SIAKAD can help manage the data of students' score, courses, teaching staff (lecturer) and faculty/department administration that is still manual to be done with software in order to save time and operating costs.

However, this SIAKAD program has not run smoothly and many problems and constraints are still found. For that reasons, it is important to find out the constraints existing in the implementation of e-government particularly SIAKAD program in the service in STAIN Ponorogo. This research analyzes the "constraints with the implementation of e-government in the service (a case study on the application of SIAKAD program (Academic Information System) in STAIN Ponorogo".

2. Method

This research employed a qualitative approach. The data of research was grouped into two: primary and secondary data. Primary data source becoming the references in this research consisted of some competent informants including lecturers and students and some units involved in SIAKAD program. Meanwhile, the source of secondary data included archives, reports, regulations, and Technical Guide of Activities, main duties and functions of personnel, personnel list and etc. Data analysis was carried out using data reduction, data display and data verification.

3. Findings and Discussion

SIAKAD is the special system for academic data management purpose by applying computer technology both 'hardware' and 'software'. SIAKAD began to be used in STAIN Ponorogo in 2013; the one responsible for organizing SIAKAD program is Academic, Student and Alumnus Affairs Sub Division. Considering the interview and observation conducted, particularly in service providing implementation with information and communication technology in STAIN Ponorogo, it can be seen that the use of ICTs has not been optimal. Some types of service have been implemented by SIAKAD of STAIN Ponorogo are still limited to the announcement of academic policies, including academic information service. The constraints in implementing the SIAKAD program, with reference to the top-down model in implementing a policy, are identified as follows:

3.1. Communication

A successful policy implementation requires the implementer to find out what it should do, and what the objectives and target groups of policies are thereby reducing the implementation distortion. When the objectives and targets of policy is not clear or even unknown at all by the target group, the resistance will potentially occur among the target group. Regarding SIAKAD program in STAIN Ponorogo, communication between related units is very poor. It is generally due to no staff dealing with the information service specifically.

Considering the existing observation, the socialization ever conducted is not maximal recalling many lecturers finding constraints in the application of SIAKAD program, it is because socialization does not involve all of lecturers, in addition, some lecturer's mastery IT poorly. The lecturers not involved in the socialization have not understood SIAKAD well, that in turn inhibits service provider to students. In addition, poor coordination makes many assignments piling on one unit so that the system cannot run maximally. The institution has provided inadequate information and socialization to the students. The management only helps when the students have questions or difficulties, so that as long as there is no question, there should be a guide to what should be done. Meanwhile from the observation conducted, it can be found that many students find difficulty or confusion in the application of SIAKAD, so that it should be done repeatedly, because the students only follow what other students should do.

From the result of interview and observation, it can be seen that the poor communication and socialization made by institution and management in implementing SIAKAD program makes the program not implemented optimally.

3.2. Resource availability

The problem of resource is related to many things from human resource, budget/fund availability to infrastructure readiness. In the term of tool resource, STAIN Ponorogo has had about 274 computers, including PC, laptop or notebook. Meanwhile, to support internet connection, there are 3 servers currently existing in information technology and database unit. Viewed from the need or the quantity to be catered to or area width, the 3 servers are considered as very inadequate. Considering the observation, the process of accessing internet is very difficult and slow. It of course harms the activity when online SIAKAD is applied compulsively.

Regarding the availability of human resource, the analysis is based on the personnel availability, both quantitatively and qualitatively, education background and technical ability the personnel have. The problem of human resource related to SIAKAD program is particularly encountered by the administrative staff (Academic Sub Division). Meanwhile, the lecturers do not found significant difficulty, despite some lecturers mastering IT poorly.

3.3. Bureaucratic structure

The bureaucratic structure of implementer including characteristic, norm, and relation pattern affects significantly the successful implementation. The role of bureaucratic structure in an organization is very important. In relation to the implementation of SIAKAD program, one of bureaucratic structure components the institution should have is SOP (Standard Operating Procedure). For SIAKAD program, there has no clear and official SOP in its application, and no Decree (*Surat Keputusan*) or Assignment Letter (*Surat Tugas*) governing the management of SIAKAD. The absence of SOP and SK becoming the legal formal foundation for the executor unit to implement SIAKAD makes every unit seems to run independently without clear and directed coordination. There is vagueness/confusion and buck-passing phenomenon between work units in the implementation of each unit's duty.

It is important to understand that the design and development of ICT for public sectors should be different from the private organizations. Further, in emerging or transitional economies, ICT adoptions should take a different perspective and strategy compared to the more mature economies. In fact, some found it hard to change their traditional views to adopt e-government services. This of course requires the changing of mindset that will take time, especially in terms of the providers who are the government officials as well as more senior citizens who are not computer literate. But

the most important factor for the failure to use the websites is the lack of promotion or publicity to educate citizens on how to use e-government services [11].

To establish an e-government system, a country needs to embark upon a significant transformation process, particularly in those nations where aspects of good governance are yet to be strengthened. A genuine commitment from government leaders, the private sector and other institutions of the civil society is required to create leverages, benefit from synergies and sustain this transformation within the national development process [6].

4. Conclusion

The implementation of e-government is a combination of several technologies, different systems, various people, multidimensional aspects as well as a number of development phases. In order to facilitate e-governance, some development phases must be observed. In phase 1, considering the current government strategy and policy, some planning and designing should be done which will include the hardware and software specification as well as the sequence of execution based on the structure of proposed Information system [4].

Considering the result of research, it can be concluded that the utilization of ICT in service, in the form of SIAKAD program, has not run as expected yet. Many constraints are found in the implementation of SIAKAD program from the poor communication between implementers, limited resource available and used to the inadequate support from the existing bureaucratic structure.

In relation to communication aspects, the SIAKAD program in STAIN Ponorogo is implemented with inadequate socialization and tended to be limited to the leader's level and certain lecturers. Limited resource can be the prominent inhibitors. The limited equipment, both server and bandwidth, limited human resource both number and competency, and limited budget allocated in implementing the IT-based programs had harmed the implementation of SIAKAD program. In addition, the constraints emerge in bureaucratic structure as well. The inadequate commitment to make the implementation successful can be seen from no organized SOP, no decree (*surat keputusan*) and other administrative documents needed by those responsible for implementing the SIAKAD program.

The recommendations are: to intensify the socialization about SIAKAD program to lecturers, employees and students both in face-to-face manner and with various media existing in campus; the competency of IT mastery should be improved, both quantitatively and qualitatively; the budget allocation should be increased to improve the management and the addition of server and bandwidth capacity in order to facilitate the

accessing process; and the implementation of SIAKAD program should be confirmed through preparing SOP, decrees, and other administrative documents necessary to be the juridical basis of a policy implementation.

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