The Importance of E-Leadership and Workplace Learning for E-Government Implementation in Indonesia

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Abstract

The development of e-government in Indonesia began in 2003 with the release of the President’s Instruction: the National Policy and Strategy Development of e-government. Until then the Indonesian people did not receive high quality government services through the e-government service provision. From a global perspective, the United Nations in 2004-2010 ranked Indonesia in the low level of e-government readiness.

This research paper aims to explore public service performance and leadership in the use of e-government, especially concerning the responsiveness of e-government to the public. Both quantitative and qualitative approaches were used in this study. Seventy one Indonesian ministries and provinces and one hundred and fifteen districts were used in the research sample. Their websites were analyzed to provide the quantitative data.

A purposive technique was used to select the informants for the qualitative data and was based on responses given through e-mail communication with selected websites. The level of responsiveness of e-government sites was analyzed according to the availability of the contact link, functionality of the contact link, and the speed of response to the users’ email.

The analysis of the quantitative data from the study found that the responsiveness level of the Indonesian e-government sites sampled was very low. This was indicated by the majority of the website administrators who did not respond to every email from their users.

The qualitative findings of this study suggest that e-leadership and workplace learning are very important factors for the implementation of e-government in Indonesia. The major issue of e-government is not the technical aspect but the understanding between the people in the organization, including the leadership, and the opportunity for employees to learn new technology in their workplace. These were the critical factors identified by participants for the successful implementation of e-government.

Given the paternalistic character of Indonesian society, which is characterized by a top-down management pattern, it can be argued that the implementation of good practice in e-government should be initiated by the leaders of government organizations.

E-leadership is leadership that combines existing leadership models with the development of new technology skills. E-leaders need to be prepared to take advantage of the latest technological
developments so they can influence employees. E-leaders should also espouse the values of the e-government approach and reinforce its importance through a structured program of workplace training.

Keyword: e-leadership, workplace learning, e-government, responsiveness

INTRODUCTION

Throughout the past decade Information and Communication Technology (ICT) has developed quickly and has had a broad impact on all aspects of peoples’ lives. This trend of an increasing number of ICT users has led to the development of specific terminology for the new electronic services provided by the private and public sectors: electronic commerce, electronic business, electronic learning, electronic marketing, electronic procurement and including electronic government or as it is more usually termed, e-government. It is the development of e-government in Indonesia that this research paper will focus upon. In the context of this paper, e-government refers to the use of emerging information and communication technologies to facilitate the processes of government and public administration (Drucker, 2001).

The employment of e-government services means that the government is able to serve the community outside office hours, 24 hours a day, seven days a week and the services can be delivered anywhere because they are online. Citizens who need government services do not need to go to government offices anymore because they can access e-government through government websites. The following quotation from a USA citizen demonstrates how effective e-government services can be:

An American soldier renewed his Virginia state driver’s license on Tuesday in December 1999. No big deal—except that it was six o’clock in the morning and he completed the procedure in seconds without leaving the army base where he
was stationed, across three state boundaries in Fort Benning, Georgia…etc. (Holmes, 2001).

However, this is an example of e-government services in an advanced country that has already fully developed e-government services. The question is, how can e-government services reach this level in developing countries such as Indonesia? According Rokhman (2008), e-government in Indonesia is in the first phase of e-government development or what has been termed the publish phase and only a small part of e-government has entered into the second phase, known as the interaction phase (Baum & Di Maio, 2000). Even though e-government development in Indonesia has only reached the initial phase, it is still necessary to evaluate how well e-government functions at present and assess the level of responsiveness of e-government operators in serving their communities. This paper aims to analyze the present level of function and responsiveness of e-government in Indonesia, and conduct an in-depth quantitative review to discover why e-government services have not yet met its development objective as outlined in government policies: providing for the communities’ needs in accessing government services easily and efficiently.

**A SUMMARY OF E-GOVERNMENT POLICY IN INDONESIA**

Leadership in e-government has been evident through recent Indonesian government policy initiatives. Through the Directive of President (Inpres) No.3, year 2003, the Government has issued a policy on a national strategy for developing e-government. The development of e-government is an effort to develop government organization through electronic means to improve public service quality and efficiency. The Inpres, relates to the arrangement of management systems and working process in government by optimalizing the use of activities related to: (1) data processing, information management,
management system and electronic working processes and (2) the use of advanced information technology so that public services can be easily and cheaply accessed by communities throughout the country territory (Harijadi, 2004).

The implementation of these aims in the development of e-government means that it needs to reach four objectives: (1) establishing an information network and public service transaction which has the quality and scope that broadly satisfies the communities’ needs and is able reach throughout the territory of Indonesia any time, unlimited by any time gap and is affordable to user communities; (2) establishing an interactive communication with the business world to improve the national economic development and to strengthen capability in facing the change and competition of international trade; (3) establishing a mechanism for communication with State Institutions and providing the community with public dialog facilities so they can participate in formulating the state policy and (4) establishing a transparent and efficient management system in order to get reliable transactions and services within government institutions and in the autonomous regions.

Following the Inpres, the government of Indonesia in 2003 issued several guidelines such as (1) The Guide for Government Portal Infrastructure Development, (2) The Guide for Government Electronic Document System Management, (3) The Guide for Composing an Institution E-Government Development Plan, (4) The Guide for Organizing Education and Training of ICT to Support E-Government, (5) The Guide on Organizing a Local Government Web Site. In addition these were complimented by the guides issued in 2004: (1) the quality standard and services range and application development (e-services), (2) the policy on institution, authorization, information and private participation in the implementation, (3) the development policy of good governance and management of change, (4) the guidance on project
implementation and e-government budgeting, (5) the blue-print of e-government application for central and local governments. Furthermore, in 2006, the government established the Council of National Information and Communication Technology (Detiknas) through the Decree of President No. 20/2006; one of its tasks is to accelerate the e-government implementation process (Detiknas, 2010). Finally in 2008, Law No 11 was issued regarding Information and Electronic Transaction. This Law aimed to provide a strong legal base for electronic data transaction including for e-government implementation. These Indonesian government initiatives provided a sound framework for leadership in the development of e-government.

**STAGES IN E-GOVERNMENT DEVELOPMENT**

The development of e-government occurs through several stages in accordance with the capability and needs of the developing organization. The higher the development stage achieved, the higher the complexity and the higher the cost. The many previous research studies that have been conducted on the stages in developing e-government are presented in the following table.

<table>
<thead>
<tr>
<th>Table 1. E-Government Development Stages</th>
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<tbody>
<tr>
<td>Stage 1</td>
</tr>
<tr>
<td>(Baum &amp; Di Maio, 2000)</td>
</tr>
<tr>
<td>(Hiller, J and Be'langer, F, 2001)</td>
</tr>
<tr>
<td>(Deloitte &amp; Touche, 2001)</td>
</tr>
<tr>
<td>(ASPA &amp; UN, 2001)</td>
</tr>
<tr>
<td>(INPRES No 3, 2003)</td>
</tr>
</tbody>
</table>
CRITICAL SUCCESS FACTORS OF E-GOVERNMENT

Many researchers have studied the critical success factors of e-government. These factors are significantly influenced by the context of each country where e-government is implemented. Altameem et al. has collected the critical success factors that are universally valid by classifying them into three main factors namely governing factors, technical factors, and organizational factors. These main factors consist of several sub-factors which are described in the figure below (Altameem, Zairi, & Alshawi, 2006).

![Critical factors for E-Government Adoption](image)

Figure 1. Critical factors for E-Government Adoption

RESEARCH METHODOLOGY

This research used quantitative and qualitative descriptive approaches to investigate the research target which were the e-government ministry, province, and district websites. Sampling for the ministry and province categories was taken from a total of seventy one sites, while samples from the districts’ were taken proportionally and randomly up to 25%, with a sample of 115 out of the the 457 districts. After visiting the government sites several times, it appeared that
not at all the samples from the districts could be accessed, therefore samples of district
government websites in this research was limited to 90 sites. The determination of the informant
was to gain qualitative data by using purposive technique, namely the e-government operators
who answered the questions in this study by e-mail.

This study uses a single variable level of responsiveness of an e-government site operator
in serving the users, with the following indicators: (1) the availability of the contact link: the
facility or menu was available for the users to contact the site either by e-mail and/or through the
application forms provided, (2) Function of contact link: the contact link provided was able to
function effectively and (3) Speed of response to email users: whether the site operator answered
the users message or not.

The technique of data analysis applied for the quantitative data was descriptive statistics
in the form of frequency distribution. The qualitative data was derived from interviews and was
analyzed using an interactive technique (Miles & Huberman, 1994).

QUANTITATIVE FINDINGS

The availability of the contact links

Of the 38 websites of departments/ministries analyzed by the researcher visiting the sites,
a few were not even providing the necessary facilities for users to contact the e-government
operator through an e-mail or a contact link. There were 33 (86.6%) sites providing the contact
links, and the other 5 sites (13.2%) were unavailable to users. The provincial government sites
were the worst offenders, with only 11 sites (33.3%) providing contact links out of 33 sites
analyzed. Most of the 22 (66.7%) provincial government sites did not provide the contact link.

The results were similar for district government websites. From the 90 websites sampled,
only 46 sites provided contact links (51.1%) while 44 sites (48.9.%) provided the contact link.
These results show that the development of e-government both at central government level and in local government divisions, have not fully considered how to make interaction easy for website users. The e-government system that has been established is designed only for one-way communication from the government to the community. This contact link is very important as it signals whether the operator of e-government is ready to interact with the users or ready to serve the users any times and anywhere.

**The function of contact links**

After the researcher sent thirty three e-mails to the department/ministry website operators, there were 3 emails (9.1%) that were rejected because the addressee of email was not found or was inactive, whilst the rest, 30 (90.9%) deliveries were sent successfully. In the provincial government websites, after the researcher sent 11 e-mails, only 7 e-mails (63.6%) were successfully sent and the rest, 4 e-mails (36.4%) were rejected. District government sites were the least effective in e-mail delivery. After sending 90 e-mails, only 23 e-mails (25.6%) were sent and the rest, 67, (74.4%) failed.

**The speed of response towards e-mail users**

Although there was notification that the e-mails the researcher initiated had been sent, only a few emails received a response from the e-government operators. From 33 e-mails that were successfully sent to the department sites, only 3 of the website operators gave a response (9.1%). The rest, 30 e-mails (90.9%) received no response. For the provincial government sites, from 11 e-mails that were successfully sent, there was only 1 that gave a response (9.1%), while the rest (90.9%) did not respond the e-mails. The results for district e-government sites were similar, with responses to only 5 e-mails out of 23 successfully sent, or 21.75%, the rest, 18
(78.7%) received no replies. The complete quantitative findings are presented in the following table.

Table 2. Quantitative findings

<table>
<thead>
<tr>
<th>Variable</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministry</td>
<td>86.6</td>
<td>13.2</td>
</tr>
<tr>
<td>Province</td>
<td>33.3</td>
<td>66.7</td>
</tr>
<tr>
<td>District</td>
<td>51.1</td>
<td>48.9</td>
</tr>
<tr>
<td>Functionality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministry</td>
<td>90.9</td>
<td>9.1</td>
</tr>
<tr>
<td>Province</td>
<td>63.6</td>
<td>36.4</td>
</tr>
<tr>
<td>District</td>
<td>25.6</td>
<td>74.4</td>
</tr>
<tr>
<td>Responsiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ministry</td>
<td>9.1</td>
<td>90.9</td>
</tr>
<tr>
<td>Province</td>
<td>9.1</td>
<td>90.9</td>
</tr>
<tr>
<td>District</td>
<td>21.7</td>
<td>78.3</td>
</tr>
</tbody>
</table>

**QUALITATIVE FINDINGS**

Based on the quantitative results shown above, the responsiveness level of e-government website operators in Indonesia is extremely low. Further qualitative research in the form of interviews, was used to attempt to gain a deeper understanding of the reasons for these results. For example, ‘Why do website operators fail to answer e-mails?’ and ‘Is e-government inappropriate to the Indonesia culture?’

Why do the website operators fail to respond e-mails? Some responses to this question from the different sample groupings are similar; the reason they give for not responding to e-mails is related to human resource and cultural factors. The lack of specialist personnel available to handle e-mail is mentioned as is the lack of commitment of public services to change their systems to a paperless model. Opening e-mail is considered unimportant and therefore e-mail requests are often neglected and left unopened. In addition, cultural factors are important. Many operatives do not see opening e-mail as part of their daily job so that many of the e-mail sites are not regularly maintained. In some cases operatives use the sites so rarely that they forget their
Is E-Government inappropriate to Indonesian culture? Based on the responses given, almost all those interviewed admit that e-government is a new culture for the Indonesian nation, brought about by the development of information communication technology. It was seen as a challenge and an opportunity for the Indonesia government, and it was hoped that the application of e-government helps services become better, more efficient, transparent, and accountable. E-government was perceived by respondents as providing an opportunity to improve the quality of public services which was seen as being of a low standard and in need of improvement. However, the application of e-government faces a cultural challenge that is concerned less with the support of our national relationship in daily life as with bureaucratic processes such as the “ewuh pekewuh/reluctant” culture that is opposed to the transparent culture as offered by e-government.

Interview respondents admit that their leaders are not using internet to communicate with the community and do not see electronic media as the main priority in the services they provide for customers. Moreover, their leaders are not yet familiar with the internet; if leaders have an e-mail address, it was usually set up by their subordinates and had never been opened by the leaders themselves.

Other findings that emerged from the qualitative data collected were that the quality of e-government management is significantly determined by the level of human resources that were available in the government agencies. The respondents admit there were few human resources that had mastered e-government management. The human resource management needed a mechanism to select the relevant personnel to manage e-government and to ensure that these passwords so eventually the mailboxes become full and cannot accommodate the entering e-mail. This is why many of the e-mail sent in this study failed.
personnel receive adequate technical training so that government organizations are not dependent on a few personnel who have mastered the ICT. This training should not be formally structured but should be implemented in the work place with minimal disturbance to work routines.

**DISCUSSION OF OVERALL FINDINGS**

The quantitative and qualitative findings reinforce that the responsiveness of e-government operators in Indonesia is too low. The public administration paradigm in Indonesia refers to a classic paradigm that characterizes all matters on a legal formal approach. E-mail is not seen as part of a classical bureaucratic culture because it has not been formally accommodated in the Indonesian bureaucracy regulations. The bureaucracy is still fixed on a paper, stamp and signature approach. The e-mail counters this as it is without signature and stamp and this makes it legally and formally invalid, so of little concern to government officials.

This classic public administration paradigm is considered inappropriate for this developing era. Denhardt (2008) argues that recently the state administration paradigm has moved from the classic paradigm symbolized by bureaucratic hegemony in public service implementation, to be more service focused and based on customer satisfaction, known as the New Public Services paradigm. Besides, the change of paradigm recognized by Denhardt, cannot be prevented because information and communication technology are developing so fast. The question is, ‘Who will provide the leadership to enable these changes to occur?’

One of the characteristics of the paternalistic Indonesian community type (Warnecke & DeRuyter, 2009; Rajab, 2009) is that any change commonly starts from a superior or leader at the top of the hierarchy. Consequently, the development of an e-government culture as part of the framework of a new public service paradigm, should be initiated by a bureaucracy leader. In this case, a bureaucracy leader must be familiar with and capable of applying e-leadership. This
approach is reinforced by the successful implementation of e-government by the Kota Surabaya Government in 2007, which was also supported with a reward from Warta Ekonomi magazine in the E-Government award contest. E-Leadership is seen as the key component in the city’s success in applying e-government (Sonhaji, 2008).

E-Leadership combines the existing concept of leadership which in this context is seen as a process whereby an individual influences a group of individuals to achieve a common goal, (Northouse, 2007) with technology development. E-Leadership aims to utilize technological development to influence subordinates and inculcate them with their values. Budvytyte (2006) states that E-leadership comprises of two basic elements: technology and leadership. Budvytyte further describes e-leadership as follows.

Misra (2009) states that e-leadership can be defined as leadership online, that is, leadership in the virtual world as distinct from the physical world. Organizations in the virtual world are known as virtual organizations and have several characteristics: (1) members are not known to each other, (2) all members are equal, (3) there is no administrative hierarchy.
Vision2lead suggest that e-Leadership requires a balancing of many roles and carrying them out via communications technologies (Vision2Lead, 2010). Additionally, Fernandez (2007) requires that several tools shall be mastered by a leader applying e-leadership as shown in the following table (Fernández, 2007):

<table>
<thead>
<tr>
<th>Table 3. Tools for e-Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
</tbody>
</table>
| Communication tools | End-user asynchronous tools that facilitate the sharing of information by sending messages, files, data, documents, etc | • E-mail  
• Internet forums Discussion boards  
• Wikis  
• Weblogs  
• RSS  
• Social networking  
• Web services  
• Social bookmarking |
| Conferencing Tools | End-user real-time tools that facilitate interactive communication | • Online chat and instant messaging  
• Flash Meeting  
• Video  
• Online whiteboards or data conferencing  
• Conferencing |
| Management Tools | Facilitate and manage group activities | • Meeting scheduling tools and team calendars  
• Mind map  
• Application/desktop sharing  
• Contact management/address books  
• Task lists  
• File and documents sharing  
• Awareness utilities  
• Workflow management support  
• Intranet  
• Extranet |

The importance of training and workplace learning

E-leaders need to ensure that they have well trained personnel to deal with the challenges of new technology, so its operators are properly prepared and can employ it effectively. This research study demonstrated that the application of e-government failed because of a lack of leadership and through a lack of qualified human resources in ICT within the government agencies. The E-Government Institute admits that information technology is a new field and that the government does not have the necessary qualified human resources in the information technology sector. Those who are qualified are commonly to be found in the business/industry.
sectors. This lack of adequate human resources is one of the main barriers to the implementation of e-government. The solution to this problem is to recruit new employees and also provide training based on workplace learning, which is designed to supplement rather than disturb the daily activities of the employees, and is more effective because it is directly relevant to their job fields (E-Government Institute, 2005).

Workplace learning (also workplace training) refers to learning or training undertaken in the workplace, usually on the job, including on-the-job training under normal operational conditions, and on-site training, which is conducted away from the work process (e.g. in a training room) (Australian Government, 2010).

Workplace learning has also been described as learning that occurs during the activities and experiences of work. Fenwick (1995) argues that workplace learning implies human change or the growth that occurs primarily in the activities and the context of work. It can include some type of structured formal class or presentation where the learning outcomes are geared to accomplish organizational goals. However, workplace learning must also include learning activities such as on-the-job training, mentoring, or coaching to enhance workplace performance. Workplace learning also includes the social interaction between people, people in groups, and groups across boundaries (Rowden, 2007).

Workplace learning has advantages for the employees such as: (1) an increased relevance of learning and training to the organization’s skill development needs, (2) usually does not interrupt the normal production processes; can often be part of the normal production processes, (3) help in attracting (high quality) new employees, (4) similarly, can help in retaining (high quality) employees, (5) because it is organization-specific it can help in transmitting and underlining the organization’s culture and values (Lanceser, 2009).
Ideally a workplace learning strategy can be implemented nationally, and the Communication and Information Partnership could be responsible for its implementation in cooperation with government national training institutions such as Personnel Training Board (Balai Pelatihan Pegawai) which exist in each ministry. The training participants would be e-government operators throughout Indonesia. The aim of this program would be to help e-government operators to improve their capabilities both technically and managerially so they can serve the community effectively.

**CONCLUSION**

This research study found that e-government in Indonesia has not performed to a satisfactory level. Visitors to government sites who wanted to interact with public officers were not well serviced. Not at all sites had a contact link facility. Many of them were not functioning efficiently. The level of responsiveness to visitors’ requests was too low. Much of the responsibility for this was linked to poor leadership that lacked the vision and information technology skills that were necessary for the successful application of the e-leadership model. Another reason for this failure was a lack of well qualified human resources which led to inadequate staffing of e-government services. Therefore, it was argued, training is required to improve their human resource capacities. The ideal training should be held nationally by Ministry of Communication in cooperation with the Personnel Training Board (Balai Pelatihan Pegawai) which exist in each ministry and in local governments. Because of national scope of this training, workplace learning including e-learning, was proposed as the most relevant and effective training approach. This radical change in e-government provision would require E-leadership of the highest quality and vision.
REFERENCES


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