

## Chapter XLII

# The Level and Impact of Web Based E–Government Adoption: The Case of Jogjakarta’s Local Governments

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### ABSTRACT

*This chapter examined the state of Jogjakarta’s local governments Web sites (i.e., Bantul, Sleman, Kulon Progo, City of Jogjakarta and The Special Province of Jogjakarta provincial government). There are few tools available to assess e-government Web sites. We used the framework developed by Stanton, UNPAN, Indonesian Government, and CIPSODA proposed by Heeks. Stanton’s frameworks emphasized the use of ICT by local government for better interaction with the citizen. This framework is inline with the UN framework that aimed at building a people-centred and inclusive information society. Stanton identified 4 e-government sub spaces (i.e. publish, interact, transact, and transform). Indonesian government rules were leaning toward Web-based e-government. We used those tools to evaluate and observe the impact of e-government and also observed the state of ICT infrastructure in Indonesia that might be hindering the adoption of Web-based e-government and suggested an alternative.*

### INTRODUCTION

With e-government readiness index of 0.3819 Indonesia was ranked 96 out of 191 UN member states<sup>1</sup>. This ranking was far behind other South

East Asia countries such as Singapore (7), the Republic of Philipines (41), Malaysia (43), Thailand (46) and Brunei Darrusalam (73). Indonesia experienced an 11 points decrease compare to prior

year ranking (85). This ranking was partly based on e-government web site assessment.

As Indonesia adopting decentralized governance that give considerable autonomy to its provinces and local governments, the whole picture of Indonesia would be better if the portrait include an assessment of province and local government web sites. This approach is also of benefit considering Indonesia has a great deal of heterogeneity in term of economic development, infrastructure and human resources quality. The Special Province of Jogjakarta<sup>2</sup>, the region where the researchers live, was chosen as the object of this research.

This chapter examined the state of Jogjakarta's local governments web sites (i.e, Bantul, Sleman, Kulon Progo, City of Jogjakarta and The Special Province of Jogjakarta provincial government). Our previous findings (Sarosa & Lestari, 2006) confirmed that the rate of adoption of e-government website in Jogjakarta is quite low. For example, the interaction forum within the website of Kulon Progo was frequently visited by 400 people compared to the total of Kulon Progo's recorded population of more than 400.000 in 2005. We evaluated the web-based e-government deployed by Jogjakarta's local governments using several different tools including a guidance issued by the government of Republic of Indonesia in form of Presidential Instruction (Indonesia, 2003b) and Minister of ICT decree (Minister, 2003).

By looking at our evaluation result and the current state of internet adoption, we proposed a new media of e-government service delivery in form of mobile device. Our conclusion is supported by the recent research in mobile e-government and high rate of mobile technology adoption in Indonesia.

On the next sections, we will discuss the web-based e-government and how to assess e-government readiness, followed by the current state of e-government in Indonesia, our analysis, and lastly we present our conclusions.

## **WEB-BASED E-GOVERNMENT**

E-government can be broadly defined as the use of ICT in the-government sector ranging from the use of stand alone computer and telephone, office automation to the used of the most sophisticated web-based e-government (Heeks, 2006; Mosse & Whitley, 2004; Shackleton, Fisher, & Dawson, 2004; Stanton, 2005; UN, 2005). In this sense e-government has been with us long before this terminology widely used. Nowadays, however, the term e-government tends to refer to web-based e-government as more and more government and its departments moving to the web. This chapter, therefore, focus on web-based e-government aspects.

E-government can be seen as a 'socio-technical system' consisting of technical aspects (information and technology) and social aspects such as people, organization and environment (Avison & Fitzgerald, 2002; Heeks, 2006). Further Heeks (2006) proposed a checklist called ITPOSMO to describe "what an e-government is". ITPOSMO stands for:

- **Information** refers to the formalised information kept by the systems and used by the user of the systems.
- **Technology** refers to the digital or IT technology but also supporting non digital technology such as manual systems.
- **Process** refers to e-government stakeholder's activities (both information and business related processes).
- **Objectives and values** refer to the main objectives and values of e-government systems. It might be political, formal strategies, cultural issues that include subjective truth, etc.
- **Staffing and skills** refer to number of staff involved with the systems and their competencies.
- **Management system and structures** refer to the required management systems to organise and maintain the systems and also

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