## Chapter 10

# A Statistical Analysis of Priority Factors for Local e-Government in a Developing Country: Case Study of Yogyakarta Local Government, Indonesia

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### ABSTRACT<sup>1</sup>

This chapter presents findings of a study devoted to investigating the factors that influence successful implementation of e-Government at a local level in a developing country context. The study is based on the case study of Yogyakarta Local Government, Indonesia. Using qualitative methods of data gathering, the study developes a conceptual model with 27 items that were used for developing the questionnaire distributed into conducting in-depth interviews with 200 government officials in Yogyakarta, who adopted Information and Communication Technologies (ICTs) as a platform for their daily work activities. The study also conducted desk research that explored many documents on ICT implementation in the public sector. The results reveal that the most significant factors that influence success in e-Government projects are corporate culture and e-Governance competency. The other factors, in order of importance were users' willingness and competency in using ICTs, Information quality and human resources competency, and system quality, which was moderated by information quality and human resources competency.

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### INTRODUCTION

ICTs influence the way government and citizens interact throughout the world. Even in developing countries, many governments have been trying hard to implement ICTs in order to meet the needs of citizens. In developing countries, the impact of ICT projects, especially in the public sector, is not commensurate with the amount of ICT infrastructure investment (Heeks, et al., 2002; Ferran, et al., 2005). Even, recent survey reports on e-Government readiness also place many developing countries in the lower ranks compared to developed countries (UNDESA, 2008; EIU, 2009).

Alot of approaches designed to improve implementation of ICT projects in the public sector in developing countries have been developed. But most of these approaches are based on the experiences of developed countries where the technology was developed. Heeks (2002) has revealed that there are gaps, related to infrastructure, information culture, procedure, management and human resource competence between developing and developed countries with regards to ICT project implementation. This has correspondingly negatively impacted on the level of penetration of e-Government in developing countries.

In developing countries, success in implementing an ICT project will not be achieved if the focus is on just making improvements to the technology (Ferran, et al., 2005; The Local Government of Yogyakarta, 2006). The approach developed by Mcconnel International (2001) shows that many factors including e-Leadership, human resources competence, business climate and ICT infrastructure influence the success of ICT implementation in developing countries. Similar findings in Indonesia, in 2007, show that although a lot of local governments have invested a lot to improve the ICT infrastructure, the quality of public services did not improve significantly (Kompas, 2007). Futhermore, other studies conducted in Indonesia emphasized that there were many factors, similar to the findings of the study

conducted by Mcconnel International (2001), that influence the uptake and effective development of e-Government (Wijaya & Surendro, 2007). It is for this reason that this study sought to take a different approach in developing a framework that can be used to study factors that may influence successful implementation of ICT projects from the perspective of developing countries. The chapter attempts to address the question: Why does the implementation of e-Government in developing countries not improve the public services significantly?

This chapter is organized as follows. The first section is the introduction of the study. The second section presents the context of the study by outlining the Jogja Cyber Province Initiative, an e-Government initiative implemented in Yogyakarta Province. The third section presents the relevant literature related to e-Government in a developing country context. This section is followed by an outline of the research methodology and data gathering techniques. Our empirical findings and discussion are presented in the fifth section, and finaly, the last section, describes the limitation of the study and provides some recommendations for future research.

### LITERATURE REVIEWS

Although the implementation of ICTs in developing countries has increased over the years, there is very little literature about ICTs in developing countries compared with experiences of developed countries. There are many research studies that present factors related to e-Government success (EIU, 2005; Liu, 2001). These studies have posited that e-Government development mostly depends on the organizational and institutional readiness to adopt ICTs to the core of the available business value chains or activities. For an organization to derive optimal benefits from implementing ICT projects, the organizational environment should be ready to adopt ICT (Chang & Kannan, 2002;

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