Chapter 5
A Base of Knowledge, Mobile, and Web 2.0 Technologies for Connected E–Government

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ABSTRACT

E-Government is an evolving field with continually changing practice and priorities. It is also a global phenomenon, from the richest and most technologically developed nations to the poorer and less technologically developed countries, involving a range of latest Information and Communication Technologies (ICT) and diverse methodologies. In such a dynamic field spanning all sectors of the governments and societies, it is difficult for e-government researchers and practitioners to identify the trends in the e-government activity and learn from previous cases and experiences. In this context, the aim of this chapter is to present an in-depth evaluation of e-government practice and research since 2007, to provide insight on research practicalities and emerging issues in e-government activity, and to identify the trends and technologies. The chapter also focuses on the current mobile and Web 2.0 technologies and examines the practicalities of using mobile technologies in various countries such as USA, Canada, UK, Austria, Japan, and others, as well as the practicalities of Web 2.0 technologies in some domains such as government, regulation, cross-agency cooperation, law enforcement, etc. This chapter presents a framework based on the mobile and Web 2.0 technologies in the context of e-government activity. In addition, the authors propose a framework for a government-people relationship. We hope to make a contribution for researchers, practitioners, policy makers, and people interested in e-government by providing a base of the e-government domain knowledge, practice, and framework. Additionally, the chapter illustrates how the implementation of mobile and Web 2.0 technologies support connected e-government.

INTRODUCTION

E-Government is a global phenomenon with continually changing practices and priorities. It is also a global phenomenon. E-Government is a broad area covering a variety of interdisciplinary subjects including Computer Science, Information Systems, Information Technology, Politics, Public Management, Finance, Health and Sociology. E-Government activity takes place from the richest

and most technological developed nations to the poorer and less technologically developed nations. The study by Bolivar et al. (2010) showed that various academic departments conducted research on e-government and noted that 22.5% of research came from Public Administration, 7.3% research originated from Marketing and Communication, 12.4% research was from Management Science, 5.8% from Library and Information Science, 15.2% research came from Public and Policy Science, 10.6% from Computer Science and Information System, 8.4% from Practitioners, 7.6% research came from Accounting, Business and Economics and 9.37% research came from other sources. Similarly, Heeks and Bailure (2007) identified that e-government researchers came from diverse departments such as: Business/Management, Public Administration, Political Science, Computer Science, Library and Information Studies, e-government, Information System, Government/Governance, Non-academic research institutions and other. They also pointed out the main literatures of e-government research which consist of e-government, Information System (including business), Public Administration, Management, Political Science, Computer Science and other (Heeks & Bailur, 2007).

E-Government is a term that appeared in the late nineties. There are various definitions of e-government. The US Congress defines it in the US 2002 e-government Act (Grönlund & Horan, 2004) as: "government supported by Information Technologies for delivering good services and information to government stakeholder effectively and efficiently." In 2004, European Union (EU) classified e-government as: "Public Administration based on Information and Communication Technologies to enhance public services and democratic processes and it supported by new skills and organisational improvement." Furthermore, the One U.S. General Accounting Office examined some of the challenging factors of e-government implementation such as: strong leader

commitment, effective e-government, preserving citizen concerns, privacy and security issues, electronic records, good technical infrastructures, human capabilities for IT skills, consistent and standardized public service delivery consistently (Jaeger & Thompson, 2003).

Notwithstanding the benefits that e-government promises, it seems to present three main challenges as follows (Signore, Chesi, & Pallotti, 2005):

- Technical challenges. These include interoperability, privacy, security and multimodal interaction.
- Economic challenges. These consist of specific issues such as: costs, reusability and portability.
- Social challenges. These challenges cover social aspects such as: accessibility, usability and acceptance.

Jaeger & Thompson (2003) explain some important issues for successful e-government implementation as presented below:

- Assuring the capability exists to implement suitable technologies.
- Propagating the importance of e-government to public.
- Ensuring the public can acquire meaningful information and services.
- Creating the integration of local, regional and national e-government programmes.
- Elaborating the methods and achievement indicators to evaluate e-government performance

As a consequence, e-government implementation not only faces technical issues but also non-technical issues. This is the reason that e-government has become such a broad issue and why all manner of interdisciplinary subjects exist in order to resolve the issues and achieve the goals

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