Chapter 4.11

# Knowledge Management for E–Government Applications and Services

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## ABSTRACT

The Web is revolutionizing the way citizens and businesses interact with government agencies and organizations. Nowadays, a wide spectrum of governmental services is available online in order to facilitate end-users and provide them with effective Web-based experiences. In this chapter, authors argue that the usage of knowledge management (KM) would greatly assist e-government applications and services. The basic aim is to point out the necessity of designing and implementing efficient KM e-government applications in order to improve public sector quality. In this framework, firstly it gives e-government and KM basic definitions. Then the chapter provides a review of literature and all these foundations upon which it is envisioned and then demonstrates the close relationship between the two issues. The chapter continues with the presentation of a characteristic KM conceptual model for e-government services. It examines the most interesting applications in the area, and finally demonstrates the barriers, the arising opportunities, and the key challenges regarding e-government and KM.

## INTRODUCTION

In recent years, the world has witnessed the rapid evolution of the Web, a development environment

that allows easy access, sharing, interchanging and publishing of information. In this context, the significance of governing and administration has been considerably altered. Not only because intense pressures and expectations that the way of governing should reflect new methods of work, but also the necessity for more "open" governments to citizens and businesses. Governments have realized that their information resources are not only of value in themselves. They are valuable economic assets, the fuel of the knowledge economy. By making sure that the information they hold can be readily located and passed between the public and private sectors, taking account of privacy and security obligations, it will help to make the most of this asset, thereby driving and stimulating national and international economy. The governments take advantage of Information and Communication Technologies (ICTs) and the continuing expansion of the Web and started strategies to renew public administration, eliminate existing bureaucracy and therefore reduce costs (Riedl, 2003; Tambouris et al., 2001).

Electronic government (e-government, e-gov or EG) allows an economic approach of democratic processes. However, ICTs can achieve more than this. They redefine public administration processes by altering the relations between services' providers and public, public and private sector, and government and citizens. New forms of governing make their appearance, reflecting the continuously altered organizational and economic structures, with important effects in the way that we "exist" as citizens. It is clear that e-government does not concern only online services and the better support of citizens and businesses, but comprises a new set of technologically advanced processes and tools, that promote the interaction between the public and the government.

All economic sectors have been greatly affected by e-government novelty. Many public agencies and organizations (e.g. Ministries, Municipalities, other local authorities, etc.) provide online services such as the following:

- Publication-dissemination of information for citizens, private sector and other public authorities.
- Gathering of information through usable online forms (e.g. for subsidies).
- Direct reaction to specific users' requests (e.g. legislation on a specific problem, downloading application forms, consulting from specialists).
- E-services integration, etc.

Furthermore, a large amount and a wide range of knowledge is required to achieve the above. However, explicit and particularly implicit or tacit knowledge comprise important challenges in the area.

Knowledge Management (KM) may be defined as leveraging of knowledge for attaining objectives of productivity and competitiveness of a national economy. At the level of a government, knowledge management for government (KM4G) may be defined as leveraging knowledge for improving internal processes, for formulation of sound government policies and programmes and for efficient public service delivery for increased productivity. Finally, knowledge management for e-government (KM4EG) may be defined as management of knowledge for and by e-government for increased productivity. KM4EG is a management tool for government decision makers and its programme implementers (Misra, 2007).

This chapter attempts to highlight the linkage between KM and e-government applications and services. Emphasis is given on the current trends and opportunities. In this framework, the chapter examines national and international literature, relevant e-government issues, in order to depict the current state and also to conclude some specific developing considerations. Specifically, its aim is to point out the necessity of designing and implementing efficient e-government applications. Authors strongly believe that the vision of an electronically modernized public sector will be realized if a series of key strategic aspects

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