# Chapter XLVII A Framework for Knowledge Management in E-Government

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#### INTRODUCTION

E-government, driven by an ever-increasing and pervasive use of information and communication technologies, is affecting the public sector more and more (Bannister, 2005; Eyob, 2004; Metaxiotis & Psarras, 2004). Many governments across the globe have resorted to instituting e-government initiatives as a way of better positioning themselves in the Information Age (Information for Development Programme [InfoDev], 2004), or seem at least to be showing commitments in redressing the imbalances resulting from the low utilization of knowledge resources and ICT in the economy and governance (Joi, 2004). E-government is enabling government organizations to provide better services to their constituents. The ability to improve citizens' access to services has made e-government an attractive investment for government organizations, fueling worldwide implementation of such applications (Amaravadi, 2005; Scherlis & Eisenberg, 2003). As an emerging practice, e-government seeks to realize processes and structures for harnessing the potentialities of information and communication technologies at various levels of government and the public sector for the purpose of enhancing good governance. The key issues in transformation are the adoption and uptake of interoperable standards, the development of appropriate business models, the legal and policy frameworks that will facilitate integration, and governance arrangements that support both enterprise responsibilities and crossagency approaches and responsibilities.

On the other hand, in order to gain competitive advantage for their survival, most of the large companies in the private sector have been actively taking initiatives to adopt new management tools, techniques, and philosophies. Governments always follow suit. History shows that most of the management philosophies were first practiced in large companies; once they gained foot in the field, they became adopted in other sectors. Enterprise resource planning (ERP), business process reengineering (BPR), and total quality management (TQM) are indicative examples. Now comes the turn of knowledge management (KM). Governments are now realizing the importance of KM to their policy making and service delivery to the public, and some of the government departments are beginning to put KM high on their agenda.

Public administrations are knowledge-intensive organizations. They host a particularly high percentage of professionals and specialized staff who command important domains of knowledge. This is particularly the case in ministerial departments and in the judiciary and regulatory agencies. Many public organizations are chiefly "intelligence organizations" where human actors cooperate in order to store and process information and to produce information output for further use. If we ask the question, "How does the public administration know what it knows?" it becomes immediately evident that even though there is indeed a lot of knowledge in the organizations, it is not necessarily available anywhere, anytime for anybody. Not all parts of a public organization or even citizens can necessarily benefit from that knowledge. This means that a lot of "wheel reinventing" is going on in public administration.

Not only does the trend toward the knowledge society call for KM solutions (Davenport & Prusak, 1998; Metaxiotis, Ergazakis, & Psarras, 2005; Wiig, 1993) but also current e-government developments significantly influence the public sector. E-government implies fundamental knowledge redistribution and requires a careful rethinking of the management of information resources and knowledge bases.

Implementing a framework for the application of KM in e-government is a very challenging task as it requires many agencies, departments, and policy makers to coordinate their efforts in addition to preparing the technology and supporting the infrastructure—the soft infrastructure, meaning the laws, rules, and regulations that must be changed—in order to facilitate the development of both the new infrastructure and information and knowledge services. While most of the prior research studies have investigated the possible application of KM in the public sector, none have focused on the application of KM in e-government; this is done in this chapter. In this chapter, the author, recognizing the importance

of e-government and KM to devolve into the public administration sector, continues his previous research related to the application of KM in e-government (Metaxiotis & Psarras, 2005), discusses key issues, and presents a framework for the application of KM in e-government as a basis for future research.

## KNOWLEDGE MANAGEMENT IN E-GOVERNMENT: BACKGROUND

While literature on KM has been addressing issues, challenges, and opportunities for the private sector, little has been discussed for the public sector, and even less in e-government. Frank (2002) reported that several e-government initiatives in USA are using knowledge management principles as the way to knock down the stovepipes that keep government from operating as efficiently as it could....The idea of "collect once, use many" is a common theme in several of the 24 e-government initiatives led by the Office of Management and Budget...

Lenk (2003) presented typical situations in order to stress the specific significance of KM for the public sector.

- Clerical and professional work concerning individual cases to be decided upon
- Individual services to citizens
- Pursuit, by citizens or enterprises, of business or personal affairs involving public bodies
- Management of administrative work and organizations
- Policy formulation by ministerial departments and other public bodies
- Parliamentary work

Other researchers (Stracke, 2002; Bresciani, Donzelli, & Forte, 2003; Palkovits, Woitsch, & Karagiannis, 2003) recognized that in order to efficiently manage e-government evolution, it is

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