

Chapter XLVI

Government Innovation Through Knowledge Management

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INTRODUCTION

Contemporary organizations face the challenge of growing and advancing in a complex and changing environment (Johannessen, Olaisen, & Olsen, 2001; Malhotra, 2000). In order to accomplish this objective, private organizations continuously innovate to attract customers (Johannessen et al.). Competition has been accelerated by information technology, which allows the appearance of new business models, introducing new competitors in the business arena (Rayport, 2001). Under these circumstances, it appears that innovation is one of the most valuable activities for any organization (Nonaka, 1996). Furthermore, the management of intangible assets such as knowledge is one of the critical factors to promote innovation and sustainable competitive advantage (Davenport, 2001; De Long & Fahey, 2000; Malhotra; Nonaka).

The need for innovation in government does not respond directly to competition, but to several intertwined factors, such as the complexity of the problems being faced by government, the emergence of new organizational forms such as networks, the pressure to improve service to the

citizens, and the need to learn about new information technology.

Government faces complex social problems that require collaboration from different levels of government, private organizations, and non-profits (Snyder & de Souza Briggs, 2003; Snyder, Wenger, & de Souza Briggs, 2004). These new collaboration patterns challenge the traditional hierarchical government organization, deriving on the need to innovate in the structure of institutions (Gascó, 2004) and the creation of networks of public and/or private organizations needing to share what they know about a specific problem domain (Fountain, 2001a; Snyder & de Souza Briggs; Zhang, Cresswell, & Thompson, 2005). Innovation is also needed to respond to citizens demanding from government levels of service similar to the ones they are used to getting from private companies (Kannabiran, Xavier, & Anantharaaj, 2004). Additionally, movements such as the New Public Management or the Reinvention of Government are also adding pressure to improve these levels of service (Fountain, 2001b).

IT is being used to respond to these challenges, and public-sector organizations are using IT to

promote better relationships between government and citizens (Gil-García & Helbig, 2006; Heeks, 2006; Lee, Tan, & Trimi, 2005; Rocheleau, 2006). However, introducing IT in government poses the challenge of continuous learning and education of government employees, promoting also the need for sharing knowledge (Heeks, 2006). In several countries, additional pressures promoting knowledge management (KM) come from personnel turnover from retirements (Bontis, 2007).

In this way, promoting innovation and managing knowledge is becoming increasingly important for public agencies. As with many other public information technologies, knowledge management and knowledge management systems require the integration of technical design in a series of social processes and interactions among government, citizens, and private organizations, where knowledge is continuously created or transformed (Awad & Ghaziri, 2003; Barrett, Cappleman, Shoib, & Walsham, 2004; Fountain, 2001a).

The purpose of the present chapter is to discuss the process involved in managing knowledge and innovation in government, considering some critical factors in the process. To accomplish this objective, the chapter is organized in four different but conceptually interrelated sections. In the first of them, I describe some of the main concepts of knowledge management. The second section is a description of the knowledge management process, and the next one is a brief discussion about the impact of the four critical factors identified by Arthur Andersen and Company on the main stages in the KM process. The last sections of the chapter constitute a description of future trends and conclusions.

BACKGROUND: THE CONCEPT OF KNOWLEDGE AND KNOWLEDGE MANAGEMENT

Knowledge management is the activity of administering knowledge. De Long and Fahey (2000)

consider that the purpose of knowledge management “is to enhance organizational performance by explicitly designing and implementing tools, processes, systems, structures, and cultures to improve the creation, sharing and use of all types of knowledge that are critical for decision making.”

Although knowledge is an abstract concept difficult to define, there are two common ways of conceptualizing knowledge. Some experts consider knowledge as an accumulation of actionable information (Davenport, de Long, & Beers, 1998; Nonaka, 1994) or intellectual capital (Becerra-Fernandez, Gonzalez, & Sabherwal, 2004; Bontis, 2007). Some others consider knowledge as a dimension of practice (Black, Carlile, & Repenning, 2004; Levina & Vaast, 2005; Walsham, 2005).

In this way, knowledge management projects take two different forms, characterized as person to person and person to document, responding to each of these views (Dennis & Vessey, 2005). Although both perspectives recognize that knowledge resides in people, person-to-document projects consider knowledge as a codifiable asset to manage. Examples of person-to-document projects include knowledge repositories, decision support systems, expert systems, data warehouses, or executive information systems. The federal Mexican government, for instance, maintains a public repository of government procedures known as *Tramitanet* (<http://www.tramitanet.gob.mx>). The e-Mexico program, on the other hand, has invested part of its resources to create knowledge portals in areas such as education, health, economy, and government (Luna-Reyes, Gil-García, & Cruz, 2006).

Person-to-person projects assume that knowledge is embedded in practice, and they look to promote innovation and knowledge sharing by establishing means to connect people. Knowledge directories, groupware, customer relationship management (CRM), workflow management tools, and communities of practice are examples of this kind of projects. In Argentina, for instance,

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