Chapter 33 Towards E-Government Information Platforms for Enterprise 2.0

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ABSTRACT

Enterprise 2.0 aims to help employees, customers, and suppliers collaborate, share, and organize information. As governments are relevant partners for enterprises (legislation, contracts, etc.) e-government platforms need to be ready for Enterprise 2.0 to what concerns e-government interactions. The public sector holds huge quantities of information and just a small proportion is relevant to each enterprise. Enterprises should only be confronted with relevant information and not flooded with lots of data. This implies data organization with semantic description and services using open standards. The goal is to build a durable information infrastructure for government that can be readily accessed by enterprises. The authors propose a conceptual model for government information provisioning. The rationale for this proposal is to motivate the creation of durable, standard, and open government information infrastructures. The model acquires information from natural language documents and represents it using ontology. A proof-of-concept prototype and its preliminary results are presented.

INTRODUCTION

Enterprise 2.0 aims to help employees, customers and suppliers collaborate, share, and organize information. In McAfee (2006) Enterprise 2.0 was defined as "the use of emergent social software platforms within companies, or between compa-

DOI: 10.4018/978-1-4666-4373-4.ch033

nies and their partners or customers". The idea of Enterprise 2.0 has evolved and is now assumed that important opportunities exist inside and beyond corporate walls, including all stakeholders: businesses, clients, government (Chang & Kannan, 2008).

Government influences the others stakeholders through regulation, taxation, defining of the conditions under which firms compete, and also as a client. Carroll and Buchholtz (2011, p. 347) uses the US federal government's 2011 budget, \$3.8 trillion, to illustrate the magnitude of the effect government has on all institutions in society. Adding to this is the influence of state and local governments. This makes governments a very relevant partner for enterprises and thus e-government platforms need to be ready for Enterprise 2.0.

Osimo (2008) acknowledges that governments are knowledge-intensive organizations, that they will become increasingly so in the future and that knowledge management is key to improving the efficiency and effectiveness of government. However, sharing data online is not sufficient to effectively share knowledge. It is necessary to organize the information, provide a semantic description and use open standards that will help information consumers to absorb, analyze, and interpret it. The real opportunity is not the use of temporary tools but the building of a more durable infrastructure for participatory democracy (Leighninger, 2011).

An issue highlighted by McAfee (2006) is the failing practice of knowledge management. He discusses that information technologies used for communication are either channels (e.g. email and instant messaging,) or platforms (e.g. intranets and portals). These technologies are radically different in that channels allow information to be created by anyone but consumed by very few, and platforms contain information that is available to the whole organization and generated by small groups. There is nothing in between. Also, Cook (2008) observes that, with these technologies, the common approach of feeding information to the knowledge management platform is to ask information from people throughout the company and put into a central system for everyone else to access. He further elaborates on this topic writing that this approach is inappropriate: "this method of capturing information neither fits with the way most knowledge workers operate nor reflects what they produce. No wonder then that those trying to locate knowledge within an organization find it so difficult, and when they do find it more often than not it rarely provides the answer to their questions..."

A study requested by the Institute for Prospective Technological Studies, a scientific institute of the European Commission's Joint Research Centre, took the long view to provide input for e-government longer-term strategic planning in the European (Frissen et al., 2007). It did so by identifying emerging trends and opportunities for enhancing governments and governance in 2020. Considering a wide array of all scenarios, the authors of the study foresee empowerment (of citizen and enterprises) as the trend to have the most significant impact in the coming decades. Consequently, "Governments will have to operate in more open and networked constellations with other stakeholders. They will need to ... operate in a flexible, not overtly bureaucratic way..." (Frissen et al., 2007, p. 109).

This perspective of the near future - where concerns as information sharing using open machine readable formats should be addressed - is not exclusive to European Union. The 2010 edition of the United Nations E-Government Survey (UN, 2010) shares a future view that, although not assumed as the United Nations official view, shares the same approach. The idea of "government 2.0" associated with the use of social networks by the public sector should assume a broader definition government should be viewed as a platform. From this perspective, government should become a provider of data and services that others can also exploit as they see fit, allowing third parties to innovate by building upon government data and applications

The present chapter discusses how government information can be made available taking into consideration government's particularities and proposes a conceptual model for government information provisioning applications. The rationale for a conceptual model proposal is to motivate a framework for application development that fa-

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