

## Chapter 17

# The Paradox of the Interactive Web in the U.S. Public Sector

**Ines A. Mergel**  
Syracuse University, USA

**Charles M. Schweik**  
University of Massachusetts, USA

### ABSTRACT

*Web 2.0 technologies—what we prefer to call the “Interactive Web”—have become frequently used tools in the public sector. These tools include social networking applications such as Twitter, Facebook, Wikis, or RSS feeds. Public sector agencies are using blogs to communicate information on public hearings, wikis to coordinate work or share expertise and intelligence information, and social networking sites to communicate with citizens. These kinds of applications create a public sector paradox. On the one hand, they have the potential to create opportunities related to key public sector issues of transparency, accountability, communication and collaboration, and to promote deeper levels of civic engagement. On the other hand, information flow within government, across government agencies, and between government and the public is often highly restricted through regulations and specific reporting structures, and therefore usually delayed through the filter of bureaucratic constraints. The authors provide an overview of drivers encouraging the adoption of Interactive Web applications, but also transformative organizational, technological, and informational challenges ahead that might lead to resistance to that change.*

### INTRODUCTION

So called “Web 2.0” applications, what we call the “Interactive Web,” are new types of information production and sharing tools that are emerging in the form of grassroots developments in the public sector—mainly driven by citizens. These differ

from traditional e-government technologies in that these technologies allow for two-way contributions and interactions among all stakeholders and are enabling a high degree of collaborative knowledge creation and sharing (O’Reilly, 2005; Chang & Kannan, 2008). They are web database-driven “Interactive Web” applications, often built upon platforms supported by private sector firms. Among these tools are for example the

DOI: 10.4018/978-1-4666-0071-3.ch017

photo sharing website Flickr (see the Library of Congress Flickr account), video publication sites like YouTube, or Vimeo, social networking sites, such as Facebook or LinkedIn, microblogging tools such as Twitter, forecasting and prediction markets such as Intrade.com, and also collaborative and peer production sites such as Wikipedia or Weblogs (Castelli, 2008; Noveck, 2009). These tools have the capability to integrate information and opinions from citizens into the policy-making process in innovative ways that might challenge the current communication strategy of public officials. As an example, Obama's first online town hall meeting showed that citizens are actively using Interactive Web tools. Citizens submitted more than 140,000 questions to the Whitehouse blog "Open for Questions" and in addition were able to participate countrywide in the live-streamed online coverage on YouTube and Facebook.

Especially during Obama's presidential campaign, these tools have shown that a traditional top-down approach for participation and content creation is no longer needed – political volunteers can now self-organize, with the support of a knowledgeable campaign team and the use of collaborative social media tools (Eggers & Dovel, 2008; Carpenter, 2009). The success of the so-called Web 2.0 campaign is attributed to the bottom-up mobilization and the willingness of the public to provide knowledge and insights with a minimum of regulatory and bureaucratic control mechanism.

In this chapter we aim to highlight the potentially transformative effects of the emerging Interactive Web phenomenon on the public sector. The chapter is organized as follows. We will first present our definition of the Interactive Web and an overview of the key concepts underlying Interactive Web applications that might support the adoption of these technologies in the public sector. We will then highlight prominent examples of Interactive Web applications in the public sector and then discuss four main drivers and also challenges that are involved in Interactive Web

deployment. Here we focus more specifically on the organizational, informational and technical challenges that may occur.

## **INTRODUCING THE INTERACTIVE WEB**

For the purpose of this chapter, we rely on O'Reilly's seminal definition of Web 2.0 technologies as: "Web 2.0 is a set of economic, social and technological trends, that collectively form the basis for the next generation of the Internet—a more mature, distinct medium characterized by user participation, openness, and network effects." (O'Reilly, 2005). This term indicates the changing trends in the use of World Wide Web technology and web design that aims to enhance creativity, secure information sharing, collaboration and socializing on the web. Importantly, the key technological difference to the so-called first generation of websites is that Web 2.0 technologies allow users to actively create content and directly interact with each other, instead of a one-directional content dissemination, because their content reside not in static web pages but through dynamic web-database applications. The sociological difference to Web 1.0 is that users are at the center of all activities and Web 2.0 technologies allow for bi-directional connections with the site creator and other users generating content online (Cormode & Krishnamurthy, 2008). As applications are being adopted in the public sector, the social computing component including user-generated content creation might have hugely disruptive effects on Government and its standard operating procedures (McCarthy, 2007). However, in our view, "Web 2.0" is too generic and lacks meaning. Therefore, we introduce the term the "Interactive Web" as a new term to describe the use of web-database driven social networking platforms and bidirectional web services, that allow free exchange and creation of web content independent from a single authority. The key

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/paradox-interactive-web-public-sector/61864](http://www.igi-global.com/chapter/paradox-interactive-web-public-sector/61864)

## Related Content

---

### Can IT Innovation become a Tool against Fiscal Crisis?: Findings from Europe

Leonidas G. Anthopoulos and Panagiotis Siozos (2015). *International Journal of Public Administration in the Digital Age* (pp. 39-55).

[www.irma-international.org/article/can-it-innovation-become-a-tool-against-fiscal-crisis/121523](http://www.irma-international.org/article/can-it-innovation-become-a-tool-against-fiscal-crisis/121523)

### Understanding Nonprofit Organizations' Use of Social Networking Sites: An Examination of Management Factors

Qian Huand Wanzhu Shi (2017). *International Journal of Public Administration in the Digital Age* (pp. 19-34).

[www.irma-international.org/article/understanding-nonprofit-organizations-use-of-social-networking-sites/164955](http://www.irma-international.org/article/understanding-nonprofit-organizations-use-of-social-networking-sites/164955)

### Public Policies for Providing Cloud Computing Services to SMEs of Latin America

Mohd Nayyer Rahman and Badar Alam Iqbal (2019). *Advanced Methodologies and Technologies in Government and Society* (pp. 365-376).

[www.irma-international.org/chapter/public-policies-for-providing-cloud-computing-services-to-smes-of-latin-america/215876](http://www.irma-international.org/chapter/public-policies-for-providing-cloud-computing-services-to-smes-of-latin-america/215876)

### The Relationship Among Military Expenditure, High Technological Product Exports, and Economic Growth: An Econometric Analysis for Selected Economies

Sevgi Sezer (2021). *Research Anthology on Military and Defense Applications, Utilization, Education, and Ethics* (pp. 624-645).

[www.irma-international.org/chapter/the-relationship-among-military-expenditure-high-technological-product-exports-and-economic-growth/284341](http://www.irma-international.org/chapter/the-relationship-among-military-expenditure-high-technological-product-exports-and-economic-growth/284341)

### Implementation of E-Government and Reforms in Public Administrations in Crisis Periods: A Scientometrics Approach

Laura Alcaide Muñoz and Raquel Garde Sánchez (2015). *International Journal of Public Administration in the Digital Age* (pp. 1-23).

[www.irma-international.org/article/implementation-of-e-government-and-reforms-in-public-administrations-in-crisis-periods/121521](http://www.irma-international.org/article/implementation-of-e-government-and-reforms-in-public-administrations-in-crisis-periods/121521)