Government 2.0—Fact or Fiction?

by Daniel Mintz

In spring 2006, after becoming chief information officer at the U.S. Department of Transportation (DOT), I created a one-page, bulleted list of priorities and presented it in many forums inside and outside of the department. Various DOT stakeholders gave me feedback on these priorities, which I used for, among other things, modifying the list itself.

The original version of my fifth bullet (added in 2007), Government 2.0, said: “Exchange information in a consistent format and easy-to-access manner with key external and internal stakeholders, in particular the American public.” During one of my presentations, a senior official said they really liked the priority list, but could I change the beginning of the Government 2.0 bullet to “Exchange accurate information …” My response was that I was open to suggestions, but that the resulting bullet would be a lie. That is, the entire nature of the value of Government 2.0, in some sense, contradicts concerns over predictability, consistency, and accuracy for which we normally strive. In fact, the implications of Government 2.0—or, as it is sometimes called, Web 2.0—are more profound, and it will inevitably influence government, whether we plan for it or not.

The problems with my initial version of Government 2.0 were much broader than just the decision to insert or not insert the word “accurate.” Government 2.0 represents a better and more robust way of achieving timely and creative interaction with our stakeholders, in particular the American public. The federal government is using it more every day. The implementation of Government 2.0 raises numerous policy questions that will need to be addressed to take full advantage of the available capabilities.

Challenges

At present, most government agencies—as they grapple with ways to take advantage of the capabilities of this next generation of Internet—focus on the immediate problems it poses: security, privacy, and policy implications. The next administration will face two much larger challenges—we hope with the vision, focus, and stamina needed to address them—one, how best to build a government organization that can tolerate failure, at least in small doses, and second, how to make a government agency or department organizationally.

The second generation of Web access will change the way government delivers services and its relationship with the American public.
agile. Answering the first challenge will be necessary to start to take advantage of Government 2.0 capabilities. Answering the second will be required to maximize that utilization. This article does not provide answers to the two challenges, which would take too long and is outside its scope, but it does explain why those challenges are relevant and important.

**Web 2.0**

All the current candidates for president are using Web 2.0 capabilities, which provide the foundation for Government 2.0 efforts, as an integral part of their campaigns—including Web pages for online communication, Facebook and MySpace pages for social networking, and YouTube to hold presidential debates—much of which would not have been imagined during the last presidential contest a mere four years ago. The person elected from this group is likely to expect the same or more from government. Certainly, citizens drawn into the process by such campaign events will expect the same or more. Government 2.0 is fact already—and potentially transformational if it becomes a priority for the next administration.

**Government 2.0**

Historically (before the Internet), finding an item, or even the existence of an item, that met a defined set of requirements took significant amounts of time and (potentially) money. Researching a topic required physical effort. In many cases, such research would be impractical under time or cost constraints.

The first generation of the Web had people or companies creating content that others could access. Although this capability was powerful and useful, the information provided on the Web was static and passive. Once placed on the Web, it remained unchanged—unless and until the original provider updated it.

Government 2.0 is derived from the more general term, Web 2.0, which represents a second generation of Web usage. This second generation access differs greatly in at least three ways: it is participatory, pervasive, and integrated:

- **Participatory.** The original passive Internet—where a provider placed information on a Web page and a user read it—has changed. Users make their own content and, in the case of artificial worlds, become part of the Internet experience directly.
- **Pervasive.** Internet access has grown beyond the computer on a desk—to cell phones, cars, and even kitchen appliances. Hotels and coffee shops—and a growing number of other public and private spaces almost anywhere—feature wireless access.
- **Integrated.** More and more “things” are being connected to the Internet, from security access devices transmitting their status, to home security systems, to data devices implanted in a highway sending signals on the status of the road. We are entering a world where everything is connected to everything else.

**Wikipedia and More**

The initial impacts are felt in a variety of ways. For example, Web content is not controlled now by the original creator, who, over time, has become less and less clear. One of the best known examples of this is Wikipedia, which has become the largest single collection of information in existence. A small staff is responsible for coordinating all Wikipedia activities, but almost all of the content is provided by users, and most of the editing is accomplished by a coterie of volunteers.

The federal government has a variety of wikis. For example, the director of national intelligence has created Intellipedia, which is being used to collect information across a variety of federal intelligence agencies. The State Department has created Diplopedia, which allows its employees to share information about topics and experiences around the world.

The value of such wikis is that they allow groups of people who otherwise would have only limited contact with each other to pool their knowledge in a single repository available to all within that community. It not only increases information sharing, but also a sense of collegiality and partnership that otherwise might never arise.

Web 2.0, more recently, has taken an additional step—moving to a participatory model. Virtual worlds, the three-dimensional (3D) Internet, provide the capability to create an artificial world containing representa-
tions of real people called avatars. People are able to traverse such worlds, interacting with other people and obtaining information interactively.

One of the leading commercial examples is Second Life, where people or organizations are able to create islands where avatars (people) can congregate for social or business reasons. Second Life has become an active community, where information and services are bought and sold, social relationships thrive, training is conducted, and communities of interest are created.

A variety of government agencies have already created content on their own islands within Second Life. The National Oceanographic and Atmospheric Administration has a presence where it discusses issues about weather and other aspects of its mission. The State Department has an embassy where it recently sponsored a jazz festival for Second Life participants. The Centers for Disease Control and Prevention uses its Second Life presence to provide health-related information.

New Challenges

The federal government faces a number of challenges that private industry does not when working with these kinds of public-facing Internet activities. First is the problem noted above—the desire that all published information produced by a government agency be “accurate.” Normally, wikis will undergo a continuous editing process, which allows them to approach “accuracy” over time, but they do not always start that way.

The second is a related problem, that any material a federal employee publishes can be taken as establishing or implying the establishment of formal policy. As anyone who has had their name appear in the press or has had to testify before the Congress will tell you, even offhand remarks and e-mails can be used in unexpected ways. A wiki or encounter in a virtual world is an “e-mail writ large.” Third, when the creation and maintenance of these sites crosses organizational boundaries—including federal, state, and local governments, as well as private stakeholders—responsibilities for the level of accuracy can become complex and unclear.

One final challenge when using 3D Internet sites like Second Life (as with any externally hosted solution) is a government agency’s inability to control what is happening anywhere in that virtual world—let alone on their specific island. Sometimes, what goes on can be embarrassing.

The Larger Context

Government 2.0 is not an isolated phenomenon but the next step in a continuum the Internet is forcing on all organizations as it continues to have an increasingly disruptive impact.

Cost

Economists use the term “transaction” to indicate the cost of an activity. By “cost,” they mean the resources required, whether money or a person’s time, to achieve the transaction. Not only does an organization change its behavior depending on transaction costs, but its structure.

In Wikinomics, Don Tapscott and Anthony Williams discuss the findings of Ronald Coase, a British researcher, who looked at why corporations existed and grew large. The reason Coase gave was that the cost of performing a transaction inside a corporation tended to be less expensive for many activities than for a transaction outside for that same activity. Thus, corporations over time acquired the activities that could be done less expensively in that fashion.

Measuring Results

For many years, computer technology did not have an impact on these inside and outside costs. The focus of information technology (IT) organizations and the organizations they supported, therefore, was optimizing the use of the computer technology. Thus, organizations focused on cost reduction, computer consolidation, centralized purchasing to achieve economies of scale, and, more recently, the creation of shared services throughout or across organizations (e-government initiatives, for example). The next logical step for government is to start focusing on how to measure and maximize the resulting programs rather than looking at how well the infrastructure supports them.

However, the Internet has changed this situation for the reasons noted. Now, the cost of performing a transaction may not be more outside an organization. For many larger organizations, the cost may be lower for increasing numbers and kinds of transactions outside rather than inside.

This is already having a dramatic impact on private-sector organizations. Companies are increasing the use of external Internet-connected resources, including private individuals, to provide advertising advice, technical input, and even research and development capabilities.
that once would have been provided internally or from well-established and long-term partners.

Companies that learn to be organizationally “agile”—that can make internal changes to move specific functions outside the company and can train or hire staff members who understand how to use these new and changing relationships—will have a much higher chance of survival and success. The companies that are not agile run the risk of being driven out of business because of high-cost structures or their inability to move quickly enough to respond to changes in the marketplace.

**Human Capital Implications**

The impact on personnel will be significant. Capabilities required to define the business and contractual relationships and manage partnerships differ greatly from those for managing a hierarchical relationship. This change will require retraining or hiring new personnel who have these skills and capabilities.

Senior management will support these changes to obtain greater visibility into their organization. Junior staff members can more immediately impact policies and interface with the senior staff. Middle management will be threatened by these changes because its historic importance was often based on control of information up and down the organization.

Government will not be immune. Its private-sector partners will participate to stay in business; they will want to interface with the government in the same fashion. Young employees of the government will regard these capabilities as second nature; they will expect comparable capabilities in government—or they will look elsewhere for work.

**Leadership Needed**

We thus return to our initial challenges. Government 2.0 is in its infancy. No one knows what will work and what will fail. By its varied nature, these new Internet-enabled technologies allow unpredictable interactions between unexpected stakeholders producing unplanned results, none of which offer comfort to the typical government agency. To participate, government agencies will need to define small pilot projects and give the staff flexibility to experiment. In our current “blame first, ask questions later” environment, it will take strong leadership for this to occur.

The short-term advances of Government 2.0 are dramatic. The use of Internet-based information sharing and social networking has increased the opportunity to optimize the use of IT. Decreasing the costs of business transactions becomes possible. However, the real impact is likely to be organizational in nature—turning inside out the classical approach to organization structures and business relationships.

The federal government has struggled to make progress on the current set of e-government initiatives. It is a tribute to the Office of Management and Budget and the agencies that believe in the programs that so much has been done. The political and cultural hurdles of Government 2.0 will be more difficult to overcome, impacting more people more significantly. To have the best, most responsive government, we must tackle these issues.

**Conclusion**

There is argument about the date that Radio 2.0 was invented. Most of the important inventions relating to Radio 2.0 occurred in the 1920s. In its initial years, Radio 2.0 was treated the same as Radio 1.0—broadcasting stories and entertainment, essentially unchanged—even with the addition of video to Radio 2.0.

Over time, everyone realized that Radio 2.0, or television, was not radio with pictures, but something entirely different. Television had a different relationship to its viewers, with a different method of participation and experience. None of that was obvious when it began. Similarly, what Government 2.0 will ultimately become and how it will affect government is only dimly understood today. It is likely to have a major impact on how government services are delivered, how government is organized, and ultimately how it relates to and with the American public.

Government 2.0 is a fact, not fiction. It will have an increasing presence in the next administration and will affect us all in ways barely imagined today.

**References**