eGovernment Maturity

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As we review our progress in eGovernment, we have much of which to be proud. Three or four years ago, what passed for eGovernment was not much more than a collection of agency web sites with individual designs that gave some information about the agency and, perhaps, contained some forms that could be downloaded, printed out, and mailed in. Today our web presence consists of numerous, transaction-enabled services with a common look and feel. Given our progress, the question naturally arises as to where we go from here. No doubt, in three or four years, our current situation will look as immature as our earlier efforts appear today.

One tool we can use to determine the road ahead is called a *maturity model*. A maturity model is a method for judging the maturity of the processes of an organization and for identifying the key practices that are required to increase the maturity of these processes. Maturity models exist for a number of processes. One of the most well known is the Capability Maturity Model (CMM) for software development from the Software Engineering Institute at Carnegie Mellon University.

An eGovernment maturity model provides us with guidance on how to gain control of our processes for developing and maintaining eGovernment services and how to evolve toward a culture of excellence in providing and managing eGovernment. A maturity model can guide us in selecting process improvement strategies by determining current process maturity and identifying the few issues that are most critical to eGovernment quality and process improvement. By focusing on a limited set of activities and working aggressively to achieve them, we can steadily improve our organization-wide eGovernment processes and enable continuous and lasting gains in our eGovernment capabilities.

Maturity models can be very involved and take years to master. The CMM referred to earlier is one such model. However, in its simplest form, a maturity model is an enumeration of attributes for a sequence of maturity levels. For good or bad, no well-developed maturity models for eGovernment exist; the best available models are simple, but still useful for understanding some key facts about eGovernment.

Table 1: eGovernment Maturity Model

Attributes	Level 1: Simple Website	Level 2: Online Government	Level 3: Integrated Government	Level 4: Transformed Government
Attributes	Static pages Lists of departments and contact information Links to separate departments Policy statements Downloadable forms and documents Access primarily via telephone No site reporting, tracking or analysis	Departmental focus Online forms for applications and registrations Online payment Request information or service via email Respond to online surveys Limited online help, FAQs, resolution services Basic account inquiry Basic benefits enrollment	End-to-end electronic transactions Automated RFP and procurement process Cross-departmental sharing of information Automated advice and problem resolution data Limited configuration capabilities Self-service HR administration Web-based training	Community-centric, integrated, intergovernmental processes Common platform for targeting content through any channel/touch point Internal/external business process integration and collaboration (planning, workflow, design) Constituent case tracking to ensure resolution and satisfaction Highly configurable HR (benefits, career planning, development training)

Table 1 shows an eGovernment maturity model put together by Broadvision. While we might quibble with some of the attributes of eGovernment at various levels in this particular model, the overall model is probably a good consensus of where eGovernment is headed and thus can highlight a path for us to follow as we move forward.

In the model in Table 1, the first level of maturity is a **simple website**. We've seen these; in fact, we used to build them. A simple web site is a static collection of pages, focused on the department or division, with a few downloadable forms and some phone numbers. While this level represents a start, there is little there that really changes the nature of a citizen or businesses interaction with government.

The second level is called **online government**. The biggest difference between a simple website and online government is the addition of transaction based services in an effort to provide real value to the customer. The focus is on the department and its business. A number of online interaction mechanisms, such as email, web based forms, and FAQs, are used to elicit information from the user and give help and feedback.

The third level is **integrated government**. In integrated government, we have moved away from individual, department-based transactions and toward interactions that bring multiple processes together in a meaningful way. One of the key points is end-to-end electronic transactions, meaning that the web site is not merely a high tech patina on the old process, but fully integrated into the back office systems and processes.

The fourth level in the maturity model is labeled **transformed government**. I think the name is perhaps a little unfortunate, but the idea is that to operate at this level, the eGovernment processes are operating in ways that change the very nature of how government works. In the fourth level of eGovernment maturity, the services offered are built from the citizen's viewpoint to service individual requirements and needs. The opportunities for this sort of development are many and include intention base services such as "Moving to Utah" or "Starting a Business in Utah" as well as services that help a given segment of the community, such as HIV positive citizens. In each of these instances, the organization of government has been subjugated to the service need of the citizen.

Level 4: An Example

For an example of what a level 4 service might look like, imagine a couple--John and Mary--starting a family business. They know that there are a lot of requirements that government places on anyone who starts a business. The problem is that they do not know what these requirements are, let alone have time to meet all of them. One evening after discussing their plans around the dinner table, John and Mary go to their computer and visit the www.utah.gov web site. There they select a life event consistent with their situation, "Starting a Business," and fill out a series of easy to understand screens that gather all the information necessary to satisfy government's demands associated with starting a business in Utah.

After going through this simple process, the information that John and Mary entered is used to register their business name with the Department of Commerce, get an EIN from the IRS, notify the Tax Commission that they need a sales tax number, sign them up for a business license with their city, set up their unemployment insurance account at the Department of Workforce Services and apprise them of any licensing requirements. Because of the design of the www.utah.gov portal, Mary and John are able complete this transaction in a secure environment choosing from a variety of payment methods.   In a few minutes at home, they have taken care of tasks that would have taken days of driving from place to place, filling out the same information on numerous forms. This is a completely new way of interacting with government.   They interact with government in an integrated fashion, "online, not in line," 24 hours a day, seven days a week from the convenience of their homes.

One of the things I like about this example is that it extends beyond state government to include services offered by local government and even the federal government. One day these services may even extend to include private services such as banks or real estate. At the end of the day, John and Mary do not really care that they are interacting with numerous government entities or even the private sector; they just care about getting their work done as quickly as they can.

Utah's eGovernment Maturity

Assessing where utah.gov is today, most would conclude that we are very solidly at level two on the maturity model given in

Table 1. Certainly more can be done in terms of online government, but we have made great progress and we have processes in place to ensure future progress in this area. As we look at where the maturity model tells us we need to go, toward *integrated* and *transformed government*, we can see that a key feature difference between level two and level three is the need for cooperation and development across agencies, branches of government, and even levels of government. The key challenge confronting government is how to make that happen. Online government is about each agency doing their business online. Integrated government is about removing those organizational boundaries.

From the citizen's perspective, this certainly makes sense. Citizens don't know or care about how government is organized. There's no rhyme or reason, to them, about why motor vehicle registration is a Tax Commission function and driver licensing is a Public Safety function. For the most part, they just want to conclude their business with the government as quickly and painlessly as possible. Integrated government moves us in that direction.

Let's return to the story of John and Mary who have just started a business. The vision we painted was that they would come to one place and conclude their business through a single set of forms, getting service from numerous state agencies as well as the federal and local government in an integrated fashion. This precisely illustrates the vision of integrated government. However, from our perspective, it raises several important questions:

- Who will be responsible for building and maintaining this integrated service? Certainly each agency can be responsible for their piece, but who will be responsible for the whole?
- Who will pay for it? Many of the pieces have fees associated with them, but there's not overall fee or appropriation that currently covers the integrated service.
- How should government be rearranged to accommodate such services and to what extent?
- After such a service is built, who is responsible for its upkeep and enhancements?

- How will we regulate the new services? Who is responsible for rule making, for example, when a service is created and maintained by various agencies and levels of government?
- Will the integration be shallow or deep. That is, do we merely build a set of web forms that feed the data to a dozen or more different data sets and business processes, or do we integrate the data and processes?

Each of these questions raise important issues that must be solved for us to move beyond where we are now and to the next level of eGovernment. In some ways, what we've done so far will seem far easier than the organizational and financial challenges that we will face in moving to more integrated government.

To mature, we must be driven by an outside-in look at government. This means that we must view ourselves as those who interact with us view us and provide services that are structured accordingly. This is true in all four arenas of eGovernment: Government to Citizen, Government to Business, Government to Employee, and Government to Government. Each of these areas are important facets of the eGovernment experience and have unique requirements.

Our example with John and Mary serves to illustrate how difficult and pervasive these challenges can be. Suppose that John and Mary register their business online at utah.gov using the integrated business registration service. Ten months later, they've expanded to the point that they need a new office and decide to move. John sees the notification from the Department of Commerce that its time for his annual business renewal (hopefully delivered by email) and phones in to notify the Department of Commerce of his address change. The question for government is: where do his tax forms get sent? To his old address or to his new address?

The problems highlighted by this illustration stem from the fact that citizens will interact with government through a variety of channels: email, web, phone, kiosk, physical mail, and in person. They expect that each of these channels feeds the same processes, systems, and databases. Further, they expect that when they tell us something they should only have to tell us once.

To further underscore this last point, let me relate a story I recently heard. A Utah citizen goes into the Driver's License division to renew their driver's license. They've moved since they'd last renewed and failed to tell the Department of Public Safety. After renewing, they receive a ten minute lecture about how the were required to let DPS know about a change of address. The natural reaction is: I told the Tax Commission every year, why do I have to tell you too?

From these examples, we see that an outside-in look at government is enabled by a single view of the citizen. Many businesses have created systems that can track all the interactions of a customer with a business regardless of the channel they use to interact with the business. So it will be with government as we move to an integrated and ultimately transformed government.

Moving Forward

The questions raised by integrated government are not about technology. The technology needed to make this vision a reality is all available and ready to use. The issues that keep us from realizing the vision involve laws, rules, organization, governance, finance, appropriations, and culture. The challenge facing our government is how do we confront those issues and move forward with eGovernment.

We cannot solve these problems on an *ad hoc* basis time after time. There are literally hundreds of integrated services that need to be built. They won't be static, but will change over time and eventually be retired and be replaced by others. We will not succeed if we have to solve these problems anew each time we confront them. What is needed is a general model for confronting these issues.

The Governor has formed a task force of Executive Directors, product managers, and IT directors from each agency to confront these issues and build a general model for moving to the next level of eGovernment maturity. That process will return to the Governor a set of options for solving these problems that will allow the Governor to choose our path for moving forward.