Simple.gov

It's Time to Change the Story

A Strategy Paper from the Center for Digital Government

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I Introduction: Simply More

"I believe so much in the future that I invest exclusively in 'futures.' In fact, you can't invest in 'pasts,' they don't offer that. I've checked."

– Michael Scott, NBC's "The Office" [1]

The future is simple. Not simplistic or simple-minded but sophisticated, elegant and straightforward. *Simple.gov* is doing for government what the iPod has done for personal music devices. And its time has come because it is the best way forward during a time of unprecedented change.

Simple is when the engineering is so refined, the ideas so powerful, and the interface so intuitive that using it is a joy. Simple is efficient. Simple is innovative. It evokes responses such as, "Wow, why didn't I think of that?" Simple masks complexity and shuns the unnecessary.

It is not:
- Simplistic
- For simpletons
- Simple-minded
- "The Simple Life" of reality TV infamy

It is:
- Simplified
- Simplicity itself
- Simple to use
- What the TV ads for the office supply store mean when they offer the "Easy Button"

Government is not simple. But it *should* be. It *can* be. It *will* be. The focus here is on how and when. Simplicity matters now because of the confluence and convergence of opportunities. At its core, *Simple.gov* is about the "M's"— the Moment, the Mechanism and the Meaning (or what it all means to "Me").

The opportunity of the moment is always present after elections and especially after those resulting in shifts of power. The 2006 elections just happen to have come at a time that is ripe with opportunities masquerading as challenges. Balances of power are shifting about the globe. Empires are rising, falling and morphing. Governments are being squeezed and pushed between many vices and tides:

- Change and intransigence
- Bureaucracy and entrepreneurialism
- Centralization and distributed work, workers and systems
- More for less
- More needs than money
- The will to criticize but a shortage of problem solvers
- Old politics and anecdotes versus results and data-driven decision-making
- Debt, deficits and tax cuts
- Swapping labor for capital
- Transition costs and meeting current obligations
- Rules and responsive customer service
- Security, freedom and transparency
- Media-driven elections and partisanship and a rising desire for independent, practical solutions to real problems.

The oxymoron-laden, cognitively-dissonant, death-of-irony situation facing government has led some to despair. We think it is a time for hope. So many obstacles and challenges make us afraid of making wrong choices, taking missteps and stumbling just when we need change the most. The Moment demands that we stop looking down to avoid tripping and start looking up to find a clearer path. We think that moment is now.

One reason *now* matters is rooted in the second "M": Mechanism. Technology — the Mechanism, the mechanism of modernity which is so ubiquitous in our time that we take it for granted rather than taking advantage of it — is entering another quickening phase. The pace and scope of change and invention are accelerating. The powerful, practiced and practical applications of these Mechanisms are well within reach —— and more useable by more people and institutions than any other dominant mechanism in history since sticks, rocks and fire. The Mechanisms are democratizing and dispersing the tools of learning, communication, work and collaboration that underlie acts of creating and spreading ideas, theories, innovation, systems, software, content, data, rules, formulas, algorithms, processes and communities of dreamers and doers. The inevitable impact of these changes can already be seen and will grow to remake societies and cultures. Government will change

with them, especially in relation to advancements in information technology, artificial intelligence and robotics. Will that change be guided by knowledgeable policymakers, with the benefits harvested and redeployed to a higher purpose? Or will change be resisted, stifled, starved, ignored and left to happen *to* government, as the Mechanism makes much of government obsolete and unable to work as the world works?

That leaves the final "M": Meaning. In the short term, we ask, "What's in it for me and my community?" While we may despair in our own short-term narcissism and the all-politics-is-pork implications of the question, we can use the parochial and personal as leverage for a greater good. The world has long centered on the center — not the person, but where many persons lived. These centers were about place. The important centers were: proximity and concentration, culture, production and the application of knowledge through place-based mechanisms. The new centers are either inherently placeless or made placeless by Mechanism: excellence, integration, brokering, discovery, creativity, global scale and service. This means that the person who can do and participate in these things becomes more important than where they are or where they physically gather. Place becomes places where many "Me's" can use a Moment and a Mechanism to make a contribution and a difference. Moreover, the very Mechanisms that make the many "Me's" more important allow us to be treated more personally, and less like part of the crowd. We all want to be treated like a valued customer, a member, a returning friend, a known and trusted partner, a part of the family and an individual with our own preferences. Now we can be recognized on that level, and many private entities are using this opportunity to extend their ability to serve and their ability to manipulate those they serve (also known as niche marketing).

Will government take the hoped-for path of more personal service and less manipulation or the least favorable path of little personal service and greater manipulation? We know what the angels of our better "Me" would say. Besides the moral imperative, the axiom that good policy makes good politics applies here. Good and simple policy means a government that is more about me, but in the interest of all of us. The choice for government leaders is whether this will happen *to* government by blunt instrument, or be done *by* government, with more precision through our venerated processes and the art of governing.

Simple.gov is the Center for Digital Government's summary idea for taking the three M's and using them to make government simple, in the best sense of the word. This paper is a framework for moving government in that direction. We begin that framework with another M: More — what more is needed to get to simple.

A Dozen More: The Moment, the Mechanism and the Meaning

The closing years of the first decade of the 21st century are likely to be characterized by equal parts opportunity and peril. They may also represent the last best chance to use a number of temporary advantages to redress structural or systemic problems in ways that can only be done during a disruptive moment.

Each of the 12 "Mores" below are followed by a question that recognizes past achievement while pushing toward a simple(r) future.

A. THE MOMENT: WHY *NOW* MATTERS

1. More Money for Change: Now that states have emerged from revenue recessions, will states use cyclical surpluses to change the cost structure of government (through technology) as a hedge against structural fiscal constraints and the inevitable downside of the cycle?

2. More Clarity of Purpose: Now that voters have declared that the public wants a voice in the way government works, will states default to old habits, or commit to a new direction that reflects the public's appetite for government that works?

3. More Shared Ownership: Now that government agencies head their own legacy systems and administer vital public programs that can no longer be marginalized as "targets" or enemies of government modernization, can they be made partners in earnest?

B. THE MECHANISM (OR THE MACHINE): WHY *HOW* MATTERS

4. More Nimble Architectures: Now that many jurisdictions have embraced systems that can easily interact with each other (known as loosely-coupled technical architectures) and that align well with the federated structure of government itself, will they avoid unnecessary duplication in favor of single, simple, streamlined transaction processing?

5. More Connectivity: Now that broadband networks have taken their place among a short list of vital public infrastructures and Internet penetration has reached three-quarters of American households, how will converged connectivity — wired and wireless voice, video and data — change the way governments work?

6. More Transparency: Now that the public is again demanding greater accountability for public actions, and public records can be liberated from the paper form in warehouses full of filing boxes and cabinets, how will these records be used to make more informed decisions and how can the public make them more simply and realize greater results?

7. More Consistency: Now that modern systems breach information stovepipes and organizational silos, how can government reorganize itself in ways that public missions are more simply met by allowing technologies and public servants play to their respective strengths?

8. More Choices: Now that always-on scalable infrastructure is becoming more widespread, how can government catch up with the expectations of the public it serves (and save some serious coin) by taking advantage of the many smaller, simpler programs that outnumber and may outweigh larger programs?

9. More Trust: Now that information has become the coin of the realm in all parts of society, can government find a simpler balance among the sometimes competing interests of access, disclosure, privacy and security?

10. More Customer Agents: Now that states and localities have more than a half-century of experience in using agents to extend their capacity and reach, how can their use help create government services that (automatically) listen to an individual's needs, interpret how best to meet them, and simplify the ways the service is requested and delivered?

C. THE MEANING: WHY *WHAT* MATTERS

11. More Places: Now that networks have largely eliminated geographic isolation, allowing things to be done anywhere (or sometimes everywhere), what needs to be done to offer the opportunity for any community to create something simply great (although not necessarily great in size)?

12. More about Me: Now that everything from politics to technology is personal, how can government remain relevant in a world where the public is pushing, on its terms, its way back into the public square?

All of these dozen "Mores" are stops on the journey toward simple, and each will be discussed in turn.

II A Dozen More: An Agenda for Governing

Each of the dozen "Mores" contributes to government's capacity, competence and credibility as it turns its attention to doing the public's business in the years ahead.

A. THE MOMENT: WHY *NOW* MATTERS

It's Time to Change the Story

The Center for Digital Government believes that federal, state and local governments stand at a disruptive moment; the decisions made and actions taken in the next two years will shape the next 20 years of public service. The new story extends everything of value from the ongoing discussion about the modern means of doing the work of government without losing focus on the question: to what ends?

Those ends are simple. Simple ends in this case mean a government that is easier and more responsive in its dealings with the citizens it serves and the businesses it regulates. Simple also means a government of which the inner workings are more transparent and more readily understandable by the public servants charged with meeting public missions and those who hold public institutions accountable.

In a time of scarcity, simplicity means austerity and doing more with less. In a time of abundance, simplicity means more.

1. More Money for Change

It is time to revisit the popular promise of "doing more with less," which were the watchwords during the crushing public sector revenue recession earlier this decade. State treasuries are recovering. For fiscal year 2006, the National Association of State Budget Officers (NASBO) concluded that most states were experiencing "relatively stable and healthy financial conditions … due in large part to continued revenue growth that has exceeded budgeted expectations."[2] NASBO reports that "revenues exceeded original budget projections in 38 states,"[3] with actual collections exceeding original estimates by 3.4 percent in fiscal 2006. For the same period, the group estimates state spending increased by 7.6 percent due in large measure to continuing pressures by growth in "healthcare (i.e. Medicaid), education, corrections, employee pension systems, and infrastructure."[4]

INSIDE THE STATE SPEND
Educate, Medicate, Incarcerate

Elementary and secondary education	21.4 %
Medicaid	22.3 %
Higher education	10.9 %
Transportation	8 %
Corrections	3.5 %
Public assistance	2.1%
All other expenditures	31.7 %

Source: NASBO, *Fiscal Survey of States*, June 2006

Looking ahead to fiscal 2007, NASBO reports tax changes across 31 states are expected to increase net revenues by $1.2 billion, bringing the projected total across all fund sources to $1.2 trillion.[5]

Given this cyclical recovery, the central question in dealing with the underlying structural problems is not how to do more with less. At this moment, the central question is, "What are you going to do now that you have money?" Clearly, the new revenues could easily be absorbed by existing programs and systems with little or nothing to show for the gains. But this moment matters because the temporary revenue increases could be used to make permanent structural changes to increase government's efficiency, effectiveness and — ultimately — simplicity.

Central to those structural changes are the compounding effects of investing in changing, modernizing or simplifying processes. Peter F. Drucker, perhaps one of the most astute observers of process, once noted, "There is nothing so useless as doing efficiently that which should not be done at all."[6] Technologists have embraced the colloquialism "paving the cow path" to describe what happens when technology is used to make old, tired and broken processes run faster. A useless paved cow path is neither easy nor simple.

To heed Drucker's admonition is to invest in changing processes first. Such changes are force-multipliers in a manner similar to compound interest. Absent process changes, technology can become a dead weight loss. Technology will compound the gains made through reforming processes. A study by a management consulting firm concludes that the pairing results in twice the value as measured in terms of increased productivity. According to the study, investing in IT *alone* brings a 2 percent improvement, investing in improving management practices *alone* results in an 8 percent gain, and both *together* realized a 20 percent improvement.[7]

If opportunities are only as large as the preparation made to take advantage of them, the changes governments make now are vital in getting ready for the next time you don't have money.

STATE HOUSES
(Majorities in both chambers of the same party)

POST	23 (D)	15 (R)
PRE	19	20

STATES & THE SINGLE PARTY
(Governor, House and Senate of the same party)

POST	15 (D)	10 (R)
PRE	7	12

Figure 1: The Majority Report — Election results.

The opportunity to make these changes comes at a moment of considerable political alignment. In 38 state legislatures, as *Figure 1* illustrates, the majorities in both chambers are of the same party. Moreover, the governor and majorities in the House and Senate are of the same party in half of all states. History suggests that such concentrations are not sustainable but, for as long as they last, they increase the probability of realizing the priorities of the political leadership. Simple ought to be one of those priorities; it has the making of a signature accomplishment that will leave a profound legacy in the way the public's business is done.

2. More Clarity of Purpose

Change is the single word most commonly used to explain the results of the 2006 midterm and gubernatorial elections.[8] It was the apparent intent of voters even as things continued to change around them in:

- where and how work gets done,
- demographic concentrations into two huge generational groups,
- what is needed from education and how best to help people learn,
- the level of demand for public services and how government delivers them,
- the rapidity and maturity of technological advances that make it possible to radically rethink the issues of government capacities and competencies in doing the public's business.

With all that change, how can we clearly see what to change and why? Let's start with what we know. We know that:

- Conventional explanations and current practices are insufficient to prepare for the future. The laws of physics suggest that "doing more with less" eventually exhausts itself and making old, tired processes do more and work faster also has limits.

- Public officials have understandably looked for quick fixes. The information and communications technology (ICT) sector has obliged with any number of strategies: re-engineered business processes and monitored performance metrics through consolidated infrastructures, loosely-coupled architectures and Web-enabled applications and transactional online services.

- Advocates and practitioners have pointed to the need for collaboration among formerly discrete public- and private-sector organizations to realize economies of scale and executive leadership who are so strongly committed to a set of results that they will provide the necessary support and sponsorship.

- Contemporary tools and technologies have been marshaled to confront the complexity of doing the work of government. The movement for government modernization, which dates at least as far back as a decade or more since the introduction of the Internet and as much as a half-century ago, has had a tendency to be all about means, often at the cost of the more important discussion of ends. A renewed sense or vision of the greater purpose gives us all a reason to do the hard work of change.

However, all this change is only prologue. There is no resting on laurels. Credit for modernization efforts to date has already been claimed. New and returning administrations have priorities and problems of their own for which they need and expect an appropriate set of initiatives and solutions suited to their times, their opportunities and their challenges. Like the fictitious Michael Scott from "The Office," the three dozen state administrations with fresh electoral mandates only invest in "futures" because they simply cannot invest in "pasts." We know technology can enable and speed the realization of that future, but leadership must provide the clarity of purpose that rallies people and resources to the cause.

3. More Shared Ownership

What to do with a moment like this? Govs. Spitzer (New York), Ritter (Colorado), Strickland (Ohio), Patrick (Massachusetts), O'Malley (Maryland), Beebe (Arkansas) and Crist (Florida) rode in on the electorate's appetite for change, but now share at least one thing with their incumbent counterparts — confronting the complexity of government. Returning administrations in 29 other states are likewise preparing for a new term with new priorities and at least one eye on shaping their legacies.

It is no time to rest on laurels despite a tendency among public CIOs to point with pride to consolidated infrastructures, service-oriented architectures (SOAs), more secure applications, and a governance structure that just cannot be beat. These technological advances took hard work. They created a nimble and robust digital platform for governing. Many governments still have not arrived there, and even for those that have, it is simply not enough.

At issue is the realization that this decade will likely be remembered as a time during which analog governments ran on a digital foundation. Whatever one's metric of choice — citizen satisfaction, return on investment, or the elusive quality of transformation — we are simply not done.

To be clear, the blocking and tackling of government modernization must continue on infrastructure, architecture and applications because they remain a work in progress in most jurisdictions. These measures are necessary but not sufficient for the challenges facing government — more of the same will not get us to done.

One of the chief benefits of having CIOs in the governor's cabinet is that is where the system owners are. Cabinet members own the legacy information systems that administer vital public services and face growing transaction volumes as demand for services increases. By extension, they control the processes those systems automate and are responsible to their respective legislative branch committee for meeting the public mission.

At the risk of putting too fine a point on it, these executives are also uniquely positioned to know how much money flows through these systems and what the cost per unit of service is. Those costs are higher than they need to be precisely because unreformed analog-era processes are running on digital platforms. Second only to the governor and legislative leadership, cabinet-level system owners will determine whether and to what degree this process-platform conflict will be redressed.

The challenge and opportunity for public CIOs is to draw their cabinet colleagues into a community around the shared purpose of changing the cost structure of government by changing the way the public's business gets done. Together, these leaders must decide whether to use the current cyclical up-tick in government revenues for a modest increase in services at the old analog rate or seek exponentially more flexibility and service delivery capacity at the new lower digital rate.

It will not be easy, but the right things rarely are. Getting it right will necessarily require CIOs to overcome a discernable bias in their thinking. There has been a tendency to marginalize legacy systems as targets for blame and replacement with the effect, very often, of declaring the agency heads who own them as enemies of modernization. Agency directors can be excused for not feeling enthusiastic about being a partner in earnest in this effort if all they know of the CIO is a tin ear reception for agency pleas for extending the life and value of systems, whatever their age, that are uniquely able to do the heavy lifting of administering complex public programs.

There are models that extend beyond a conventional understanding of partnerships to a stance more akin to shared ownership. Consider unilateral executive branch changes in Washington state, where the balance shifted from legislative intent, in which the "primary responsibility for … information systems … rests with each agency head,"[9] to one in which the CIO-led agency "is now jointly accountable for the success of major state computer system implementations, along with the agencies that develop the systems."[10] Likewise, the shared services model helpfully delineates between infrastructures that can and should be used across agencies to achieve economies of scale and those that are application- or agency-specific.

Both developments may be helpful at the implementation and operations stages. Put another way, they are necessary but not sufficient to realize the potential of the moment. The larger benefit — that transformational moment — happens much earlier in the lifecycle, before a single line of code is cut or a clever acronym chosen. It begins in the green field of the mind, where two or more cabinet colleagues talk about ideas, scribble on napkins, and debate the answer to the question, "What if?"

B. THE MECHANISM (OR THE MACHINE): WHY *HOW* MATTERS

1. When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong.

2. The only way of discovering the limits of the possible is to venture a little way past them into the impossible.

3. Any sufficiently advanced technology is indistinguishable from magic.

– Arthur C. Clarke[11]

"Any technology, no matter how simple, is magic to those who do not understand it."

– Florence Ambrose in *Freefall*[12]

Why Does How Matter?

En Route to Simple, a Little More about the "Mores"

Technologies are viral containers of ideas. When we adopt technologies, we become infected with their imbedded ideas and change the way we think. The ideas in technologies are most often inherent, rather that consciously planned as a way to change society. A technology does something useful, so we use it. Only later, if ever, are the planned, inherent and unintended consequences realized or understood. *Guns, Germs, and Steel*[13] led to empires, massive disease outbreaks and ecological changes. Motors led to destruction of the agrarian way of life, and the eventual but inevitable development of McDonald's restaurants, Wal-Mart and suburbs. We like to say technology is just a tool. But that belies the history of technology and how much it influences the choices we see, the choices we have, and the choices we make.

To understand how a technology will shape its users, we must look at the inherent properties and values it contains. A relational database allows any-to-any relationships of any readable data. When we adopt database technology, we adopt the idea of the ability to form new relationships between previously distinct data, entities, endeavors and people. Some may wonder why we began attacking the organizational silos of government, initiating cross-boundary collaboration and remapping the relationships between government and private entities. Some may have thought it was their idea. We think it is a direct and natural result of the widespread adoption of database technology that comes in forms as varied as main frames, the Internet's vast holdings, data warehouses, electronic medical records, case management files, GIS, physical and genetic fingerprints and student information systems.

Change, and Step on IT

Government is highly resistant to change and when it does change, it does so slowly. Therefore, government has only adopted and completely applied a fraction of modern mechanisms such as relational database technology. Even with those it has adopted, government often continues to use analog thinking and business processes that are at odds with the inherent properties of these digital technologies. These technologies are mature, proven to improve processes and lower costs, and widely used outside of government. While government is struggling to catch up, technology is speeding up.

It would seem that the pace of technological innovation was already swift, but it has been accelerating. At the current pace, we will be the beneficiaries of about 100 years of 20th century change in the 20 years from 2000 to 2020.[14] The technology we are inventing and using is itself an accelerator of this change. We are inventing systems that help us invent more systems. Databases and systems of shared knowledge that provide the means to sort, organize, analyze and utilize data also increase the speed of innovation.

One need only look at the near-term path of systems that underlie information technology to understand how much we are likely to change, and how fast. Our brains work at 20 petaflops, performing 20 quadrillion operations per second. With the power/cost ratio changing to double the value of computers every 12 months now, Ray Kurzweil (inventor, futurist, scientist and scholar) predicts that we will see a brain-speed supercomputer around 2010 and a $1,000 laptop at that speed in 2020. But doubling technological power every year has a magic that is hard to grasp. At this pace, we will see a supercomputer run at the combined speed of every human brain on the planet around 2040 and have *that* speed in a $1,000 laptop in 2050.[15]

If that were not enough to cause us to scratch and shake our 20 petaflops processors, we should add that each element of computing technology — storage, networking, display, interface, sensor, content, and most importantly, software — are changing at a comparable pace. Information — that is, everything we know — doubles now every three years and in 10 years, is on track to double every 11 seconds.[16] Software makers are employing an array of tools to model complex systems and emulate more and more human functions. Robotics, formerly a manufacturing tool or novelty item, is about to go mainstream by emulating and ultimately embracing a whole range of human endeavors and turn yet another chunk of science fiction into reality.

Making the Case for Doing Things Differently

So, why does the question of *how* matter? Let's review:

First, how we choose to do things substantially influences what we do and what we value. What we choose to do and what we choose to value are the essential products of politics and government. One would hope that something that has such significant influence on politics and government would matter to politicians and government.

Secondly, how we do government's work has undergone an incomplete transformation through partial adoption of some modern technology. That puts government in the difficult position of struggling to maintain two systems — one analog and one digital — at higher cost and lower return than either on their own. Trying to run an analog government with digital tools puts government out of step with how the world works, as this hybrid can be neither completely personal nor efficiently automated.

Third, we have adopted tools that lead us to inherently overlapping and interrelated systems while we are organized as a multitude of separate entities, positions, processes and systems. The pressure to align how government is organized with the inherent values of modern tools is high and will increase. No society has yet successfully prevented this alignment of the values inherent in their adopted tools and the way they live and work, no matter how disruptive it was to that society. Alignment can be delayed, but not denied. In the present case, alignment should be embraced because it can and will lead to more efficiently and better served government customers and constituents.

Some public agencies and subdivisions are already working toward this through efforts such as the Federal Enterprise Architecture's Business Reference Model[17] and similar state and local efforts. Some are still staggering forward saddled with dozens, and in some cases, hundreds of departments and administrative units. A simple state and local government is within reach — provided public leaders are prepared to leapfrog to the likely endgame of this inevitable alignment: seven policymaking areas implemented jointly by just seven coordinated operational departments (see *Figure 2* on p. 12). The federal government can have two more for international relations and defense. The legislative committee structure must match the change in the administrative side so that the funding, policymaking and oversight are aligned and coordinated within the 7x7 structure. The judicial branch will remain independent, but may well find utility in having groups of judges who specialize around these same clusters of rules as they do now for such things as bankruptcy and juvenile justice. This kind of New Deal–scale reform and reorganization is what it will take to get to simple, and make government work again and work well within our modern context.

In reviewing the 7x7 government model, notice that there is only one customer service department. Government may be that last entity on earth to find this simple solution, but better late than making all of us wait in yet another queue.

STEER BY 7 POLICY AREAS, DELIVER THROUGH 7 FUNCTIONAL AREAS

POLICY

1. Economic, Business, Community, and Workforce Development
2. Environment & Natural Resources
3. Education, Training, Arts & Culture
4. Finance
5. Transportation & Infrastructure
6. Public Safety (Corrections, Prevention, Emergency Management, Defense)
7. Health (Health, Medicaid, Medicare, Workers Compensation, etc.) and Human Services (Agencies, Institutions, Unemployment, and Non-Health Benefits)

DELIVERY

1. Law Enforcement (Civil, Criminal, Corrections, Inspections, Regulation, Appeals, Revocations)
2. Licensing (Licenses, Permits, and Permissions)
3. Disbursement (Benefits, Grants, Payments, and Loans)
4. Revenue (Taxes, Fees, Debts, and Financing)
5. Customer Service (Call Centers, Information, Intake, Help, etc.)
6. Administrative Services (IT, Facilities, Personnel, Contracts, etc.)
7. Service Delivery & Consulting

Figure 2: 7x7 Model of Government

Fourth, while we have catch-up work to do, technology is not standing in place, waiting for us. It is continually and quickly redefining the nature of work and how that work will be done (see *Figure 3*). We are moving steadily from place-based machines and workers to place-irrelevant networks of both. Indeed, work already encroaches on leisure, and leisure activities may be part of the work day. The interface used to play may just as easily be an interface to work, and playing in a simulated environment may create work products and decisions that are used in the real world. Fighting wars with game controllers and running a city via a SIMS[18] or Second Life[19] game are no longer speculative fiction, but actual choices that may help change the way decision-makers and their communities move forward.

All this marches forward while we fail to focus directly on the mechanisms that are driving, causing and facilitating these and many other changes. We still regularly receive comments from all levels of government that leaders with sufficient understanding of information technology are in short supply. Leadership that knows how to govern through IT, use IT artfully to accomplish goals, and plan for the changes already in motion and arising from a world running on IT remains a scarce resource in a world of abundance.

WHAT AND WHERE IS WORK AND WHO OR WHAT DOES IT?

Figure 3: Working it Out

Lawmakers as Coders

The very nature of how we do the work of creating policy is about to undergo a substantial change. The tools that allow us to make computer code and rule-based systems are undergoing democratization. As so many things have transformed from arcane art to an easy to use and automated interface, so too will the art of making software and systems. We have seen this transformation in such areas as mechanized transportation, printing, and most recently, multimedia content and Web sites. What previously required an expert do the work became something we could all do ourselves once we learned the interface. We already have the capability to turn objects, flow charts, avatar parts and behaviors and mapped-out business processes into software, and this capability will advance and mature. Anyone who writes the rules will be able to create the software to administer and enforce them. That possibility is a horse of a very different color.

The language that is common to governing hints at what lies ahead. Policymakers have a long tradition of enacting rules and statutes. As we move forward, they will also simultaneously enact rules in statutes and into software code. One reason to believe this can happen is that almost every one of the raw materials of government is undergoing digital transformation: data, documents, rules, laws, forms, processes, and so on. Most legislatures, judges and administrative rule makers are working toward extensible markup language (XML)-based filing, drafting and publishing systems. This conversion, digitization and standardization of the raw materials of government will allow us to link the policy creation process between jurisdictions and between branches of government in new ways. Comparing and aligning laws becomes easier, while local control and the laboratories of democracy survive and thrive because they no longer have to push against inevitable change.

Just because we can finally either agree on what some words mean or how to translate them does not mean we cannot vary our parameters (percentage of poverty level for eligibility for public benefits, for example) or vary the outcomes we seek. The National Conference of State Legislatures led[21] the Streamlined Sales and Use Tax Project, where lawmakers and tax administrators were able to agree on a common way to understand the many sales and use tax codes while preserving policy differences in how they are applied. This project shows that interstate cooperation can produce results in standardizing laws. Making the raw materials of laws and rules into LEGO blocks of interchangeable, searchable, manageable, and reusable digital objects will transform the individual aspects in the process of making, implementing and adjudicating policy into an integrated and linked process.

Having the raw materials of government in such a digital form will enable and accelerate the ability to make software from government rules. In doing so, we will be able to draw from a comprehensive database of all government rules, and this will allow unprecedented opportunities for how we code our codes. Until recently, black letter law was more that just an expression — it was the only way we chose to communicate the rules of government in all three government branches.

In education, we have seen textbooks transition to a hybrid of text, graphics, multimedia, Web sites, test banks, map layers, standards-based evaluations, customized curriculum, collaboration and interactive communications. These other forms of communication are slowly integrating into the way we make and communicate rules. We work as we are taught.

Even more revolutionary will be the ability to see, exchange, reuse, make, choose and review the computer code and systems that will carry out the will of the rule maker as the rule is being made. Instead of guessing and hoping how the rule will be implemented, why not look before you enact? One could see data submission mechanisms such as forms and direct data transfers, the work flow of submissions, process steps, links to other processes, comparisons with similar systems, staffing needs and what the compliance data and reports will look like. Even more enticing, coupling this double coding with better and more comprehensive data, modeling, and outcome assessment, leaders should be able to see exactly how the rules will work and how well they will work to achieve the desired outcomes before they are enacted. The technology will make this possible and the imagination of policymakers needs to grow to envision this opportunity and make it part of the art. Wrenching the real business of government — decision-making — out of the unseen hand of technology by using that very same unseen hand for our own empowerment is the reward and challenge of modern leadership.

Governing Gets Harder from Here, and So Does the Engineering

Making the "how" of Mechanism real still falls to IT managers. Their burden is thrice born: retire or re-purpose the old, adopt the new and make it a rock solid utility, and adapt to the emerging new ways to deliver government as a service. Over time, more and more of the place-based machines in the basement will give way to an extended, brokered, shared, metered and open set of services which IT managers must procure, secure and integrate. They take understandable pride in their IT shop, their systems, solutions and machines — except those machines are not their own. They are the stewards, trustees and implementers, not the owners. Real engineers optimize the resources rather than coveting their turf and tools. Those that have struck out thusly have stood the 80/20 rule on its head: they no longer spend 80 percent of their time making what they own work as it was designed to work. Instead, they spend 80 percent of their time extending the capabilities available to improve how government works, what government can do, and how efficiently government can do it.[22]

Speed the How[23]

What follows are the action steps or pointers to resources that describe how to accelerate the deployment of the existing best practices and technologies, the realization of value from that deployment, and the adoption of emerging technologies that will displace existing methods and systems.

4. More Nimble Architectures

First, if you are not among those that have a documented architecture, whether nimble or not, get one. Second, borrow or create a business reference model that shows the overlap and relationships between entities and systems. Third, create a master customer file, index, or pointer system so that common customers can be treated as one unique customer. Finally, come to grips with Government as a Service (GAAS), a more full discussion of which can be found in another Center publication called *Prove IT*.[24] GAAS in a nutshell: act as broker and share services and systems; do not buy, run or own them for just your organization.

5. More Connectivity

Broadband networks are taking their place alongside electricity, water and roads in the life of communities across the country. From Virginia to Colorado and beyond, states and localities are pursuing new strategies for making broadband as common a twisted pair as telephone wire. Broadband provides advantages in competing for businesses and for people and holds the key for simplifying the integration of previously discrete public services and opening new vistas in educational opportunity.

The private sector has invested heavily in broadband, but the industry cannot undertake an infrastructure modernization effort at the scale broadband requires by itself. In a predictable but unfortunate cycle, the telecommunications industry invests based on its sense of consumer demand, consumer demand is driven by the availability of compelling content and services, and the content creators hedge their bets based on perceived consumer demand and availability of advanced network services. A catalyst is needed to break the cycle of waiting and, by default, that catalytic agent is government that is uniquely positioned to need and anchor the network in all parts of the state, while having greater tolerance for amortizing network construction costs over a longer period of time.

As for government's use of mobile broadband, we know that as much as half of the typical state and local workforce is comprised of mobile workers. The key to matching the work to the technology is to first re-engineer the work processes and then put the end-user devices and wireless networks in place to support the new process. While there is a proven business case for mobile data, there is a bigger return if the underlying processes are rethought to take advantage of that infrastructure. For a more complete planning guide, see the Center's *Telework 360*.[25]

6. More Transparency

The form or media of a public record does not matter — the nature of the record does. Sensitive records should be closely safeguarded; routine records should be kept loosely. Echoing the 1970s feminist manifesto that crept onto stadium reader boards to "raise boys and girls the same way," what applies for one form ought to be equal for all forms — atoms or bits, paper or digital. This point is often lost in a rush to legislate special rules for electronic records, which seemingly demand more rules than their paper counterparts. The public sector also has been uneven in the secondary use of public records containing personally identifiable information. In most jurisdictions, secondary use is exception-based in their respective public records statutes. At the same time, the public sector has been slow to adopt what is unfortunately labeled "business intelligence." The simple and compelling idea is to interrogate the aggregated information the government holds about its own activities in order to monitor its own performance and contribute to data-driven planning and decisions.[26]

To start, know what you know. Take regular inventory of the public databases and unstructured data sources, what is in them, and who can use them and for what. Identify what kind of audit trail, assurances, or waivers are needed to allow the data to be used across boundaries. Select or start using a modern set of database, business intelligence and dashboard tools to push data and open up access to the various constituencies in government, the public and the press. Nothing quite grabs a person's attention like a clean score card or dashboard on a subject about which they care a lot. For example, the New York State Office of Temporary and Disability Assistance (OTDA) joined with the Office of Children and Family Services (OCFS), the Office of Medicaid Management (OMM), and dozens of county district commissioners to find a way to better report and analyze the volumes of information available. According to a report in *Government Technology* magazine,

In addition to the hard numbers, the reports provide graphs and charts to illustrate the data, and commissioners can toggle back and forth between the actual numbers, pie charts or bar charts. Red, green and yellow indicate trending against identified performance measures. The trending colors correspond to traffic signals: green means the department is meeting the performance measure, yellow warns that an issue may be developing and red clearly flags an existing issue.[27]

Despite the fact that participation by the local commissioners was voluntary, most all are using the tool and want more — more data from more sources to help them track performance and respond intelligently to trends. It gets simpler to find your way with the dashboard lights on.

For a more complete analysis and planning guide on use of data in achieving transparency and improving management, see the Center's *Governing Faster, Smarter*.[28]

7. More Consistency

As discussed above and as shown in *Figure 1*, a fundamental rethinking of the organization structure of government is needed. We can slide toward it and do it without actually reorganizing or reaping the full benefits, or bold leadership can take this issue head on to rationalize and streamline government for the modern era. Just imagine Roosevelt and Reagan working together with a sharp knife, a bigger purpose and great IT. A better organized and managed government can lift all ships and should be a non-partisan effort.

Another way of getting there is laid out. One industry white paper suggests:

Typically, governments recognize the case for restructuring. They understand that citizens and stakeholders are arranged in interest groups that do not neatly align with existing institutional structures and that this hampers the provision of citizen-centric services. The first hurdle that governments face when trying to rectify this is cultural. Most public servants are recognized and promoted based on the rewards they bring to their own organizations or agencies. Public employees are usually not rewarded if they refer a citizen to another agency for help. Instead, that agency gets the credit, not the person who made the referral…

A radically different approach to solving the problem is to be more holistic, to create a robust infrastructure and interoperable systems using online technology as the fundamental organizing principle. This frees data and knowledge from the confines of particular places or organizations and makes it both visible and accessible to people, regardless of institutional or physical location. This approach asks a series of questions:

- *Where is there an unmet or poorly met customer need?*
- *Which agencies have the information that could help meet this need—or which are best placed to gather it?*
- *Which existing processes inside or outside the public sector are most like those needed to support the meeting of this need?*
- *What legislative, data protection, and security requirements stand in the way?*[29]

8. More Choices

As discussed more below (in section C.12 - More about Me), the so called "long tail" of smaller services can *cumulatively* outnumber or outweigh the initial e-government services we put in the field. Government serves many different constituencies. A few applications such as healthcare and taxes are so wide spread that they got all the money and attention at the beginning of digital government. But as those systems have been deployed and stabilized, the opportunity to address what might be seen as niche markets becomes possible. The numbers served may be small individually, but large as a group. Sharing solutions and other lower cost ways to deliver solutions and systems to smaller markets makes expanding one's portfolio to meet these needs possible. Begin to scope and assess the cumulative value of the many little systems and processes that have not yet made the "to do" list.

9. More Trust

One sure way to get more trust is ask for it and give something back when it is given. All too often, we have ignored the path of letting the government customer choose how they want to be authenticated and what information can be shared to better serve them. We make tradeoffs between privacy and convenience every day in our lives and government, for better reasons than marketing, can offer the same choices to its citizens to improve service and cut costs. You may be surprised what your customers let you do to make government simple if you ask them.

On the bigger question of trust, balancing access, disclosure, privacy and security is not an equation to be solved, but a constant process. There are many competing interests and not many constitutional or societal absolutes to guide us. In the absence of detailed guidance, take a principled approach. (For a set of useful principles, see the *Trust in the Balance* sidebar on p. 17.)

10. More Customer Agents

Any function of government not requiring the physical presence of the citizen can/is/will be done by a customer agent. Government customer agents are people, professionals, software and services that do government for us. Lawyers, permit services, accountants, tax preparation services and software, and many other examples comprise the growing ranks of customer agents. Jurisdictions trying to do a business one-stop are trying to be the customer agent for business in dealing with government. Customer agents are here to stay and they will continue to do more and more of what used to be the exclusive work of government.

What if we wanted to accelerate and enable that transition so that we could save scarce funds and redeploy human resources to higher and better purposes? Try starting with the recipe in *Figure 4* below. Besides being a good government thing that can save money and improve service, this approach has the advantage of leveraging three very powerful forces CIOs rarely get to have on their side: voters, lobbyists and campaign contributions. This is not less regulation or oversight, it just means that interacting with the government would be easier and cost less whether you want benefits or a business permit. For a more complete discussion of agents, see *Prove IT*.[30]

Agents are both human and virtual and, depending on the tasks at hand, work independently or together. Software agents work anywhere and everywhere, extending the reach of people to solve problems from the place of their choosing.

LEVERAGING TECHNOLOGICAL AND POLITICAL POWER: A RECIPE FOR MORE CUSTOMER AGENTS

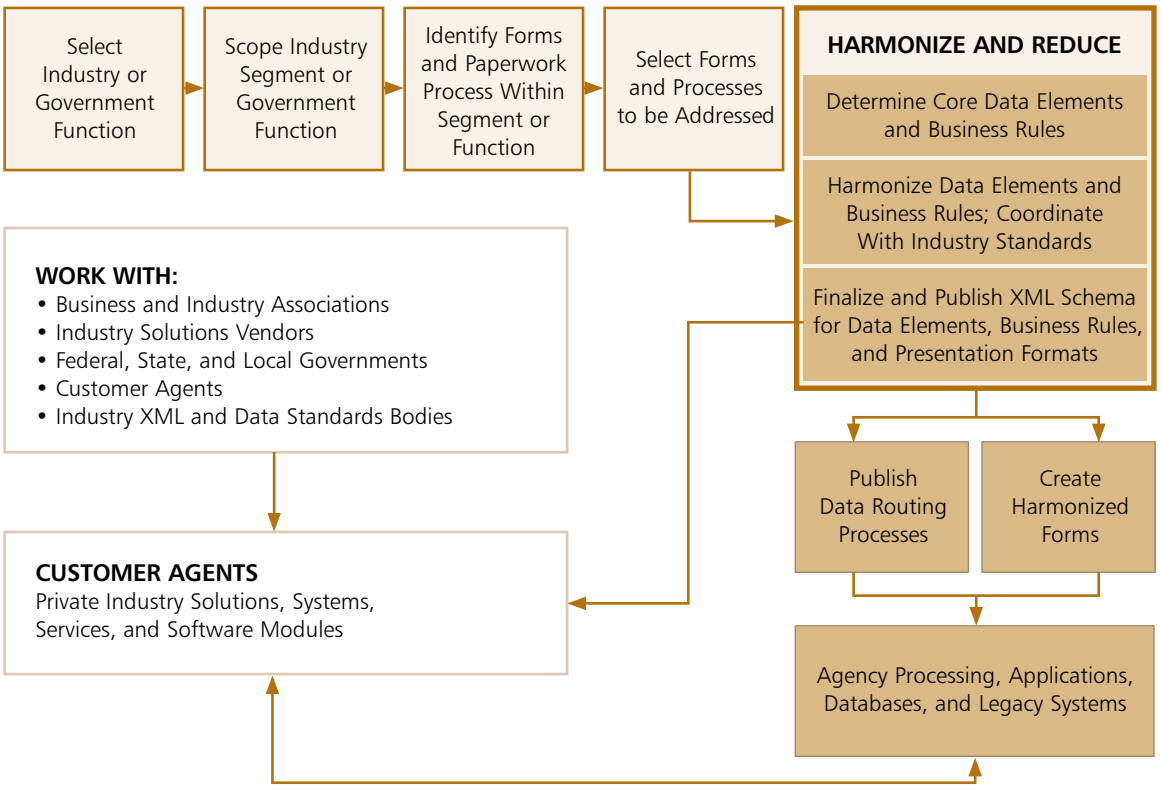

Figure 4: Making More Customer Agents

TRUST IN THE BALANCE

These 12 principles from *The Public Record, Information Privacy and Access: A New Framework for Finding the Balance*[31], are offered as a guide to better balancing. No matter how you balance, we all know that security will have to be strengthened and invested in to make our balancing decisions enforceable and auditable.

1. Policymakers Should Identify and Evaluate Conflicting Interests

Decisions regarding privacy and access inevitably affect and are affected by other important interests. It is therefore essential that any policymaking process identify and examine those interests carefully to determine how they are implicated by a proposed law or regulation and to what extent they can and should be accommodated.

2. Privacy Solutions Must Respond Reasonably to Defined Problems

Those privacy problems or harms used to justify restricting access to public records should be stated explicitly and should reflect reasonable expectations of privacy.

3. Limits on Access to Protect Privacy Should be Effective and No More Restrictive than Necessary

The accommodation between access and privacy needs to be carefully crafted, so that we continue to permit as much access as possible without unnecessarily invading privacy. In no event should limits be imposed on access to, or use of, public record information to protect privacy if those limits will not in fact be effective in solving identified problems. Moreover, the government should not impose broad limits on access to protect information privacy where effective, extra-legal mechanisms exist that permit a more sensitive and individualized balancing of access and privacy interests.

4. Privacy Interests are Limited to Personally-Identifiable Records

Access to government records that do not identify individuals should not be restricted on the basis of protecting privacy. Anonymous and pseudonymous records pose no meaningful privacy threat.

5. Enhancing State Revenue is Not a Privacy Problem

The government should not use privacy claims as a pretense for raising revenue, enhancing the competitive position of state-published information products, or restricting access to information for other purposes.

6. Public Information Policy Should Promote Robust Access

Information policy should facilitate as much access as possible without harming privacy interests. The public should be able to easily discover the existence and the nature of public records and the existence to which data are accessible to persons outside of the government. In many cases, it may be desirable and appropriate for the government to inform citizens about who is using their public records and for what purposes. Obviously, access to records is not appropriate in all cases, but this principle recognizes that access serves broad and important purposes.

8. Not Every Privacy/Access Issue Can be Balanced

Despite the importance of balancing, it is not appropriate in every case. The courts have established that there are some instances where the societal interest in access is so great that it trumps all privacy concerns. Similarly, the privacy of some types of records is of such importance to our society that it outweighs access interests.

9. Systems for Accessing Public Records and, Where Appropriate, Controlling Their Use Should Not Be Burdensome

The mechanisms for accessing the public records and for allowing individuals to protect the privacy of records concerning them should be easily accessible and no more burdensome than necessary.

10. Information Policy Must Ensure the Security of the Public Record Infrastructure

The government must ensure that public records are protected from unauthorized access, corruption, and destruction.

11. Education is Key

An informed citizenry is essential to the balancing process for both the individual choices they may make and in understanding the costs, risks, and benefits of privacy and access solutions. Government — assisted by industry, not-for-profit organizations, and the academic community — has a duty to educate the public about privacy and access issues.

12. The Process for Balancing Access and Information Privacy Should Be Sound

Government should have a process for balancing access and information privacy issues that is informed, consistent, and trusted. This process should be in place before one evaluates any new access or privacy issues. The process should draw heavily on expertise and existing data, involve as many of the affected parties as possible, apply these principles faithfully, focus on real and effective solutions, and provide for the automatic termination and/or frequent re-examination of those solutions to ensure their effectiveness and precision in the face of fast-changing technologies.

C. THE MEANING: WHY *WHAT* MATTERS

11. More Places

New York Times columnist Thomas L. Friedman's weighty tome on the intersection of globalization and technology, *The World is Flat*, has been on the recommended reading list of the National Governors Association since soon after its release in 2005. In the heavily trade-dependent states of Michigan and Washington, Govs. Granholm and Gregoire have made the book required reading for their cabinets and extended management teams.

At issue: the creation of global locals that can survive and thrive in a world where the rules have changed. The economic vitality of communities in a "flat world" now relies on bellwether states such as Michigan, figuring out how to compete successfully with both India and Indiana. Policymakers face the challenge of finding policy levers that can be used to reintroduce a few curves into a flat world to support larger public policy goals without surrendering the gains realized through changes that have taken the friction out of business processes.

To be clear, more places — more communities, both urban and rural — can become successful global locals and remain vibrant places to live, work and raise a family. Many communities are looking for their second act after being displaced by the factors Friedman documents about shifting production centers. For these communities, physical centers shifted and they got stranded. It is reasonable to expect that communities will host both physical and virtual centers of employment; each brings different types of jobs, both merit favorable policy treatment and, together, they promise a sustainable economic backbone for communities in the new century.

All these communities can be successful if governments pursue the right strategies and policies to make them so. Everyplace can have what they need to be successful global locals that help preserve quality of life, affordability and jobs even with a decline in physical centers. The wide-scale adoption of common economic development strategies now have sufficient track records to suggest their efficacy:

- trade missions and export supports.
- regulatory reforms, streamlining processes through online one-stop business portals and incentives to have businesses start and locate within a particular geography.
- aggregating governments' purchasing power to realize better value in spending taxpayer dollars and influencing the market by being a smarter customer.
- workforce readiness initiatives, including math and science emphasis in education.[32]
- broadband wire line and wireless network availability as the new public infrastructures alongside electricity, water, roads, bridges and ports.[33]
- partnerships in earnest with the private and civic sectors.[34]
- matching people to distributed jobs — that they are not associated with a local company — in local telecommuting center and home based businesses such as virtual call centers operators, professional piece work, software development, consulting, customer service, and the many jobs that can be located virtually anywhere.

All these strategies increasingly rely on the Mechanism described above such that the more effective the *how* becomes — agent-based, data-driven, intelligent, connected, consistent and double coded — the more successful the strategic *what* of creating economically sustainable global locals becomes.

Each of the seven economic development strategies is properly the subject of separate reports (and, in fact, entire literatures of their own) that is beyond the scope of this paper. That said, it is useful to explore emerging models of collaboration across sectors that allow each to play to strengths.

At one level, cross-sector collaboration and partnerships are not new. Volunteer fire brigades are as old as the republic and latter day fire departments, in many communities, owe their origins to investments by "the company" in company towns. In non-emergent matters, state and local governments have, for example, long relied on local merchants to act as their subagents

in issuing a range of permits and licenses in communities across the country. At another level, the network and malleable digital data allows everything of value from the historic subagent model to be brought forward and scale to cover far more geography and far more people at far less cost.

The most promising way to make global locals is through meaningful collaborations. A few useful examples follow.

The Commonwealth of Virginia has distinguished itself with a legislatively authorized model for public-private partnerships that have been instrumental in changing the way the public's business gets done. It began with procurement reform in which government became a better, smarter customer and expanded to include the modernization of the state's information infrastructures and major applications through corporate investment,[35] which contractually obliges the private contractors, to creating more than 1,000 new jobs in economically disadvantaged parts of the state. The model even extends to social service eligibility and service delivery through "No Wrong Door" (a collaborative public-private effort between the Virginia Department for the Aging (VDA), local governments, two dozen local area agencies on aging (AAAs), a 501(3)(c) non-profit organization called *SeniorNavigator*, and a network of providers designed to harness technology to stretch resources, eliminate duplication of effort and enable agencies to efficiently coordinate information, referral and case management).

The income tax code has been a curious catalyst for change for more than half a century. When the Internal Revenue Service announced that it would no longer prepare personal income tax returns beginning in 1955, brothers Henry and Richard Bloch pioneered the use of human agents at what are now iconic storefront tax preparation shops that bear their name. The tax code met computer code a quarter century later, introducing software agents who, like their human predecessors, confronted the code's complexity and made it simple for individuals to prepare and file tax returns.

The automation of the tax code, coupled with an act of corporate philanthropy by the makers of the dominant tax preparation software product, was the catalyst to what is known as the Free File Alliance through which more than 1.5 million federal returns have been filed since its debut in 2003 — at no charge — through the good offices of private sector software and services companies. At current thresholds, 70 percent of taxpayers are eligible to file free of charge.

The federal experience has been, in turn, a catalyst for state-level Free File Alliances among tax software companies, the IRS, state revenue agencies and importantly, civic organizations and nonprofit service organizations that work with low income and underserved taxpayers in the 21 states that have embraced the Alliance. Indeed, this public-private-civic partnership has helped raise the rate of electronic filing and helped the federal and state governments collect more of what is rightfully owed — all without having to develop their own systems or develop the related expertise. Not bad for free.

The Alliance provides a promising model for collaboration in which the aims of public, private and civic organizations are realized by turning legislative or administrative code into computer code. It makes tax preparation and filing simple for taxpayers and tax agencies alike. It can be done anywhere, but the underlying infrastructure need not be replicated endlessly to be used everywhere.

This model also may provide a needed corrective to a tendency to impose so-called enterprise solutions on highly federated environments such as state and local governments from the center out. In fact, without rethinking the approach to enterprise applications such that they are seen as shared resources, control agencies and the systems they implement will be frustrated and sub-optimized. The reason is rooted in something common to both American government (characterized by local control to a fault) and the Internet (engineered to defy central control and disruption): innovation and action in both environments are at the edges. In a simple world, the center is just another node on the network — and in the ultimate act of leveling the playing field, so is every citizen served by the center.

12. More about Me

I wanna talk about me, I wanna talk about I,
Wanna talk about number one oh my, me, my.
What I think, what I like, what I know,
what I want, what I see.
I like talkin' about you, you, you, you usually,
but occasionally, I wanna talk about me!

- Toby Keith, "I Wanna Talk About Me," 2001

In 1807, Thomas Jefferson greeted people in a simple and profound way, calling them "Citizen." Two centuries later, citizens appear to be moving the town square online, leading one sardonic observer to dub them, "YouWikipedicYouTubingMySpacers."[36] This new nickname stems from a popular magazine's choice of Person of the Year 2006, a distinction that recognized "the small contributions of millions of people and making them matter." In explaining the choice, editors wrote:

It's a story about community and collaboration on a scale never seen before. It's about the cosmic compendium of knowledge Wikipedia and the million-channel people's network YouTube and the online metropolis MySpace. It's about the many wresting power from the few and helping one another for nothing and how that will not only change the world, but also change the way the world changes…

And for seizing the reins of the global media, for founding and framing the new digital democracy, for working for nothing and beating the pros at their own game, [our] Person of the Year for 2006 is you…

This is an opportunity to build a new kind of international understanding, not politician to politician, great man to great man, but citizen to citizen, person to person…[37]

This is a hopeful development in a landscape too often characterized by corrosive levels of distrust of government and the irrelevance of institutions. More on that in a moment. But first, a little more consideration of the mirror images of "You" as the magazine understands the new self-realized citizen, and the "Me" that brings high expectations to how services are delivered. Taken together, you:me (or u-me) are equal parts altruism and narcissism — and they are "all citizen" when they come into the public square to seek services and petition for redress.

The U.S. Census Bureau estimates that 16 million Americans meet this definition of "You," but that is a far smaller number than those chronicled by *WIRED* magazine, which estimates a universe of 80 million MySpacers, 40 million bloggers and a million amateur encyclopedians.[38] Even at this relatively early point in the societal change, "You" may already constitute one-third of the country, the population of which broke the 300 million mark in 2006.[39]

An even wider universe of Americans are transacting with their governments online, at a time and place of their choosing. Consider the findings of the Center's 2006 *Digital States Survey*, based on responses from 44 states. On average, the majority of personal, professional and business related transactions have moved to cheaper, more convenient online channels. The transition to digital government was a deliberate decision made by public executives who bet that online was where they would find "Me," and they did:

- Two-thirds (68 percent) of hospital status look-ups and fully 93 percent of medical professional credential status look-ups are now done online.
- Sixty-one percent of applications for public assistance benefits and status checks are now conducted using the electronic channel.
- A third (32 percent) of driver's license renewals on average and a modest 19 percent of vehicle registration renewals are conducted online.
- Fifty-six percent of state park reservations and campsite reservations in the last two years, up 18 percentage points from 38 percent in two years.
- Over half (56 percent) of all certificate orders for vital statistics (birth, death, marriage) are conducted online, up 16 percentage points from 40 percent in the last two years.
- Ninety percent of all criminal history background look-ups are conducted online.
- Ninety-eight percent of sex offender look-ups are conducted online.
- An average of almost half of all new business licensing (46 percent) applications are now processed in responding states through the electronic channel.
- An average of over half (55 percent) of all business registration renewals in responding states are handled online, up 12 percentage points from 43 percent in the last biennium.
- Two-thirds (67 percent) of all Universal Commercial Code (UCC) filings and 93 percent of all UCC searches are done online.

- An average of just over half (52 percent) of state individual tax returns are filed and paid online in responding states, a modest increase of only 4 percentage points up from 48 percent in the last two years.
- Forty-four percent of business tax filing and payment services are now handled online, up 11 percentage points from 33 percent in 2004.[40]

The way "You" and "Me" actually use online government services is different than central planners originally envisioned, and the adoption patterns point to the potential of "the long tail" in simplifying government. The long tail originated as a description of the trailing end of statistical distributions. Author Chris Anderson adapted the term to explain a key characteristic of Internet retailing. In these distributions, a high-frequency good or service is followed by a low-frequency good or service that gradually "tails off." In many cases, the infrequent events — the long tail — can *cumulatively* outnumber or outweigh the initial portion of the graph, such that the trailing end actually comprises the majority.[41] Anderson suggested that the long tail created a market from what had previously been considered "also rans." He argues the cumulative value of the long end of the distribution may exceed the concentrated mass that gets all the attention. This is not how government tends to look at its service delivery, but Anderson's observations validate the aggregation of formerly discrete online services around a shared set of infrastructures.

The long tail, as *Figure 5* illustrates, is also a reminder that government still has much to learn from the wisdom of crowds.[42] It is worth noting that former marquee applications such as driver's license and vehicle registrations are actually in the trailing tail of the distribution, while look-up services appear at the head end of the distribution.

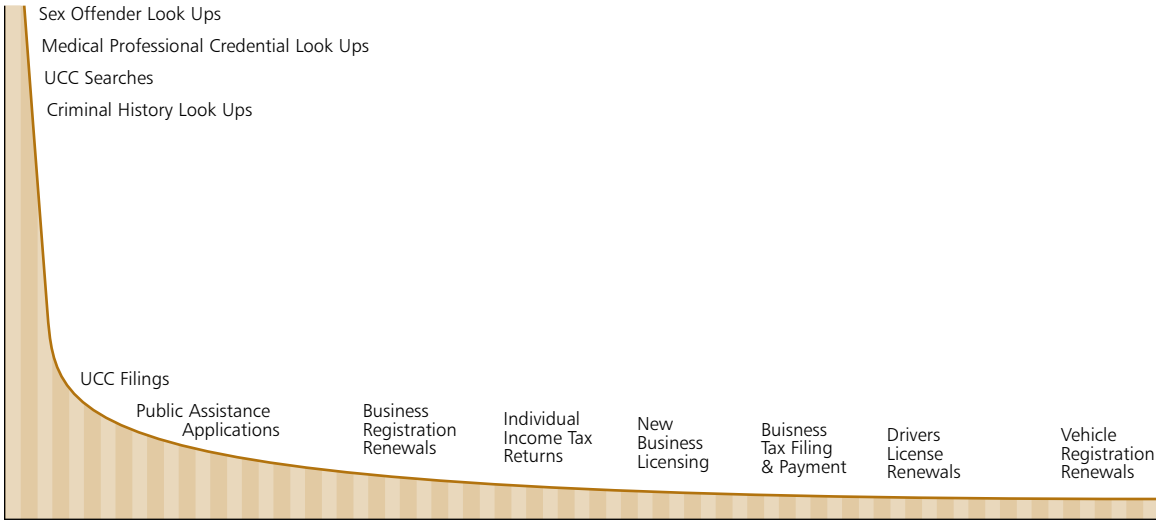

Figure 5: The Long Tail of Online Government Service Delivery

Personal and Democratized

Proclaiming the self-realized, participatory "You" as Person of the Year comes almost 25 years after another unlikely choice to earn the recognition — the personal computer. The two are inextricably linked. As its name suggests, the PC personalized computing power and provided a platform for "You" to democratize discussions about ideas that matter to them and the communities in which they live.

The intervening years have seen a remarkable change in perspective of elected officials. Those in office during the rise of the commodity Internet (which began penetrating all sectors of society in the mid-1990s), were at a staggering disadvantage. Incumbents were all too familiar with competing demands for the public treasury and structural limitations of government's complexity. As a result, they were often unable to see their way to simple.

A decade later, newly elected officials know from personal experience about being "Me" — and a critical mass of them campaigned successfully with more than a little help from "You." They know what a good online transaction looks like and have one or more digital devices that help them be who they are. Before they stepped up to govern, the new generation of leaders knew what it was like to live, work and raise a family in a simple and sophisticated world that puts a premium on immediacy, transparency, availability and convenience. Both "You" and "Me" demand not just responsiveness, but anticipation of their needs by the institutions that purport to serve them.

With public trust in government at a low ebb, earnest reformers seek to reverse the downward spiral by bringing the public back into complexity. Indeed, the public and businesses want back in — into decision-making that affects their families and communities, but not into the complexity of the rat's nest of broken and corrupt bureaucratic meanderings.

You will know that that the era of complex, analog government is coming to a close when public institutions overcome the long practice of trying to bring or win the public back to government on its terms. You will know that we have turned the page toward simple, digital government when public entities focus on bringing government forward into communities where the public lives — and do so on the public's terms, appealing to the predilections and preferences of both "Me" and "You."

III Conclusion: Who We Are, Where We're Going

People get ready
There's a train a-coming
You don't need no baggage
Just a-get on board
- Curtis Mayfield, "People Get Ready," 1964

Even the best planned journey can have its moments of confusion. The story is told of Albert Einstein's troubles while traveling from Princeton University by rail.

> *When the train conductor came punching the tickets Einstein reached in his vest pocket, couldn't find his ticket, so he reached in his trouser pockets. It wasn't there, so he looked in his briefcase but couldn't find it. Then he looked in the seat beside him. He still couldn't find it.*
>
> *The conductor said, "Dr. Einstein, I know who you are. We all know who you are. I'm sure you bought a ticket. Don't worry about it." Einstein nodded appreciatively.*
>
> *The conductor continued down the aisle punching tickets. As he was ready to move to the next car, he turned around and saw the great physicist down on his hands and knees looking under his seat for his ticket.*
>
> *The conductor rushed back and said, "Dr. Einstein, Dr. Einstein, don't worry, I know who you are. No problem. You don't need a ticket. I'm sure you bought one."*
>
> *Einstein looked at him and said, "Young man, I too, know who I am. What I don't know is where I'm going."*[43]

Indeed, this (possibly apocryphal) Einstein-on-the-train story provides a useful reminder on the journey toward simple. Einstein knew who he was, but as bright as he was, he would be excused for being confused about how he fit in if he returned in the 21st century, as he would also be excused for not knowing where to go from here. Likewise, the new century brings new expectations in the role and direction of government, which was first defined 231 years ago at the beginning of the American experiment.

Government knows what it is and what it needs to do. This moment demands a return to the classic core competencies of public service, even as government strengthens its bench in negotiating and managing the relationships with agents and other third parties in the doing of the public's business. Thoughtful leaders can be excused for being confused about where to go from here, too. The short answer is that government must act like the citizens it serves, and must act in their interest. The journey may be hard, but the result needs to be simple — just ask "You" or "Me."

As the demands of governing continue to grow, a number of observers see value in redefining the role of government more narrowly as a " 'steering' (policy) organization … [that] can purchase results from any 'rowing' organizations — public or private — that can best produce them."[44] In doing so, the Center for Digital Government sees long-term simplicity in how "decoupling of government's unique steering function and the rowing functions (the burden of which can be shared with any number and configuration of third parties) increases capacity exponentially while focusing government on its unique core competence."[45]

Renewed attention on capacity and competence can help redress what has been a disproportionate focus on only the tools and tactics involved in tackling the complexity of public institutions. Sustainable, simplified government modernization is not well served by imposing the language and expectations of a unified enterprise on a government structure that is distributed in function and structure. Instead, now is the time to learn the great lessons of the Internet (massively federated with innovation at the edges), Google (massive scalability) and the long tail (in which the cumulative value of the long end of the distribution may exceed the concentrated mass that gets all the attention).

To be simple is to be smart but passionate. Simple is to fundamentally restructure out of a sense of enlightened self-interest by all parties to a transaction. And simple is to turn the page, or to get government on the same page as the citizens and business it serves, even as the page becomes an artifact from a bygone, complex era of government the way we once knew it.

Endnotes:

1. The fictitious Scott is a character on the NBC television series, "The Office." Quote imagined by series co-executive producers Greg Daniels and Paul Lieberstein for How to Succeed in 2007, *Business 2.0*, December 2006: 106.
2. National Association of State Budget Officers, *The Fiscal Survey of States*, June 2006: 1.
3. IBID., viii.
4. IBID., vii.
5. IBID., 1.
6. See a compilation of quotes from Peter F. Drucker at http://thinkexist.com/quotes/peter_drucker/
7. "When IT lifts productivity," *The McKinsey Quarterly*, 2004 Number 4.
8. A related search on Google returned 26.1 million results, including almost 2,000 news stories.
9. Revised Code of Washington (RCW), Title 43, Chapter 43.105, Section 43.105.017.
10. Washington State Department of Information Services, *2007-2009 Strategic Plan*, May 2006: 4.
11. See Arthur C. Clarke, "Three Laws of Prediction" at http://en.wikipedia.org/wiki/Arthur_C._Clarke
12. See Mark Stanley's science-fiction inspired online comic, *Freefall* — http://www.whiteponyproductions.com/ff/anim001.htm
13. Diamon, Jared. "Guns, Germs, and Steel: The Fates of Human Societies," W.W. Norton & Company, March 1997
14. Kurzweil, Ray. "The Singularity is Near: When Humans Transcend Biology," Penguin Group, 2005.
15. One doubled thirty-four times is about 9 billion. See http://raju.varghese.org/articles/powers2.html for an exponential growth table.
16. According to Hossein Eslambolchi, CIO, AT&T
17. The Federal Enterprise Architecture is a comprehensive business-driven blueprint of the entire federal government. It consists of a set of interrelated "reference models" designed to facilitate cross-agency analysis and the identification of duplicative investments, gaps, and opportunities for collaboration within and across agencies. The Federal Enterprise Architecture includes 39 lines of business that describe activities of the government, such as education, income security, and supply chain management.
18. "The Sims" is a strategic life simulation computer game created by game designer Will Wright and distributed by Electronic Arts. The game is a simulation of the day-to-day activities of one or more virtual people (dubbed "Sims") in a suburban household located near SimCity. Visit http://thesims.ea.com/us/
19. "Second Life" is an online society within a 3-D world, where users can explore, build, socialize, and participate in their own economy. See http://secondlife.com/
20. Crowd sourcing, or crowd sourced-workers means that the masses are utilized as a labor pool, from amateurs to professionals. Part of the advantage of crowd sourcing is to get a wide array in experience and perspective. *Wired* magazine has this to say about crowd sourcing: "Remember outsourcing? Sending jobs to India and China is so 2003. The new pool of cheap labor: everyday people using their spare cycles to create content, solve problems, even do corporate R & D." See http://www.wired.com/wired/archive/14.06/crowds.html for *Wired's* article on the topic.

[21] The Streamlined Sales and Use Tax Agreement was developed by a group of states acting together with support from the Federation of Tax Administrators, the Multistate Tax Commission, the National Conference of State Legislatures and the National Governors' Association. In 32 states, legislation or an executive order authorized state participation in the Streamlined Sales Tax Project. Six other states participated as non-voting observers. The states divided themselves into a steering committee and four working groups. The working groups addressed issues in the areas of tax base and exemption administration; tax rates, registration, returns and remittances; technology, audit, privacy and paying for the system; and sourcing and other simplifications.

[22] Mike Moore, CIO, San Diego County reports that his time spent on fighting fires and everyday problems has gone down and that has freed him up to work more on applying technology to business problems.

[23] According to http://dspace.dial.pipex.com/town/parade/abj76/PG/works/speed_the_plough_by_david_mamet.shtml, the phrase "Speed-the-Plow" appears to derive from a blessing in medieval verse and song: "God speed your plow," or, "do your work and God will help you." Or the other way around is, "The sluggard will not plow by reason of the cold; therefore shall he beg in harvest, and have nothing" from *Proverbs 20:4*.

[24] *Prove IT* is available for download at http://www.centerdigitalgov.com/story.php?id=98961.

[25] *Telework 360* is available at http://www.centerdigitalgov.com/publications.php?pub_id=42.

[26] Excerpted from Paul W. Taylor, "Keepers of the Public Record," *Government Technology*, February 20006 and March 2005.

[27] See Leslie Friesen, "Improving Performance," *Government Technology*, June 2, 2006 http://www.govtech.net/magazine/story.php?id=99711

[28] *Governing Faster, Smarter* is available at http://www.centerdigitalgov.com/publications.php?pub_id=72. Center for Digital Government, 2006.

[29] *The Connected Republic: Changing the Way We Govern.* http://www.cisco.com/web/about/downloads/guest/c644/ccmigration_09186a00803697c5.pdf

[30] *Prove IT* is available for download at http://www.centerdigitalgov.com/story.php?id=98961.

[31] http://it.ojp.gov/initiatives/files/Public_Record.pdf

[32] See Center for Digital Education: *TurningPoint.edu* (2007), available for download at www.centerdigitaled.com.

[33] See Center for Digital Government, *Building the Untethered Nation I: A Strategic Guide for Local Government on Wireless Technology and the Community Infrastructure* (2005) and *Building the Untethered Nation II: Understanding the Vital Role of Local Governments in Wireless Broadband Implementations* (2006). Available for download at www.centerdigitalgov.com.

[34] See Center for Digital GovernmentPaul W. Taylor and Richard J. Varn, *The Sawyer Principles: Digital Government Service Delivery and the Lost Art of Whitewashing a Fence,* (2005). Available for download at www.centerdigitalgov.com.

[35] See Virginia's IT Infrastructure Partnership at http://www.vita.virginia.gov/itpartnership/index.cfm

[36] Brian Unger, "This Year was All about You, Sort of," *NPR's Day to Day*, Dec.18, 2006.

[37] "Person of the Year 2006 Cover Story: You." *TIME*, Dec. 25, 2006

[38] Chris Anderson, "People Power: Blogs, user reviews, photo-sharing – the peer production era has arrived," *WIRED*, Issue 14.07, July 2006.

[39] United State Census Bureau, U.S. and World Population Clocks (See http://www.census.gov/main/www/popclock.html)

[40] Adapted from the Center for Digital Government's *Digital States 2006: Summary of Major Findings*, available at http://www.govtech.net/digitalstatesawards/findings_trends.php

[41] Chris Anderson, *The Long Tail: Why the Future of Business is Selling Less of More*, Hyperion, 2006.

[42] James Surowiecki, "The Wisdom of Crowds," *Anchor*, 2005.

[43] As told by Dr. Morice Deogratias, "Where are we going?", *boloji.com*, Jan. 8, 2006.

[44] David Osborne and Peter Hutchinson, *The Price of Government: Getting the Results We Need in an Age of Permanent Fiscal Crisis*, New York: Basic Books, 2004: 13.

[45] Paul W. Taylor and Richard J. Varn, *The Sawyer Principles: Digital Government Service Delivery and the Lost Art of Whitewashing a Fence*, Center for Digital Government, Folsom, 2005.

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Special thanks to Steve E. Kolodney

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