# Digital Government through Social Networks:
# A Natural Alliance?

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## Abstract

North Americans possess a "participatory surplus" that fuels open source software and presidential campaigns, energizing millions. Well-understood social networking services could provide a barackobama.com for the constituents of any politician and to the stakeholders of any government agency or service. How might campaign web site experts design and host a network to govern governance?

Software systems designed for campaigns cannot simply be ported over to governance. And the generic social software systems developed so far do not take account of the realities of governance sufficiently. If we are to take advantage of the new online, connected environment to empower voters, we will have to discern a new set of requirements and come up with software that works in the real world of governance.

Such a system woiuld have to recognize the real world motivations and mechanisms that pull the levers of government. Governmental representatives are moved not simply by pure argument or the honest expression of their constituents' preferences. Representatives also have career interests, which are part and parcel of having a functioning government. Any social system aimed at empowering constituents must take these realities into account. One important factor: Governance is regional. A social network for governance will very likely have to reflect the way in which geography binds constituents.

A virtual congressional district is the epitome of politician advice and consent, guiding a representative's policies as effectively as an airplane's "trim tab" governs its far more unwieldy rudder. We will provide a guideline for using 435 virtual districts to promote digital signature legislation.

## INTRODUCTION

The most recent U.S. presidential campaign proved Clay Shirky right in "Political Collaborative Production"[1], written for Rebooting America[2], a collection of essays prepared for the Fourth Personal Democracy Forum[3] in June, 2008 that we have a "huge, and largely unused, participatory surplus of people who are ready to contribute to efforts and causes larger than themselves."

The authors of this paper experienced that surplus five years ago when they worked on Howard Dean's presidential campaign. That campaign innovated in the use of social networks before that term existed. But, even had Howard Dean been elected, the transition from a social network designed for campaigning to a social network designed for governing would not have been easy or obvious.

For the past four years, the authors have been working on (as principle designer and as advisers) on a software platform designed to tap the "participatory surplus" of the citizenry. But, our experience and research has shown that to accomplish the aims of such a system, it is not enough simply to put citizens together into a large, open, virtual space. A social networking system designed for participatory governance needs to mirror some of the structure of the government itself, and needs to provide a range of structured ways by which the government and the citizens can affect one another.

This paper describes the current context and the underlying poltical/social considerations that led us down this particular path.

## 1. USING THE CIVIC SURPLUS – A PRECURSOR

In his seminal book, "Here Comes Everybody"[4], Clay Shirky suggests that we're better equipped to manage our governments than most of us think, and that our society has been here before. Speaking at the Web 2.0 Conference on April 23, 2008, he explained[5]:

> "...the critical technology, for the early phase of the industrial revolution, was gin.

> "The transformation from rural to urban life was so sudden, and so wrenching, that the only thing society could do to manage was to drink itself into a stupor for a generation. The stories from that era are

amazing-- there were gin pushcarts working their way through the streets of London.

"And it wasn't until society woke up from that collective bender that we actually started to get the institutional structures that we associate with the industrial revolution today. Things like public libraries and museums, increasingly broad education for children, elected leaders--a lot of things we like--didn't happen until having all of those people together stopped seeming like a crisis and started seeming like an asset.

"It wasn't until people started thinking of this as a vast civic surplus, one they could design for rather than just dissipate, that we started to get what we think of now as an industrial society.

"If I had to pick the critical technology for the 20th century, the bit of social lubricant without which the wheels would've come off the whole enterprise, I'd say it was the sitcom. Starting with the Second World War a whole series of things happened—rising GDP per capita, rising educational attainment, rising life expectancy and, critically, a rising number of people who were working five-day work weeks. For the first time, society forced onto an enormous number of its citizens the requirement to manage something they had never had to manage before—free time.

"And what did we do with that free time? Well, mostly we spent it watching TV."

Lincoln's admiration for government by-the-people didn't really get started until 2003. Campaign Manager Joe Trippi didn't have enough money to launch Howard Dean's presidential campaign, so he put it on the web.[6] Within three months, cognitive and participatory surplus were attracted from all over the country like iron filings to a magnet. Many showed up in Burlington Vermont uninvited, but mostly they logged in from home. Every revolution starts with baby steps, often unheralded at the time, and this revolution started with the simple concept of registering at a web service.

Before 2003, no political campaign had "members," just marketing targets. But because it's customary for a web site to seek viewers to register as members and customers, so did Dean's campaign. When the campaign started a blog, daily visits exploded. When the blog was opened to comments, members of the campaign started their own conversation, cross-talking in the comments. They saw themselves as owners of the campaign, communing in the ad hoc groups forming around every blog post. Eventually they got the power to hold their own mini-fundraisers and house parties and meetups. What they were not equipped to do may have cost Dean the nomination: They could not form persistent groups nor champion the issues that mattered most to them.

The Obama campaign fixed those lacks and several more, and deflated the most powerful shoo-in nomination in modern times. But it was still just politics, not governance. Or was it more than that? Did the Obama campaign point the way to a revolution in policy formation?

## 2. FROM ONLINE CAMPAIGNING TO ONLINE GOVERNING

There is a difference between politics and governance. Partisan politics so thoroughly drives policy that we decry its apparent waste of time, money and energy, leaving idealists to wonder why we can't just get along.

But the US has just witnessed a masterful online campaign, engaging so many disparate people with such a powerful outcome that we need to assess whether these successful campaigning techniques are transferable to governing and policy formation.

Every element of governance involves a large or small campaign. Behind every law, amendment, confirmation, veto and override are the four elements of consequence  -- four "reality principles" -- that also govern every campaign:

- **Viewpoints**
- **Money**
- **Votes**
- **Careers**

When a viewpoint – an issue – is backed by consequential money and votes, with career consequences for the participating politicians, the outcome is certain.
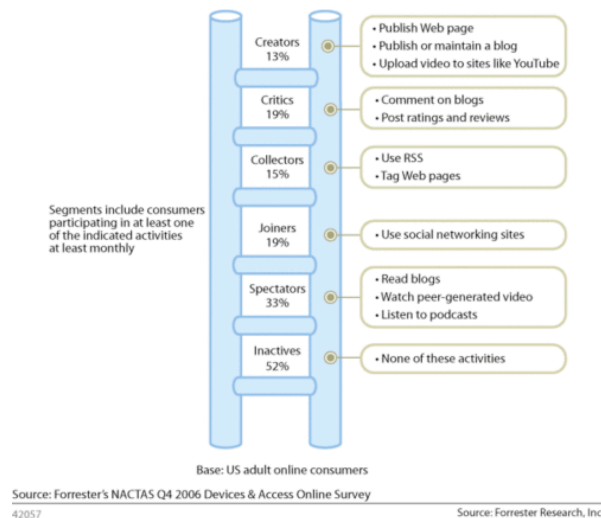
In the past, the tools of campaigning and of governing were separated by the fact that the citizenry was only directly involved in the former. Now, thanks to the always-on, always-connected infrastructure available to most of the country, campaigning and governing may have more in common than ever.

Those same four "reality principles" now can rule campaigns whether they are for office or for a piece of legislation.  If we accept that commonality, we may have a reliable blueprint for Government By The People: a way for voters to *govern* government just as an airplane's or sailboat's "trim tab" governs its far larger, more unwieldy rudder.

## 3. HARNESSING ONLINE CAMPAIGN WORKFLOWS FOR GOVERNANCE

The progression from passive observer to fire-breathing activist is now well known and has now been built into the architecture of successful campaigns. In fact, the progression is a more specific instance of a general progression of online behavior, as predicted  by a study by Charlene Li and Josh Bernoff, published in 2006 by Forrester Research. It describes the progression as a ladder of engagement with six rungs:[7]

1. **Inactives**
2. **Spectators**
3. **Joiners**
4. **Collectors**
5. **Critics**
6. **Creators**

Base: US adult online consumers

Source: Forrester's NACTAS Q4 2006 Devices & Access Online Survey

42057                                                    Source: Forrester Research, Inc.

Forrester's Ladder of Engagement is generalized to all "social" online activity. The typical online activist's progression is similar. In both cases, only some people will make the full progression, but any progression by any member of the campaign adds to the campaign's success.

Four national campaigns have provided laboratories that demonstrate that the pattern of these steps:

> Howard Dean, 2003-4
> Ron Paul, 2007-8
> John Edwards, 2007-8
> Barack Obama, 2007-8

These campaigns demonstrated that "creators" are not the top of the activist ladder, but just below the middle:

**1. Readers**
**2. Critics**
**3. Creators**
**4. Joiners**
**5. Doers**
**6. Leaders**
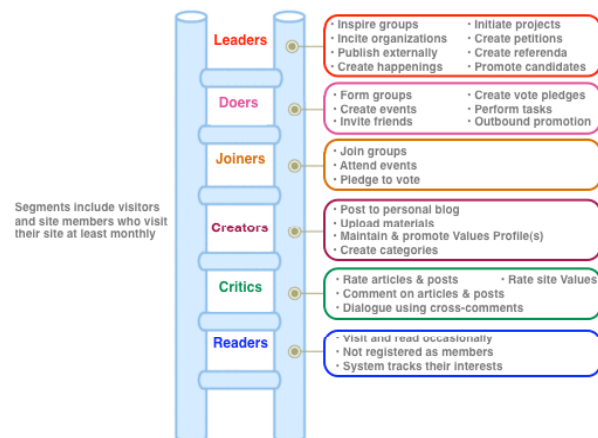


The ladder diagram hides, however, that the people progressing through the sequence within any campaign comprise a social network, whether they're on line or off, whether they know each other before or because of the campaign, whether by name or an obscure "handle". All that matters is that an individual voice has an evolving reputation visible to others, with weak or strong ties among them, and that their effort is perceived as a shared and growing success. But, that social network is the by itself not enough. Only when the campaign is coordinated online can it unlock the full force of its members' participatory surplus.

"Real" campaigns – physical mailings and meetings and calls and glad-handing and fervor – live only in collective, faulty memories and ephemeral news reports.

Counter-intuitively, a "non-real" (online) network is continuously accessible to its members, to inform us, impress us, and to add to whenever we want. Invisible bits of magnetism on unseen machines present and maintain for us evidence of our actions and our importance to one another. Improbably, online networks are far more immediate and accessible than "real" ones, so we use and rely on them more and respond to their signals with more alacrity.

# 4. GOVERNMENT IN HYPERDRIVE: HYPERLOCAL NETWORKS

**Steven Clift**, contributing to "Rebooting America" **Representative democracy is based on geography**[8], says we cannot affect politicians unless we do it as voters in their jurisdiction:

> "...content created by citizens must be identified by place instead of simply organized by issue. Content, from a news story to an online comment to a picture or video, needs to automatically be assigned (or "tagged") with a geographic place. In addition, content bounded by a state or region or identified as global will be essential.

> New content must be easily searched and aggregated for community-level display. As neighbors gravitate to talk about local issues online, so will our elected representatives tap our public pulse online."

American presidential campaigns' obsession with state-by-state campaigns sets up another vector of commonality between campaigns and governance. When our activist social networks include nodes for every jurisdiction, then the citizens can focus their voting power on individual politicians to get support for their point of view. Clift implies that we need a citizen-owned barackobama.com for every congressional district, senate seat, state and hamlet. For good measure, throw in a few thousand more, to support and guide each agency and bureau–and the Presidency: why should candidates own our presidential conversation?

Clay Shirky's point, again:

> "If I had to pick one method of rebooting civic life, it would be by finding new ways to grant groups the legitimacy essential to pursuing long-term and constructive goals on their own."

No one seems much interested in seeding thousands of barackobama.coms but that's where our observations take us.

Leaving aside the cost and complexity of providing and supporting those networks, let's consider how the most successful campaigns might structure a network of networks to support and guide politicians and governmental agencies.

We now have two operating princples.

First, there are the four "reality principles" of any campaign, with for election or while governing:

- Viewpoints
- Money
- Votes
- Careers

Second, we propose that the way to create a citizen-based social network that obeys those reality principles is to map the network to the actual shape of governance, centered around the geographical districts of governance, led by politicians who have a real stake in listening to the conversations their constituents are having.

## 5. A NETWORK OF GOVERNING NETWORKS

A network of governing networks suggests a Facebook for government. That sounds good on the surface but would be no more effective at transforming government than Facebook has been already. It also ignores the crucial requirement that governing networks must attract enough voters to affect policy-making. A network to govern jurisdictions and agencies must be accessible to a broad range of citizens, which means its first impression must be as approachable and obvious to Uncle Fred and Aunt Maude as an airport kiosk. Whether or not they will grow into leading activists, the network must appear to them, at first, as a place with interesting conversations about something they care about, at a web address meaningful to their local interests: a school budget or toxic spill or local housing market. They're unlikely to seek out a site inside Facebook and, if they don't find a conversation of their peers to follow, it doesn't matter if the network has the power to govern. They won't come back and not because they are stupid. They are simply not motivated to do what's not obvious.

If they come back, additional steps in their progression must be comfortable because they are the steps they have followed in "real-world" organizations. The point of the process is to attract millions of people to learn and adopt a workflow no more complicated than iTunes, because if it's any more complicated, people won't do it.

Using these governing networks is as unlikely as millions of people spending so much time, effort and money managing their music collection. The iTunes habit was inconceivable the last time the US elected a new President.

A system that meets all of these requirements cannot be designed in the abstract. It can only be designed the way actual software is designed: By building it and refining it. Our team has been engaged in that process for the past four years.

Based upon research, experience, and many discussions, the software helps a user progress through a "12 step" program, meeting needs at each level, but making it easy to go from uninvolved to fully engage activist:

1. Discover some intriguing blog posts
2. Follow some blogs regularly
3. Comment on some posts
4. Rate the quality of some posts and comments
5. Engage in cross-talk with other commenters
6. Invite friends to blogs and comments
7. Donate money
8. Emerge as a trusted voice with your own followers
9. Raise money
10. Participate in emerging groups, attracting others
11. Emerge as a "relative authority" to a few or many others
12. Emerge as a thought leader

Each feature of the software is designed to facilitate the movement through these steps, while satisfying users need to connect with others and express themselves.

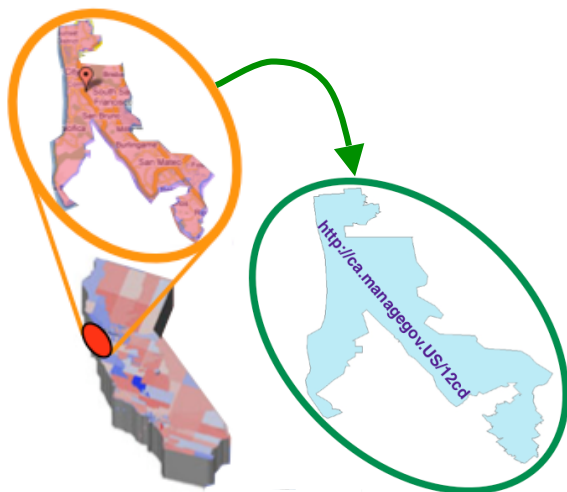## 6. A NETWORK OF 435 VIRTUAL CONGRESSIONAL DISTRICTS

The software is designed with all of the flexibility of a platform, but the leading intended application of it is as a network of 435 virtual congressional districts, each of which is associated with one of the existing 435 districts:
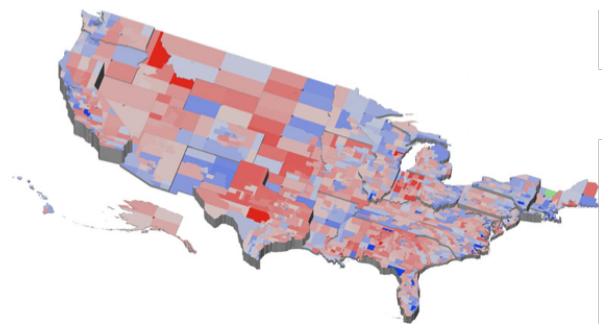


In the "real world", voters feel powerless because they see the US federal government as an unapproachable monolith even when, rarely, it is depicted as 435 diverse districts.

A Congressional district might not be too big to affect, but how would they know? Voters don't yet think of a district as a tangible political entity.

Eight years ago, most music fans didn't know what a "genre" is, but iTunes has made the term mainstream. Voters in this example, California's 12th District, which includes Silicon Valley, should easily colonize a virtual district:

Any virtual congressional district could support a dramatic increase in the voters who know what district they're in, its boundaries and the issues they want to push to their representatives. Members of that "imaginary" district would quickly discover how few votes it takes to thrill or frighten their representative.

Paul Simon, a fiercely ethical congressman and senator, said,

> "When you're handed a stack of messages at the end of the day, most of which are from people you've never heard of, and one from someone who has given you $1,000, which call do you think you're going to make?"[9]

Virtual District members would be positioned to crack the shell maintained by every congressperson, consumed with the need to raise $3,000 each day to fund the next campaign.

Politicians know that money is simply an abstraction, as close to buying votes as they can get. Direct collaboration with the voters' governing network might earn more votes, more reliably and easily, than glad-handing donors at a $100,000 fundraiser costing $30,000 to host.

## 7. COMPUTER-ASSISTED MARKET SEGMENTATION

In the 1960's, there was a similar revolution in politics, enabled by the same factors. The emergence of computer list processing created the direct mail industry, equipping campaigns to classify constituents by income, address, home value, etc., and to send highly targeted appeals for contributions and votes. This was the beginning of direct-to-consumer targeting, allowing candidates to build their own outreach capabilities separate from the political parties' hierarchy. Combined with the rise of television ads, smoke-filled rooms lost their chokehold on US political power. As a direct result, previously inconceivable candidates emerged, like McGovern, McCarthy and Carter.

Most voters have more computer power than the nation possessed at the dawn of direct mail. Computer-assisted, highly granular segmentation of a constituency is now available to any of us and is leveraged when we form well-

equipped governing networks to reach out to and activate our personal circle. Such a network can resolve and aggregate its members' views and push the specific policies to a congressperson that most constituents favor. Politicians can improve on the guesswork they currently rely on, and stop changing their pitch for different audiences, which YouTube has made so dangerous.

In a virtual congressional district, the congressperson, her staff and surrogates would be required to reason with the district's stakeholders and to collaborate rather than pontificate, due to the conversational Web's abhorrence of didactic or marketing language:

> "Conversations among human beings *sound* human. They are conducted in a human voice." The Cluetrain Manifesto, 1999.[10]

## 8. ALL POLICIES ARE LOCAL

As a network of virtual districts grows, its members could achieve strategic ends by coordinating local tactics across congressional districts. A national consensus might deplore a politician's vote in committee, but today's environment provides a cloak of legislative anonymity – constituents can't see how their representative's actions have serious national consequences. The national network's issues champions would see those connections and recruit the politician's voters to correct unwelcome behaviors.

It's unlikely that lobbyists or special interest donations would be more convincing to a politician than an online, visible protest over a committee vote that does not affect the district's voters more than any other voters, but who are willing to support their peers on the larger network.

For proponents of Digital Government, Virtual Districts could break down the resistance keeping the US on paper. Moreover, it's likely that a vibrant network of jurisdiction-tagged social networks would be the best friends that government professionals have ever had.

## 9. REAL SCALABILITY: GOVERNING THE NETWORKS THAT GOVERN GOVERNANCE

Social networks must be built for technical scalability, ensuring that the servers and bandwidth are adequate as the network grows. But a network governing governance has to be robust enough to survive two additional threats: greed and fear ... greed because of the opportunity to profit from networks as large as MySpace or Facebook, and fear masked as backlash from entrenched forces as voters gang up on them. Therefore it's crucial that the networks not be under the control of the people or institutions that develop them. This calls for a novel form of ownership, because we've learned that few owners can resist an irresistible opportunity.

The network we imagine must share the virtues of the Internet to be safe from plundering. But what are the core virtues of the Internet?

In 2003, Cluetrain authors Doc Searls and David Weinberger described the Internet as a "World of Ends.[11]" There, Doc Searls postulated three virtues of the Internet:

1. **Nobody owns it.**
2. **Everybody can use it.**
3. **Anybody can improve it.**

If our network of networks is to be safe from tampering, it must possess those three virtues. The first is the most difficult, for the second and third virtues are commonly achieved by basing the service on an open source code base. But non-ownership of a web service has never been achieved. How do you isolate control of a service from the entity that hosts the service?

Three classes of legal entities control 99% of all existing assets:

1. **Individuals,**
2. **Corporations**
3. **Governments**

Each owner type has well-established methods to control, constrain, abandon or sell anything it owns, with few ways for others to prevent the exercise of their sole control. Such independence, so admirable in a free society, seems unsuitable for an asset as consequential as a nationwide network of networks governing the government.

But there is a fourth, somewhat mysterious kind of owner known as a trust. A trust requires no controlling board or self-interested shareholders or governmental approval to operate. Managing and disposing of tangible assets is the whole point of a trust, but a simple limitation can ensure that the trust that owns the network of networks is not able to control or sell it. For this purpose we can imagine an "Internet services irrevocable non-corporeal trust." Such a trust would be restricted from owning any tangible assets, such as money, property or securities, because even the largest social networking web service needs only one property right to host its network: an intangible asset called a web hosting agreement. Naturally, the hosting cost is expensive and increasingly so. Where does all that money come from and how can the beneficiaries of the network be sure the service won't go dark?

The web hosting provider can agree to maintain a fundraiser on its own node on the network and advertise its costs so the members of the network can pay for the services they rely on to manage their government. In theory, the site would be hostage to the uncertainty of its members' continuing support, but that's no more a risk than its exposure to the members' continuing activity.

## 10. A Case Study: Digital Signatures

Many cyber security experts are frustrated that the US has not adopted digital signatures as a requirement for Internet transactions. With 435 virtual districts established, a reproducible work flow would become possible. There are four obvious phases:

1. **Draft legislation**
2. **Campaign in the Subcommittees**
3. **Campaign in the Committees**
4. **Get the vote out in each chamber**

The specific steps of the process:

Draft the legislation that the experts would like to pass. This would happen by engaging a conversation on line to attract interested parties to improve or edit the proposal. This conversation might appear at a site with a domain name something like ManageGov.us, at page with an address such as http://TSA.managegov.us/digitalsignatures.

Encourage members to rate each others' posts and comments.

When the noise reaches a steady state, the members designate a small working committee to finalize the language, chosen from among the highest-rated participants.

The committee works in public, with other group members commenting on and rating their work.

After the proposed legislation is drafted, group members are invited to indicate their commitment to it.

This starts several mini-campaigns of committee members.

Identify the subcommittees with jurisdiction. For cyber security, the House subcommittee is the House Committee on Homeland Security:

Rep. James Langevin [D-RI], Chairman,
    RI 2nd congressional district
Rep. Michael McCaul [R-TX], Ranking member,
    TX 10th congressional district
Del. Donna Christensen [D-VI] Virgin Islands At Large
Rep. Paul Broun [R-GA] 10th Congressional District
Rep. Virginia Brown-Waite [R-FL] 5th congressional district
Rep. Bob Etheridge [D-NC] 2nd congressional district
Rep. Al Green [D-TX] 9th congressional district
Rep. Peter King [R-NY] 3rd congressional district
Rep. Zoe Lofgren [D-CA] 16th congressional district
Rep. Daniel Lungren [R-CA] 3rd congressional district
Rep. William Pascrell [D-NJ] 8th congressional district
Rep. Bennie Thompson [D-MS] 2nd congressional district

This is how the subcommittee lays out on a map:



House Subcommittee on Cyber Security, *inter alia*
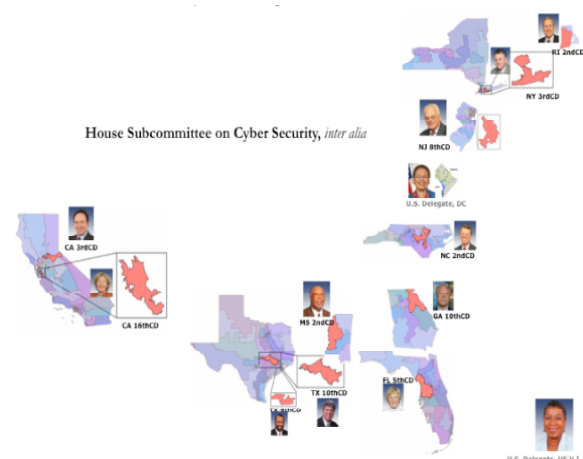
Using our "ManageGov.US" domain example, these representatives would be naturally influenced at their respective virtual districts. For example:

http://CA.managegov.us/3cd
http://CA. managegov.us/16cd
http://TX. managegov.us/9cd
http://TX. managegov.us/10cd
http://FL. managegov.us/5cd
http://GA. managegov.us/10cd
http://NC. managegov.us/2cd
http://NJ. managegov.us/8cd
http://NY. managegov.us/3cd
http://RI. managegov.us/2cd
http://DC. managegov.us
http://VI. managegov.us

With the infrastructure in place, interested parties can make their case to the network and inspire the "participatory surplus" to energize the debate. At each of those virtual districts, voters would be encouraged to debate the need for digital signatures and to help their representatives realize that the representatives care more for votes than for the campaign support by the banking lobbyists. The outcome would not be certain, but the odds of rational, systems-based thinking would be improved.

With the subcommittee members engaged, the Digital Signature group members would then reach out to voters in the committee members' districts and then repeat with the subcommittees and full committees of the Senate.

Before the legislation comes to a full vote, the Digital Signaure movement would work similarly, nationwide, to get the required votes on the floor of both chambers.

## 11. If We Build it, Will They Govern?

If we've learned anything from the online ferment inspired by candidates like Howard Dean, Ron Paul, John Edwards and Barack Obama, it's that America's civic and participatory surplus can energize voters more than their day jobs.

Once voters learn to partner with agencies to govern the engine of government, will they ever stop?



FIG. 29.—The Governor.
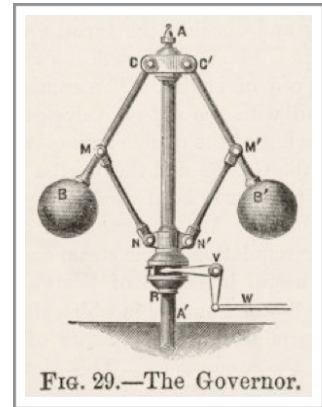
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