From Government 2.0 to Society 2.0:

Pathways to Engagement, Collaboration and Transformation

From Government 2.0 to Society 2.0:

Pathways to Engagement, Collaboration and Transformation

Zachary Tumin, *Harvard Kennedy School*

with

Professor Archon Fung, *Harvard Kennedy School*

INTRODUCTION

In June, 2010 25 leaders of government and industry convened to Harvard to assess the move to "Government 2.0" to date; to share insight to its limits and possibilities, as well as its enablers and obstacles; and to assess the road ahead. This is a report of that meeting, made possible by a grant from Microsoft.

THE CASE FOR ENGAGEMENT

"I don't get it," the mayor of one of America's largest cities recently said of Facebook and Twitter: "The thing that surprises me is why people want to tell others what they're doing day in and day out. ... And you wonder, number one — why on earth does anybody care?"

Social media is proliferating around the globe. There are now 750 million users of Facebook. By population, some call Facebook the 3rd-largest country in the world. Twitter counts 100 million users. Google's Orkut (its version of Facebook) has 100 million users worldwide — including 60 percent penetration in Brazil.

There are leaders who have found these IT-enabled platforms — the so-called web 2.0 family of applications — critical to improving performance by engagement.

Claudia Costin is Secretary of Education for the region of Rio de Janeiro, in Brazil. Her charge: 1 million students, 1,100 schools, 38,000 teachers. At 54 years old, Costin told an audience recently, "I'm a little bit scared of computers." She's not even an "education specialist," she said. "I'm a specialist in social policy for fighting poverty."

"What I'm going to show you is very important: How to promote participation in reshaping a public policy. For that," she said, "you have to have the teachers with you. You have to build trust in the teachers."

"Otherwise," Costin said, "you won't change education."

"I discovered by chance that e-mail is not a good way of communicating because the answer that I give to one, the other won't know. So, I entered Twitter because of that. Well, let me be frank. I entered Twitter because I have five kids. And one of them was in Italy. And I wanted to connect. And one of the kids, they are my teachers in technology, and one of them said, 'Let's write what you're doing.' And then I noticed that teachers were following."

"And then I said, 'Why are they following? Why do they want to know what I'm talking to my daughter in Italy?' And so, very quickly I discovered that Twitter is the key for success in mobilizing teachers."

"I'm saying this just to say that now I have 6,400 followers, last data. And of them, 5,500 are teachers. And we connect every day. So, I spend two hours now with e-mails and Twitter. But Twitter is much better because if a teacher makes a question, I answer to everybody so that they can know."

And then the Secretary shared a panoply of IT-enabled innovations she had instituted — not one laptop per child, but one per three, for cost savings. Shared curriculum development by wiki with teachers. A portal with blogs for teachers for sharing insight and best practice. Digital review classes. Online training of teachers. A new collaborative development platform — Educapedia — importing video, best practice, digital classroom materials, all designed by teachers, for teachers.

The relationship with teachers has changed, Costin said. Not a single strike in the year and a half she has been engaged.

"Sometimes," she says, "we have the illusion that we in social policy are changing things. But a teacher, once he closes the door of his classroom, he does or she does what he or she wants because he is alone with his classroom. So either we succeed in convincing them that learning matters, that we can do a wonderful job changing the lives of those kids, or we will be selling illusions to the citizens."

Yet Secretary Costin has concerns. Capacity and training: Can she keep pace with success, as demand for engagement swells? With 38,000 teachers, it's hard to be comfortable that all the teachers are prepared and trained. Content and systems: How should she use information technologies to substitute for textbooks in a fun way to further transform learning? And infrastructure and maintenance: With century-old infrastructure not adequate for wireless or informatics — or even air conditioning — how can we assure all schools, all students, all teachers share in the gain?

Claudia Costin will turn to Twitter, to a wealth of engagement platforms and to teachers themselves to find answers.

OUR CHANGING WORLD

Around the world, public services have undergone significant changes over the past 25 years, often based on the introduction of management approaches from business and evolving along the waves of revolution in information and computing technologies, from main frame to PCs to web to networks.

Today, the global recession — coupled with changes such as the retirement of the post-World War II generation, the emergence of millennials, new waves of interactive communications technology and low-cost collaboration platforms — is sparking a next wave of citizen engagement, reform of government and the transformation of service. There is great interest, globally, in the power of ideas like collaboration, transparency and participation. Where there is action, it taps the power of networks spanning the boundaries of government, citizens and the private sector to engage all.

These collaborations reflect a profound realization that neither government, service providers, nor citizens can often accomplish their purposes without collaboration. In a networked world, the speed of change, the pace of risk and the breadth of opportunity means no one institution, organization or individual can go it alone. Especially now, with governments around the world facing financial crises, joining up and co-producing services with citizens, industry and non-governmental organizations seems essential.

Even in flush times, such cross-boundary collaboration is difficult. Old-school legacy arrangements can stop innovation cold. Funding is stovepiped. Information is highly compartmentalized. Computer systems cannot easily operate together. Hierarchies are slow to change. Information assurance and privacy clash with calls for transparency and openness. Shared missions have no one uniquely accountable for outcomes. Even with all the obvious failures of recent years, from 9/11 to Katrina to the global financial crisis, agencies, organizations and units persist in "going it alone."

Especially in difficult times, when the "pie" is shrinking, individuals, institutions and societies tend to hunker down to assure their "slice" stays the same. At the level of government, for example, some agencies retreat to statutory core mission. Many managers are more risk-averse than ever. Oversight intensifies, shared mission-vision takes a back seat and investment in innovation dries up. Collaboration is a last resort — to be trotted out only when you're backed into a corner.

Yet evidence suggests, also, that in such times governments around the world may be more prone to reducing barriers to change, and experimenting more. Switching costs have lowered. Digitally enabled collaborations and innovation have blossomed. The technologies of smartphones and tablet, cloud and open platforms make adoptions light, fast and agile. All these moves provide clear evidence that the potentials for gains from new network-enabled collaborations are high.

Certainly corporate networks and citizen networks are not waiting — they proliferate. The emergence of a generation of digital natives now makes connectedness a fact of life, and with it, a host of emergent new arrangements and solutions. Government, nongovernment organizations, industry and citizens now can, in theory, tap the power of all to produce wellness, safety, prosperity as never before. There is awareness, eagerness and readiness.

JetBlue is among many firms that now monitor Twitter and jump all over negative tweets to fix what's wrong as quickly as possible — even while passengers are still standing in line! Senior executives in industry and government have internal company blogs where they communicate new directions to employees and take comments — right over the heads of managers. The Vice Chairman of the U.S. Joint Chiefs of Staff (a Marine Corps 4-star General) is famous for his blog. Other corporate and government leaders maintain Twitter feeds where they communicate with all — Secretary Costin in Brazil. for example, has 6,000 of her teachers following her. Many cities and towns are now opening discussions directly with constituents around budget priorities and letting them vote on capital budgets — how should $X be spent?

BLUE SKY VISION

Especially since the advent of the Obama administration, collaboration, transparency and participation have enjoyed vigorous new interest. So-called "government 2.0" initiatives proliferate. Images of citizen collaboration and empowerment abound. Important lessons have been learned.

Over the course of the meetings, images of the world that practitioners envision emerged, all drawing powerfully on the forces for change covered under the rubric "government 2.0." Here are some of the qualities of that potential state — components of the vision, its possibilities and sometimes its goals:

- ***Increased government transparency.*** All can discover, access and use public data in new and valuable ways.
- ***Real-time public two-way communication.*** Elected officials, managers and citizenry rely on text, mobile tech, the web — and even telephone, television and radio — to engage on matters large and small.
- ***Performance improves by involvement of the service deliverers in design.*** Discretion is restored to professionals — teachers, social workers, cops — based on empowerment, discovery and shared best practices.
- ***Executives, managers and workers see and collaborate around the whole picture*** — moving beyond their stovepiped and cylindered worlds, collaboration focuses on managing the parts for the whole across the entire "supply chain" of health, prosperity and safety.
- ***Keen awareness of the power of technology for change*** — in a resource-constrained world, technology is not a sidebar but always the "first play you run" — helping to unlock the value of assets heretofore hidden or constrained in use.
- ***Improved efficiency*** — with collaboration, public and private resources combine to produce more for everyone — making the pie bigger, and the cost of a "slice" lower.
- Broadband technologies are widely implemented, allowing for the wide distribution of user-friendly and low-cost video-conference systems linked to citizens by smartphone and digital TV.
- ***Bidirectional information and communications technologies*** — governments converse and engage rather than transmit and "talk at"; new technologies and expectations shift the paradigm.
- ***Government as provider, convener and enabler*** — government moves from a "vending machine" model to a model of government as platform provider — from silo-structured, supply-oriented and closed, to connecting all.
- ***Sustainability via transparency*** — government assures the sustainability of its moves to "open government" by making data open and available.
- ***Sustainability via new business value*** — government sustains the gains it makes to "openness" via demonstrable returns to business results for "investors" — whether citizens, bureaucracies or industry.
- ***A philosophy of "metric, perform and measure" prevails*** — terms are clarified, evaluations and assessment made, costs and benefits known, and decisions informed by science as well as by politics.

Executives, managers and workers see and collaborate around the whole picture - moving beyond their stovepiped and cylindered worlds.

- ***Open data lets us find problems*** in complicated environments faster, better and cheaper, possibly even preventing them from happening. The more eyes we have looking at potential problems, the better our chances of solving complex challenges like environmental degradation and corruption.
- ***Cloud-based platforms enable new contexts*** to be set for old problems. A clinic in the UK, for example, may have an asthma patient report to her doctor with difficulty breathing. The doctor polls Eye-On-Earth for Rome. She sees that someone made a cellphone report of a chemical truck spill nearby during the patient's visit. The UK patient is treated appropriately.
- ***We treat citizens not as objects*** ("citizen-centricity") but as part of the system of solutions. We move from the vending machine model to the engagement model.
- ***Citizen engagement goes beyond the political and digital elites —*** government assures wide involvement by engaging in participants' channels of choice.
- ***Leadership removes barriers to use of social media and collaboration —*** letting data find data; citizens, industry and government find each other. Services and results improve.

THE PRACTICAL REALITY: GOV 2.0 HERE AND NOW

Examples are diverse in function, intention and results. Here are a few mentioned by participants in our sessions:

- In Seattle, the police department uses a combination of Twitter, blogs and open data to inform citizens about what's happening with the department. A public information officer Tweets incidents minutes after occurrence. The department uses a blog to provide longer accounts about what occurred. It posts 911 data on a public website so people can see what was reported. Interested citizens can pull up redacted versions of reports once the matters are closed.
- The U.S. General Services Administration uses IdeaScale to engage the public in dialogue about its plan for open government and uses the public to vote up or down on certain proposed ideas.
- In Brazil, the Ministry of Culture creates a "Digital Culture" project that consulted the public on ideas relating to cultural and educational proposals. An inter-governmental effort headed by the Senate created an online database that functions like "Google for laws."
- In Brampton, Ontario, the city posts updates to its website on the progress of proposed building projects throughout their lifecycle. "From the time you think about doing something — whether a land acquisition or a relocation -- to the time that actually happens is a complicated process," the mayor said. "Now it's a transparent one, too."
- In Portugal, the government sets out major priorities and guidelines through the Simplex program — a major effort to simplify its initiatives, cut red tape, reuse data and information, and complete projects on time and on budget. Citizens can then vote on these ideas — and vote they do. In 2010 civil servants nominated 600 ideas, and thousands of votes were recorded.
- In Mexico, a formal "citizens' observatory" has been established to track and document the progress toward quality of reliable government service, engaging citizens, developing and using international standards.
- City leaders in the town of Kuna, Idaho, use a two-track model of consultation. They evaluate every issue they deal with and ask, "Is this likely to be controversial?" Drug testing in the schools, for example. Are there major issues to deal with? Is there a lot of information that people have that others don't and need? If the answer is "no," then it's deemed a fairly technical decision and government officials just "do it." If the answer is "yes," then they have a series of techniques for consulting with the communities.

"From the time you think about doing something — whether a land acquisition or a relocation -- to the time that actually happens is a complicated process," the mayor said. "Now it's a transparent one, too."

ISSUES AND CHALLENGES

Having seen efforts start, stop and sometimes succeed, the curiosity of practitioners and investigators is now heightened to include these questions:

- How do we make change persist? If gov 2.0 changes the world, how can we assure those changes last administration to administration, and we don't have to reset and start over each time anew?
- How can we use these tools to improve the quality of public services, mobilizing a broad swath of citizens participating?
- How can we accelerate changes and move to a culture of collaboration?
- How can we include legislative and justice institutions for greater collaboration with citizens on improving laws?
- When we open the web for citizen participation, how can we assure not just quantity of input, but quality? How can we sort noise from signal to find the reliable voice — one worthy of designing social systems around?
- What new performance measures and metrics must we invent that reflect the new challenges of management in a shared-mission world?
- Management and politics can have separate agendas and clash. In a web 2.0 world, how do we bring them together for mutual benefit?
- We are learning important lessons already. How do we best translate them into practice to make changes sustainable?
- Typically, citizens who oppose new measures are the most active. What's the best way to broaden the platform to include all voices, not just amplify the opposers?
- How can IT technologies be brought to a population that is fairly illiterate, so that they will be able to participate in the affairs of the state and policy development of the government?
- When will the voice of the citizens matter again? Gov 2.0 is not enough. We blog about it. We Facebook about it. We have all kinds of different websites about these issues. How can we assure that really makes a difference?
- How do you measure success? How do you ensure that innovation and successful programs continue, are iterated upon, enhanced and developed?
- How can individual citizens help influence decisions made at the federal government departmental level in a meaningful way?
- Circumstances may require fast decisions. How do we reconcile that with the requirements and possibilities for transparency and public consultations in a gov 2.0 world?
- Do we truly need to look at gov 2.0 by itself — or do we need gov 2.0 and society 2.0 and industry 2.0? In a government that is by the people, of the people and for the people, perhaps we need all.

WHAT HAVE WE LEARNED SO FAR?

With diversity of outputs and results comes diversity of experience. Here is what we can say about what has been learned by experience and research to date.

Everyone is at a different starting point in readiness for collaboration — and in the variety of "arrows" in their quivers. In Hong Kong, for example, in the spring of 2010, the government used Facebook for the first time to engage in political campaigning. Government and citizens were addressing issues of democratic reform — particularly the process that Hong Kong would use for electing its legislators. For the first time the government used a Facebook page to promote its viewpoint — as well as buses, megaphones and newspaper ads.

In Brampton, Ontario, the city engages citizens, visitors and business prospects across the spectrum of channels — from static websites for frequently asked questions, to interactive sites for economic development, to Facebook for citizen engagement — mayor, Susan Fennell, maintains two Facebook pages, updates them herself and answers 2,000 emails per day.

"They always say, 'Is that really you, Mayor?' " the mayor told us. "And I say, 'Yes, actually, it is.' "

"Who would think," she asks, "that the public would care where you were yesterday?" But people are interested.

"They want to know what's going on in their community, particular one as culturally diverse as ours."

Having never tried Facebook before, the government's first venture into social media, said some observers, "did it some good."

Citizens already know how to discover and engage — but do so on their trusted and comfortable channel of choice. Within the first couple of days of the Hong Kong campaign, for example, the government's Facebook page brought forward 3,000 "fans." A page that promoted itself as "Dislike the Government's Campaign" got 10,000. Still, having never tried Facebook before, the government's first venture into social media, said some observers, "did it some good."

The US Defense Advanced Research Projects Agency ("DARPA") recent Red Balloon challenge found a Twitter-enabled competitor in first place eight hours into the competition, running ahead of MIT and Georgia Tech teams with only one day of prep. His strategy: put a call out to his 50,000 Twitter followers and encourage each to e-mail him the location of any of the 10 red weather balloons DARPA had tethered around the United States. He'd split the $40,000 prize money. After nine hours, MIT and then Georgia Tech found all 10 — but third place went to the Tweeter.

In Colombia, the two candidates for the presidency each used a different social media strategy. One trumpeted internet messages and engagement — and was favored by youth, who comprise 37% of the population. The other candidate went to Colombians by television and radio — as most do not have internet, some have television, but most have radio. The social media strategy improved the challenger's image — but not his votes: those under 18 cannot vote!

In Brazil, education leaders put the school curriculum on the web. But in Brazil it is principally the poor who put their children in public schools. Education officials believe that those parents might not scan the web or find information there easily. But they do read newspapers. So Brazilian officials briefed reporters on where they could find the curriculum and discussion on the web and encouraged them to write about it.

Trust builds as citizens encounter good customer service across government channels — including most basic ones. Every interaction matters. Collaboration across channels changes the mindset overall…

In Hong Kong, agencies have benchmarked customer satisfaction in service delivery against the private sector — "that really is how our customers are going to compare us," said a government official. Their research shows customers put government close to the upper quartile of their close private sector comparators.

The tax revenue service was surprisingly high — it's a simple and easy-to-use service. The department at the bottom was the student financial aid authority, which gives out money. "It just goes to show that the quality of how things are delivered can be pretty important."

In Brampton, Ontario, city executives found that people pay their parking tickets faster now that they can do it online. Executives regard these basic services online — registering for a swim class, registering to play football, paying a parking ticket — as interactions with citizens that build trust in government's service, management of its operations and ability to innovate.

This smoothes the move to a next stage of online citizen engagement — perhaps to a virtual town hall with much more interaction. Citizens already have experience and confidence in engaging virtually from the small successes of paying tickets, or enrolling children in swim classes. In matters of policy, then, trust carries over from basic transactions to online conversation around policy, and a willingness to trust government in the basic facts of policy debate.

Readiness to collaborate has much to do with ease of engagement. "The thing about collaboration," a leader said, "is it's not so much what incentive do you need to offer; it's how you remove the barriers. They're quite keen to collaborate."

"The problems that arise," the leader remarked, "are because it's difficult to collaborate — either because the way budgets are assigned dis-incentivizes, or because the platforms are not there to enable, or because the business processes have been designed poorly."

"It's the bureaucrats amongst the bureaucrats who want to set rules. Those are the people whose mindset needs to change," said one participant.

In Hong Kong, for example, information specialists thought it would be valuable to publish geo data to the web showing the locations of schools, hospitals, post offices and all the other government buildings. An oversight department threw a wrench into the plan; it had a "user pays" principle: Users should cover the cost.

"We managed to persuade them that this was not the right thing to do. But they insisted that we go through an exercise of asking every single department that will provide the data whether or not it served their policy mission to have this data widely available. And of course every single department said, 'Yes, it does.' "

In New York, a pilot project gave social workers mobile devices to permit more face time and work on the street -- all work outside the office. The city paymaster rejected the project team's timecards: There is a you-may-not-work-outside-the-office policy in the city.

The same project team needed access to youth — and youth existed on Facebook, etc. The parent agency did not allow access to social media apps from inside the network. The project team had to call up Facebook from home — but not on city time: There is a no-work-at-home policy.

Beyond legacy infrastructures, legacy mindsets of public officials can exert powerful tug and pull. "Citizen participation means more than just being the client," one participant said. "It means being part of the solution."

"I have been a career public servant, many years under dictatorship," she said. "We develop a very strong technocratic arrogance typical of people who didn't have to negotiate, or discuss or listen. It is quite a challenge for us."

Changes in the law do not adapt as quickly as technology changes behavior. Many city managers now carry BlackBerries — and some receive communications from citizens about potholes. They worry: The law says, once a pothole is reported, the city is responsible for any damage a car experiences — once it's officially reported.

In a web 2.0 world, what's an "official" report — when does liability begin — once the city official receives a text? Once a formal notice is filed? Once it's tweeted to the world?

Citizen engagement does not require technology — but is all participation truly democratic? Porto Alegre, a city in the south of Brazil, has become famous for inventing the participatory budget, a system in which citizens themselves decide on local priorities of public infrastructure investment. In one neighborhood, citizens think paving is more important than electrification, or a community center. In participatory budgeting, citizens' schedule of priorities actually gets translated into what the city budget becomes the next year, rolling up from the local level to the overall budget.

This has now spread to many cities throughout Latin America and beyond. Belo Horizonte, for example, embarked on a system of e-participatory budgeting in which it invested the equivalent of $11 million U.S. dollars. Voters chose from a list of infrastructure projects.

But figures show only about 10% of the population of the city participated online in the e-participatory budgeting initiative.

"I have been a career public servant, many years under dictatorship," she said. "We develop a very strong technocratic arrogance typical of people who didn't have to negotiate, or discuss or listen. It is quite a challenge for us."

"SES bias" shapes participation of all kinds, including online. Prof. Archon Fung notes this may be an occurrence of "socioeconomic bias": Whether meetings are online or face-to-face, SES bias is the well-documented proclivity of people "with the nice pants" to show up, and those who are poor or less educated to stay home. Whether it is voting, contributing to a campaign, participating in a blog, going to a public meeting, in almost all societies and at all levels of government, participation is biased toward those who have better advantage. Those who have more money or education, who speak the dominant language or are member of the dominant culture show up more than those who have less.

Technology may help mitigate the SES bias. Are technologically mediated forms of participation likely to help out with this problem," Prof. Fung asks, "or exacerbate it?" Until recently, evidence suggested that technology did not provide a levelling effect, but rather was subject to the same "power law distribution" — a small number of people contributing the vast majority of content.

Will the digital world show the same pattern of unequal participation that we see in face-to-face participation? It may recast the SES bias from the haves vs have-nots to young vs old, with the young much more versatile and digitally enabled — no matter what their income or education. To the extent that the SES bias also reflects more time for the well-to-do to participate, again, technology may be a great leveler if everyone can participate online — rather than wait "in line."

Transparency fails when it fails to address the "black hole" problem. When there is no impact from participation on public action or policy, this can generate frustration and reduce future participation.

Transparency politics press actors to disclose information. That disclosure is meant to have some kind of effect. Making the information transparent will be effective only if the information actually has an audience of users who care, and who will act on it. Transparency fails when it fails to complete "the action cycle."

Technology may help mitigate the "black hole" problem. Technology makes it possible for there to be more rapid, small pieces of feedback, rather than people waiting months to hear what's happened and then discovering that nothing has happened. A dialogue — as opposed to "Thank you very much for your input, we'll think about it, and let you know" — can help, and technology can make that possible.

Participation is at risk from "the polarization problem." In many issues that are politicized, people who have special or deep interest in an issue will participate more than those who do not. We are much more likely to hear from special interest groups, for example; or if an issue is politically contested, we will see a low level of deliberation and a high level of polarization of argumentation, fighting and discord.

The few people who are mobilized on any given issue may not be an accurate reflection of society's problems: They're able to use various media to project their concerns and essentially stack the deck — whether nominating "legalize marijuana" as one of America's pressing issues, or calling for nude beaches in Seattle.

Levelling the polarization problems must be deliberate and takes work. "If you let the internet rip without conscious efforts to level out or shape who's participating, what you'll get is a pattern of unequal participation just like you do in voting or campaign contribution," Prof. Fung observed. "ICT is a medium with background inequalities. Any medium without efforts to correct that will likely reinforce those inequalities."

"Although there are a lot of possibilities for constructions of participatory forms in virtual spaces and non-virtual spaces that have more egalitarian equalities," he said, "there's no natural leveling feature of the internet so as far as we can tell right now."

It may be, however, that on any given issue there is more common ground than people recognize. Techniques can be used to find that common ground — or at least to create a deliberative space, even in a polarized dialogue.

Recently, for example, California was considering reform to its healthcare system. Although there was disagreement on the details, in general the Democrats and the Republicans were onboard: Reform was needed.

There had been public deliberation around the initiative. But the voices were loudest from the extremes. It was still a polarized debate. The structure of public participation was familiar: Most of the people who were engaged in the debate were members of the interest groups that had a stake in reform.

Governor Schwarzenegger and the leadership of California sought a more broad-based public deliberation in which they heard from ordinary Californians. They sought the common ground and engaged an organization called America Speaks to organize a large public deliberation in that cause.

America Speaks randomly selected participants from across California to achieve a statistically representative sample of the population for forums in each of eight California cities. Going beyond just the "usual suspects" and members of interest groups, America Speaks invested significant effort in trying to make this citizen encounter a deliberation rather than let the natural tendency toward polarization have sway.

Technology may help mitigate the "polarization problem". Can technologists and designers of online forums design a similar set of techniques that affect the tone of conversation to move from the natural tendency for polarized conversation to a deliberative one?

Technology can help offset the bias of the loudest voices. "If you went by them alone," Mayor Fennell of Brampton, Ontario, said, you would think that the only thing we needed to do was invest in areas of our downtown and protect the environment.

"If you have a listening mechanism through technology," she countered, "you'll find that people want to know and understand what's going on in their neighborhood. They want to communicate that back to you. They care what's available for their kids, for seniors."

Technology is empowering new groups to mobilize quickly — it "isn't just who gets the old-fashioned groups to mobilize quickly in the old-fashioned ways," she said. "I'm seeing us move forward in government now with a highly interactive young population, very culturally diverse."

Technology opens opportunities to have a responsive government that isn't spinning, but rather moving in the direction citizens want. But you need citizens to have the facts.

"If there's resistance, often it's people with less information that are spinning," said the mayor.

The web is a tool in equalizing access to information. "I don't have to filter my positions through news media: it's right there on the web for everyone to see," the mayor said. "Equal information."

Technology can help offset the bias of the loudest voices. "If you have a listening mechanism through technology, you'll find that people want to know and understand what's going on in their neighborhood."

The medium is the message: How government presents itself shows business and citizens government's attitude toward … business and citizens. In Brampton, Ontario, for example, business gets a sense from the Brampton city website of government's attitude toward development.

"The web," Brampton's mayor said, "helps us highlight customer service in providing information on economic development." And it's all to Brampton's favor: "Rather than having 10 economic development officers telling you why you should come to Canada — in fact, to Ontario, and in fact, to Brampton — that's all on the website. It's all interactive. You could order materials, get interactive maps, see lands that are available and how they're zoned, see the process, know with certainty it's worth the trip to Brampton to explore buying that piece of land and relocating your business."

"When you give certainty to business," the mayor says, "that saves money. That's attractive. It shows your attitude toward development, and it's appreciated."

Collaboration across channels changes the mindset overall. "I'm a mayor who carries two BlackBerries, I have two Facebook accounts, I have a web portal, and we're online all the time."

"Who would think the public would care where you were yesterday?" Mayor Fennell asks. "People are interested. They want to know what's going on in their community, particularly in a community like ours, so culturally diverse. And it's important for our community to grow with a good quality of life that people understand…what is available in their city? What services are there, what opportunities, what celebrations, what issues…?"

Society 2.0 is the sum of the possibilities of collaboration — not just between government and citizen, but between government and government, government and industry, industry and citizen, etc.

Heretofore transparency, for example, has been deemed an essential action item on the government agenda. However, while the greatest risk to citizens may in some societies come from government secrecy, in others it may come from industrial secrecy.

In an authoritarian regime, for example, most of those threats come from large government organizations. In democratic societies, is that really the source of greatest risk and threat? Many more may arise from the private sectors. In otherwise democratic societies, arguably that much greater effort should go toward achieving transparency of the private sector.

In society 2.0, it is not just government that must be transparent, but corporations. In that new environment, Prof. Fung says, "government forces disclosure of information that industry wouldn't otherwise discover, so that society can act on that information in ways that presses corporations to become better citizens."

Government-to-government engagement and collaboration is essential. Government-to-government innovation sometimes gets skipped in the gov 2.0 agenda. But leadership engaging front-line practitioners, sourcing ideas from the bottom up, working together as co-creators and co-innovators is just as critical and can have profound impact and far-reaching changes.

Information sharing is not an unalloyed good; nor is transparency. Any transparency system that makes a difference is going to hurt someone. Restaurant health report cards pasted to windows hurt restaurateurs who have dirty kitchens. Bank disclosure hurts banks that have poor balance sheets. Federal data systems owners will easily share data that doesn't matter to them, like cafeteria menus. Effective transparency is going to hurt somebody, which means there will be politics: If you ignore the politics, what you'll get is a transparency system that makes little difference at all.

The challenge of leadership: offsetting the negative consequences of making improvements visible. Often, opening up data may make practitioners more risk-averse as they believe that in the "gotcha" world of journalists and inspectors general, every decision will be scrutinized. But there is another way to approach it.

In Brazil, for example, teachers are regarded as low status because only the children of the poor attend public school. Public officials took them to task for absenteeism and related infractions. Because of their low status and frequent attacks, teachers became risk-averse, and demotivated.

When Rio's Education Secretary began her work, there was no trust. She drew frequent attacks on Twitter, to which she responded calmly, and cordially. "We are trying to change the quality of education," she would reply. She asked of teachers, "Let's innovate together," stressing "together." She slowly built trust.

"You don't begin with it, especially in such a difficult situation," she said.

With that, the Secretary is now able, every two months, to post the test results school by school of the unified system testing. The top achievers are signaled, feted and rewarded.

"Teachers love to be recognized, because they have been working for years, and nobody has. Common sense is that teachers don't like competition," the Secretary said. "But it's not true. There is no way to recognize a good teacher unless to make success visible."

Trends we note:

- **Globalization:** "People are becoming local and global at the same time," we were told. Country identities may weaken, but local identities may intensify. As citizens become more "into" their city and the world, citizen involvement changes. People in Brazil, for example, are now worried about whale capturing by the Japanese.
- **Scholarization:** Around the world more people are having more years of schooling and becoming more educated. If we do our work well, as citizens in emerging economies get access to schools and better schooling, they will be ready for digital inclusion, and citizen inclusion
- **A generation of digital outcasts:** We may have risk of having in our midst a generation of citizens who have not viewed their digital identities. It compounds the overall feeling of exclusion, now from the digital world, and adds to their invisibility and sense of powerlessness. "I feel outside of the world," they might say. "I am nobody and I cannot participate."
- **Pressure on authoritarian regimes from growth of middle classes:** As globalization increases, prosperity will grow the middle class. If trends continue, information will be increasingly available to everybody. The middle class will want to make personal choices when and where they buy, including for services like who will pave their streets.
- **Need for national policy to go global:** With 6 billion inhabitants in the world, poverty is diminishing even in the economic crisis. But 1 billion are trapped in extreme poverty — most of them in Africa. There, the violence of civil wars and upheaval is more frequent. National policy for all will require a regional if not global perspective.

"In society 2.0, it is not just government that must be transparent, but corporations. In that new environment, government forces disclosure of information that industry wouldn't otherwise discover, so that society can act on that information in ways that presses corporations to become better citizens."

THE WAY FORWARD

The "big picture" context is society 2.0

Government 2.0 is but a part of a larger move happening now — a move to society 2.0 of greater interaction between institutions, citizens and organizations, public and private. Enabled by digital technologies, new laws and regulation, existing networks, and the demand for improved performance, society 2.0 moves forward on the shoulders of government, industry and citizens alike. Neither gov 2.0 nor corporate 2.0 are any less important than the other in this mix; both enable society 2.0, and one without the other hinders it.

Support new organization strategies that tap the potential of new information and communications technologies

The new century is putting new demands on government, industry and citizens. Financial crisis, demographic problems, and new information and communications technology pose both risk and opportunities.

Till now, ICTs have assisted government in providing services more swiftly and efficiently, but without challenging existing organizational models. Now, the more collaborative ICTs involving social media challenge traditional paradigms underlying organizations, and the operations of governance.

No longer simply e-government, it is transformational government

In this new era, the wise government increasingly interacts with citizens, and vice versa. Moving from the traditional bureaucratic model to a simpler and more interactive one is not easy to do. It implies, offers and sometimes demands changed models of public service delivery.

The institutional framework that moves from a common and controlled model to a network integrates more knowledge, demands more innovation, and involves more collaboration both within the public sector and with private the sector and universities. This is a difficult challenge, as events and technologies are moving fast but people, politicians and even citizens are moving much more slowly.

Lower the Boundaries with ICT

Information and communication technologies can accelerate the move to gov 2.0, quickly and cheaply enabling participation in the affairs of the state and policy development of the government.

Open platforms — platforms on which businesses and citizens could develop applications.

Open cloud computing for government — a cloud computing framework that any government can use to solve 80% of their information technology needs, including the public engagement part.

"Easy apps" — social network tools for government that can be installed on desktops, notebooks and mobile phones that are easy to use.

Use Open Technology

Engagement across government, industry and citizenry depends on simple tactical execution using non-proprietary, non-custom, non-bespoke platforms that are openly accessible. This helps assure that agencies with a mission of openness and accessibility, and providing data, provide true access, not just access in name only.

Flip the Switch

Change the bias of sharing data, technology and decision-making from "need to know" to "need to let everyone know. Changing the bias — assuming, for example, that the use of Facebook by employees is OK, and not requiring justification — itself lowers barriers and can unleash the natural proclivity of individuals to partner, collaborate and share.

Widen the Aperture

The two traditional change levers include law and regulations, and budget. Standardization can accelerate transformation as well. None of these may be within easy reach.

However, gov 2.0-type engagement applications are within easy reach at all times; and networks proliferate all around. By broadening the scope of partners to include new technologies and new collaboration, additional levers can emerge.

Spur Innovation: Designing Change vs. Emergent Change

There is a role for expertise, and a role for the wisdom of practitioners, citizens and leadership. Successful change combines the two and assures continuous support and learning. By setting the table, and laying the rails, leaders point the way; the engaged practitioner and citizen both contribute their meaningful content, priorities and direction, helping to craft solutions that are relevant to them.

Moving from the traditional bureaucratic model to a simpler and more interactive one is not easy to do. It implies, offers and sometimes demands changed models of public service delivery.

Straddle the Legacy and the 2.0 Worlds

There exists an installed base of legacy systems all over the world — and legacy promises. Together they comprise multi-channel service delivery systems that bring value to citizens. Our challenge is to integrate our new systems with our old systems to continue to transform government and society.

While we make that move, we cannot put established enterprises at risk. Someone must get the public assistance checks out the door, for example. When you call for police assistance, somebody has to show up. We must educate children, get the fire put out — achieve all those things while still trying to create this new kind of engagement. Try to integrate the new with what's the best of the old.

Make Reforms Durable: Leverage Existing Infrastructure for New Results

There is complementarity between gov 1.0 — which focuses on improving the quality of transactions — and gov 2.0, which focuses on participation, transparency and engagement. The new challenge for government is not only to achieve participation, and real engagement, but to build quick responses. If government cannot respond quickly, citizens who make their suggestions and criticism may conclude government really does not care.

Assure Performance: Test and Validate Continuous Improvement

In the emerging world of gov 2.0 outputs outnumber outcomes; myths easily proliferate. It is important that leaders create performance metrics around engagement and results, measure the gains, and assure year over year improvements. You can expect what you can inspect.

Clarify and Document the Role That Technology is Playing in Advancing Developing Nations

Some scans suggest that research has yet to establish the formal link between "digital government," public private partnerships, and progress against the grand challenges of the world relative to health, welfare and safety.

White papers and business cases proliferate. But the dearth of empirical detail seems to suggest fundamental work remains — specifically around the clarity of conceptual models and constructs such as "co-production of services."

Additional research is needed in order to measure and record the impact of interventions and provide rigorous, analytic and dispassionate treatments.

Broaden Citizen Engagement

Gov 2.0 — the call to engagement — happens on many channels. Yet those who will be adversely affected by change know vividly who they are. Those who will benefit tend to be inchoate — and not organized.

There is a risk that "single issue fanatics" will get more power and influence through gov 2.0. The silent majority may have less. As government moves to the 2.0 world, it must assure that everybody has a voice, not just the activists.

To assure broad citizen engagement, mobilize citizens by utilizing their channels of choice, reaching beyond those who participate my digital means.

Attendees of the Executive Session

Shown for information purposes only. The views expressed here are the authors'; no endorsement by any attendee of the Session is expressed or implied.

Participants

Mr. Sumit Agarwal
Unied States Department of Defense
Unites States

Mr. Julius O. Akinyemi
The Media Lab, MIT
Nigeria

Mr. U.D. Ambursa
Office of the Secretary to Federal Government
Nigeria

Mr. Edward Anderson
Computer Services Corporation
United States

Mr. Rodrigo Becerra
Microsoft
Unites States

Mr. Dominic Campbell
FutureGov Consultancy
United Kingdom

Master Carlos H. Gadsden Carrasco
Organización de Servicios Interdisciplinarios
(Organization of Interdisciplinary Services)
Mexico

Ms. Laura Coffey
Prime Minister's Strategy Unit, Cabinet Office
United Kingdom

Dr. Cláudia Costin
Rio de Janiero
Brazil

Mr. Cristiano Faria
Brazilian House of Representatives
Brazil

Mayor Susan Fennell
City of Brampton
Canada

Mr. Jeremy Godfrey
HKSAR - Commerce and Economic
Development Bureau
Hong Kong

Lt. Col. Pete Kilner
MilSpace Team, West Point
Unites States

Mrs. Beatriz Londoño
Juan Manuel Santos Campaign
Colombia

Mr. Lorenzo Madrid
Microsoft
Unites States

Dr. Maria Marques
Ministry of Presidency
Portugal

Mr. Matt Miszewski
Microsoft
Unites States

Mr. Fernando Panesso
Juan Manuel Santos Campaign
Colombia

Prof. Theresa Pardo
Center for Technology in Government,
The State University of New York, Albany
Unites States

Congressman Rodrigo Pérez-Alonso
Mexican Congress
Mexico

Mr. Bill Schrier
Seatle, WA
Unites States

Dr. Joao Silveira
Ministry of Presidency
Portugal

Mr. Adam Todhunter
State of Victoria
Australia

Ms. Lorena Becerra Mizuno
Director General of Public Opinion
Presidency of Mexico
Mexico

Mr. Toshiyuki Zamma
Gartner Consulting, Gartner Japan, Ltd.
Japan

Faculty, Fellows and Staff

Prof. Archon Fung
Harvard Kennedy School

Prof. Jerry Mechling
Harvard Kennedy School

Prof. Venkatesh Narayanamurti
Harvard Kennedy School

Dr. Jorrit de Jong
Harvard Kennedy School

Zachary Tumin
Harvard Kennedy School

About the Authors

Zachary Tumin is Special Assistant to the Faculty Chair and Director, Program in Science, Technology and Public Policy, Belfer Center for Science and International Affairs, John F. Kennedy School of Government, Harvard University

(zachary_tumin@harvard.edu)

Archon Fung is Ford Foundation Professor of Democracy and Citizenship, Ash Center for Democratic Governance and Innovation, John F. Kennedy School of Government, Harvard University

(archon_fung@harvard.edu)

Harvard Kennedy School
79 JFK Street
Cambridge, MA 02138

Phone: 617-496-5584
mailto: STPP@hks.harvard.edu
web: www.belfercenter.org

In collaboration with

HARVARD Kennedy School
ASH CENTER
for Democratic Governance
and Innovation

HARVARD Kennedy School
BELFER CENTER
for Science and International Affairs

Microsoft