XBC
Creating public value by unleashing the power of cross-boundary collaboration
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The transformative power of XBC

Cross-boundary collaboration (XBC) is transforming the public sector. At Deloitte’s GovLab, researchers are uncovering myriad approaches that can unleash the power of cross-boundary collaborative networks to create public value. This paper provides an overview of this trend in public management.

What is XBC?
Cross-boundary Collaboration or “XBC” is an approach to creating value from networks. These cross-boundary networks take a variety of forms, but share one underlying common theme: They all involve collaborating with those outside one’s organization to create value.

In the public sector, XBC occurs whenever a government agency creates public value by leveraging knowledge, input, or experience that comes from outside its organizational borders. These networks might include civic groups, companies, nonprofit organizations, private citizens, or employees of other governmental entities — any resource outside an organization’s traditional boundaries.

What are some examples of XBC in the private sector?
XBC networks are gaining considerable momentum in the public sector, but they are nothing new in the private sector. In the 1920’s, for example, hotelier Raymond Orteig used a contest to create a network by offering a $25,000 prize to the first person to make a nonstop flight across the Atlantic. This encouraged independent groups, including Charles Lindbergh’s, to invest in aviation technology in an effort to win this prize.

Consider matchmaking: In the 20th century, individuals seeking marriage would often seek the assistance of a “matchmaker” to help find mates outside their immediate social sphere. Online dating sites use technology to accomplish something quite similar. The difference is that instead of relying on the hundreds of potential matches that might be known to a human matchmaker, these sites can draw upon literally millions. As a result, search criteria — from age to height to religious beliefs — can be tailored to fit an individual’s preferences. Today, roughly one of every five relationships starts online. Technology enables low cost collaboration, which increases the power of matchmaking many times over.

Indeed, the tremendous power of XBC derives from its ability to leverage the input of potentially millions of participants through technology. These participants create an ecosystem and sharing culture of enormous power. In some cases, the relationship between a platform and its participants is purely recreational. In other cases, it can rally a nation to change its government.

Today, Web 2.0 technologies dramatically reduce transaction costs associated with collaboration by potentially connecting millions of disparate, external users. Examples abound: eBay, Wikipedia, Facebook, and myriad others create communities of users and deep pools of shared information.

XBCs are emerging
For government organizations, collaborating across boundary lines may uncover a sizable latent ability to create greater public value. XBC is beginning to realize its considerable potential in the public sector:

Boston’s Citizen Connect App — Public works problems pop up in urban spaces like mushrooms after rainfall. Potholes develop, graffiti appears, animals turn into roadkill, and so on. In 2010, Boston launched a cell phone application that allows citizens to simply take a photograph of the problem and send it to the city. The application automatically collects GPS information and allows the city to generate a work order for a public works crew. It will even send citizens a push notification when the work order has been completed. Now, the city uses the eyes and ears of thousands of citizens to enhance its awareness of problems that need attention. This cell phone application accounts for roughly 10 percent of all service notifications.

Intellipedia — The 9/11 Commission found that prior to the September 11, 2001 terrorist attack, various U.S. intelligence agencies failed to share critical information across organizational silos. In response, innovators in the intelligence community created Intellipedia, a secure, participant-driven professional networking site that fosters a community network of connections across organizational boundaries to enhance overall situational awareness.

XBC encompasses both “open” and “closed” networks. While many cross-boundary networks are fairly open, Intellipedia is a network whose participation must be closely controlled because of its subject matter.

UK’s Big Society — One of Prime Minister David Cameron’s flagship initiatives is his “Big Society” program which aims for a massive transfer of power from the central government to local communities. This involves devolving power and responsibility in policy areas from welfare-to-work to reducing recidivism to networks of public, private, and nonprofit organizations. The wide-ranging initiative includes a £200 million “Big Society Bank” that will lend money to charities and other organizations that seek to run projects producing public value.

United States Veterans Administration (VA) Industry Innovation Competition — The VA initiated a contest to solicit ideas from industry for innovative new technologies to improve the quality of patient care for veterans. Among the winning projects, one will pilot wearable sensors combined with analytics to predict and prevent complications for patients diagnosed with heart failure. Another winner will equip health-care providers with mobile devices to enable them to wirelessly review, share, and respond to cardiology data.

XBC’s ability to tap into vast and inexpensive resource pools is transforming the way public value is created. XBC networks are being employed for activities as varied as developing policy to responding to disasters to rethinking traditional regulation approaches. Such networks don’t have to be motivated by profit, and they aren’t controlled in the same way that traditional public enterprises are.

“I want to see a whole mix of providers. New models like public sector staff forming co-ops to run their services and civil society organizations forming new alliances with government and the private sector can drive this change. They will break down the old fashioned public service hierarchies…”

UK Cabinet Minister Francis Maude describing his government’s Big Society initiative.
XBC and DARPA’s “Red Balloon Challenge”

In 2009, the Defense Advanced Research Projects Agency (DARPA) issued an open competition and a $40,000 prize. The prize money would go to the first team to locate ten red balloons placed around the continental United States.

DARPA formed this contest network to learn how various participants might use social media and the Internet to tackle this thorny problem.

Participants wisely employed XBC to tackle the challenge of gathering dispersed information. Open model collaboration networks are founded on the notion that regardless of how much information resides within an organization, there is nearly always more on the outside. The challenge came down to finding ways to engage, incentivize, and mobilize a large number of previously unaffiliated individuals from around the country.

Riley Crane, who led the winning team from MIT, recognized that the very nature of the problem expanded beyond the scope of his own network and institutional affiliations, so he reached into the public sphere by creating a social network dedicated to finding the balloons. Not only was there a financial incentive offered to anyone who found a balloon, the person who invited the balloon finder to join the network (and the person who invited them, etc.) would all share in the prize money. Within days, over 4,000 people from around the world had formed a collaboration network dedicated to this single task. Remarkably, only 8 hours and 52 minutes into the contest, the team from MIT reported the correct location of all 10 balloons.

Would such results have been possible in a closed system? Would this have been possible without the Internet? Without XBC powered by Internet technology, any effort to build a team would have missed the 10 people that mattered most to solving the problem.
The three modalities of XBC: Connect, innovate, execute
XBC has generally been applied in three distinct modalities: to connect, to innovate, and to execute. These areas overlap, as when XBC connects experts in a variety of fields who then innovate a new approach to dealing with a public problem. It is useful to think of XBC as a cluster of these three modalities because it allows broad understanding of the ways organizations can collaborate across boundaries.

Connect
XBC’s capacity to connect disparate individuals and organizations — the ability to turn weak ties into strong ones — is paving the way for new relationships that foster joint creation of public value.

For example, a group of regional transportation officials may convene to share effective practices around scheduling, but the group’s discoveries may lead to the creation of a joint purchasing platform to leverage economies of scale when buying buses. Connective XBC platforms are often a precursor for tactical and problem solving networks.

Innovate
XBC uses existing problems to discover latent issues or innovative enhancements to existing processes. One doesn’t necessarily need to be “solving a problem” for XBC to be beneficial in discovering new and better ways of creating public value.

For example, the “Apps for Democracy” contest held by the District of Columbia invited developers to make use of city data to create innovative, useful applications of whatever sort they could imagine. Application developers could creatively come up with “problems to solve” making use of the data that city procurement officials had not previously imagined. For an investment of $50,000, the District of Columbia government received 47 Apps, worth an estimated $2.2 million.

Execute
Often, there are ways to execute more efficiently through improved collaboration, and their potential should not be underestimated, especially when budgets are tight.

Consider the low-tech task of street sweeping. In the District of Columbia, street sweepers are now equipped with cameras with vehicle recognition technology that enables them to issue parking tickets, thus generating revenue and reducing scofflaws without burdening public safety budgets.

In other cases, disparate agencies working on interrelated problems are exploring ways to coordinate their efforts using XBC. Social workers, school officials, substance counselors, and parole officers often work with members of the same family without tools to share information that could make their efforts more efficacious. The Annie E. Casey Foundation suggested that a Facebook-like platform (called “Casebook”) could enable various agencies to better execute their mission.
Four big benefits XBC brings to the public sector

1. **Do more with less** — Budget shortfalls and massive debt threaten government’s ability to deliver public services. XBC can leverage limited tax dollars and tap into a large, motivated network to create public value at a lower cost. Examples include:

   **Contests:** Contests typically generate significantly more value than the actual prize money. The X-Prize’s first space challenge resulted in 100 million in investment for a $10 million prize. Similarly, Washington, DC’s Apps for Democracy contest resulted in a 4000 percent return on investment in 30 days.

   **Crowdsourcing work:** To digitize content for their National Library of Finland, Finland created a central game platform to get ordinary citizens to provide free labor. To date: 50,192 people have visited the Digitalkoot web site. Volunteers have contributed a total of 194,580 minutes (4,105,614 microtasks) of their time.

   **Citizens as sensors:** Boston’s Street Bump app, which crowdsources pothole identification, enables the city to locate and service more potholes than they could have done in house.

2. **Turbocharge innovation** — XBC shifts the source of strategic advantage from in-house expertise to an organization’s ability to connect, find and mobilize external resources. In a rapidly changing world, knowledge itself quickly loses value, but the ability to quickly create relationships with the right people can make an organization more innovative and nimble than ever before.

   **Example:** Through grants, the Department of Homeland Security (DHS) Science & Technology Directorate develops formal relationships with academia, think tanks, state and local governments, other public agencies, and private companies like Google and Apple to test and prototype emerging technologies. This strategy explicitly recognizes that it’s a big world out there. Most solutions already exist — somewhere — and most problems are eminently solvable if you ask the right people.

3. **Deliver mission more effectively** — Collaboration technologies, social media, and the Internet have dramatically lowered the transaction costs of connecting large numbers of individuals and organizations. The enhanced collaboration opportunities can radically improve mission performance.

   **Example:** The Alabama Department of Homeland Security’s Virtual Alabama, an online platform that uses Google Earth to merge government-owned data from across the state, is used by more than 1,450 agencies. When disaster strikes, first responders can now quickly access information on everything from flood zones to the location of water, power and gas lines. The results have been dramatic: it now takes five hours, rather than two weeks, for example, to assess the damage after a tornado.

4. **Tackle “wicked problems”** — Traditional approaches involving government agencies implementing siloed programs to tackle big problems are beginning to show their limitations. Instead of going it alone, organizations can build structures of people and organizations around accomplishing specific objectives.

   **Example:** A key component of the Gates Foundation’s initiative to identify effective measures to improve teaching outcomes in public schools involves collecting and analyzing teaching data from over 3,000 teachers working in seven school districts across the United States. To deliver on this Herculean task, the Gates Foundation created an ecosystem of dozens of academic institutions, nonprofit organizations and education consultants. Teachscape provides the technology to record lesson plans. The Educational Testing Service manages the lesson-scoring process with help from the University of Michigan. The RAND Corporation is aggregating the data and form a composite of indicators of effective teaching. And a panel of 21 classroom teachers advises on research and implementation.
How does XBC handle complexity?
Today, government faces numerous challenges that are bigger than the jurisdictional authority of any particular government entity, including terrorism, pandemic disease management, and climate change.

As the world gets more complex, so do the issues facing governments. Traditional approaches involving single government agencies implementing programs to tackle specific problems are beginning to show their limitations. Instead, public sector agencies can build structures of people and organizations around accomplishing specific objectives through XBC’s boundary breaking networks.

This concept of “networked governance” was introduced in the book, Governing by Network by William D. Eggers and Stephen Goldsmith. The book urged public organizations to move beyond traditional boundaries to ensure that form fits function for a given objective.

Consider, for example, the problem of water pollution. In the past, prevention efforts focused on the big “point source” polluters, such as manufacturing facilities that dump toxins into a river. Government regulators can deal with such polluters relatively efficiently. Today, however, pollution is often the result of the action of thousands of small polluters, including households that improperly dispose of motor fuel, mercury thermometers, and other household chemicals. Inspections and water quality monitoring can do little to detect these sources. Moreover, pollution likely occurs within the context of a watershed area that crosses several political boundaries. What can be done?

XBC offers the ability to work across boundaries with resources outside a normal regulatory structure, in an effort to engage the community in reducing its own pollution. For example, the Detroit River International Wildlife Refuge, a partnership formed in 2001 of government, industry, and not-for-profit groups in the United States and Canada, is transforming this region from an industrial sewer into a haven for wildlife observation, recreation, and education. Between 2001 and 2006, the refuge preserved 4,985 acres, completed more than twenty-five engineering projects to replace concrete infrastructure with “soft shore” habitats, and leveraged more than $11 million in conservation projects.

Since the publication of Governing by Network in 2004, technology has advanced dramatically, greatly enhancing the potential of the low-tech, cross-boundary networks described in the book, and their newer, high-tech versions. One can think of XBC as a turbo-charged form of collaboration-networked government on steroids.

In dealing with complexity, XBC also addresses the problem of scope. The multiplier effect of networked governance allows multiple agencies and multiple stakeholders to participate in both the formation and execution of a solution. This can allow rapidly increased scale since the resources of multiple organizations are engaged.

In general, XBC offers government the possibility to expand the scope of government influence without increasing the formal authority of government, which is critical as the problems being addressed grow more complex and interdependent.
NASA, collaboration, and XBC

The use of collaboration by government is nothing new. The Manhattan Project engaged more than 50,000 contractors and university scientists to build the atomic bomb. The same is true of NASA. The Apollo moon mission used a network of more than 70,000 NASA employees, private contractors, and university resources to put a man on the moon.

XBC at NASA is radically redefining the traditional relationship of government, citizens, contractors, private industry, and universities. These external partners now participate significantly in creating public value. In the Apollo moon mission, government played a very traditional role of defining the objective, directing the resources, and controlling the process. Private contractors were hired for particular purposes.

Today, however, XBC is altering these traditional relationships, and increasingly, the role of government is seen as providing a platform that allows private companies, philanthropies, non-profits, and other Non-Governmental Organizations (NGOs) to address a public problem, often in the absence of direct public control.

A closer look at NASA today demonstrates just how profound this shift has been. One example is NASA's decision to charter privately owned spaceships to replace the Space Shuttle. NASA now routinely looks outside its organizational boundaries for answers to perplexing problems, such as how to keep food fresh in space. If NASA selects one of the proposed solutions, the individual receives a cash prize in exchange for intellectual property rights.
How do you apply XBC?

Putting XBC to work systematically
Until now, the application of XBC has tended to rely on happenstance. In many cases, individuals created a sharing platform for one purpose, only to discover that users were applying it in surprisingly different ways. This is true of XBC in the private sector as well as the public sector.

Facebook was created as a way for Harvard students to check out their classmates. Twitter was originally conceived as a way to keep track of friends and find out about cool bands and parties, but now, it’s also helping to topple authoritarian regimes.

It’s wonderful that these platforms transcend their original intent. But in the public sector, wouldn’t it be great if government organizations could intentionally put the correct ingredients together to deal with particular problems?

This shift from serendipity and luck to designed networks is extremely important.

Early human hunter-gatherer societies had to rely on discovering food by chance, and their survival was tenuous. The development of agriculture made it possible to plan the cultivation of food. A certain amount of good fortune (rainfall, etc.) was still required, but the likelihood of success dramatically increased. Over time, the agricultural arts developed; irrigation and fertilization squeezed the risk out of growing food. But the big jump in productivity came with the initial discovery that enabled human ecosystems to plan their food production, compared to reliance on a lucky combination of factors.

The goal of our work at GovLab is to move XBC platform design beyond the luck-based approach of hunter-gatherers to the planned productivity of the farmer.

Designing the XBC to match your needs
With this in mind, GovLab compiled an extensive taxonomy of XBC networks (see figure 2 and appendix A). The taxonomy categorizes the features that exemplify the various forms of these networks, and it identifies various success factors that can enable public officials to effectively use these networks.

Our research into XBC has also explored what type of XBC network is optimal for a particular challenge. Using the diagnostic questions in appendix B, an organization can explore various approaches, and choose one with the best chance of meeting policy goals while maximizing public value.

This approach won’t yield paint-by-numbers results. Public policy officials will still have to be guided by their experience and wisdom. There will be failures, but this systematic approach should enhance the ability to craft an XBC that has the potential for dramatically increased productivity.

This involves picking the right network for what you want to do and then applying the right governance, design, and management approaches that align to the network. Designing and managing a contest network, for example, will likely be radically different from executing a process or completing a project.
The six success vectors of XBC
When designing a performance network, primary consideration should be given to the agency’s mission and what the hoped benefits and outcomes will be from employing XBC. In addition to purpose, however, thought must be given to the match between the characteristics of each cross-boundary network and the particular challenge at hand. The various types of XBC networks vary dramatically in their ability to support six success vectors. To move XBC from the realm of chance to planning, the following six success vectors should be scrutinized:

Transparency: This factor involves the importance of visibility of all information to all network participants and outside observers.

Cost effectiveness: What value is placed on efficiency in achieving an objective at a low cost? Put differently, what resources are available to fund a cross-boundary network, and can those resources ultimately be recovered in cost savings?

Accountability: Some cross-boundary networks have greater ability than others to hold participants accountable for their actions, adhere to schedules, or enforce a code of conduct.

Security: The ability to control access and protect information within a network will vary depending on its architecture. Network design must meet situational security needs.

Innovation: Is developing something new the goal? Different network architectures offer varying potential to promote innovative solutions.

Mission criticality: Will success of the XBC effort be vital to the organization’s mission? If the Internal Revenue Service (IRS) uses XBC to solicit ideas from employees, that’s not mission critical. Using XBC to allow individuals to file returns is.

Merely analyzing these success vectors won’t lead to the most successful XBC platform. Such analysis, however, helps organizations understand how specific needs might match up with various forms of XBC.
Figure 2: Connect, innovate, and execute cross-boundary networks
Creating public value by unleashing the power of cross-boundary collaboration

Key to diagrams

The six success vectors
- Transparency
- Cost effectiveness
- Accountability
- Security
- Innovation
- Mission criticality

Network categories
- Centralized
- Sequenced
- Facilitated
- Grassroots
As Ushahidi founder Or Okolloh says, “Information in a crisis is a patchwork of sources. You can only hope to build up a full picture by having as many sources as possible.”

Ushahidi’s major innovation is to use the beneficiaries of disaster relief — the victims — as contributors to the relief effort platform. While established humanitarian organizations initially viewed Ushahidi and its “unofficial” information with skepticism during the Haiti crisis, they are now specifically requesting the use of the platform and volunteer mappers in current conflict areas such as Libya.

What makes it work?

Ushahidi has been adapted to a variety of crises due to the unique mixture of collaboration network models it embodies. It’s a network that allows open development by users, which makes it nimble and easy to adapt around the world. The lack of any fee structure...
Similarly, Ushahidi is the locus of a collection-based, participant-driven network that capitalizes on its crowdsourcing technology. Anyone with a mobile phone may submit an incident report. Ushahidi acts as a central aggregator and verifier, turning data into usable information. While networks like Facebook are sustained by solely user-generated submissions, Ushahidi and its crisis maps require an extra step of analysis to verify information before public reports are mapped.

Partnerships
Another reason for Ushahidi’s growth has been its ability to partner with a wide range of organizations. When asked by the United Nations to support efforts in Libya, for example, Ushahidi was immediately able to activate a trained standby task force, comprised of volunteers from six other mapping organizations. Ushahidi is no accidental success. Although its platform has been used in situations not anticipated at its founding, it acknowledges that being yet another organization looking for information in disaster areas is not always enough. Okolloh cited “NGO fatigue” among locals in the Democratic Republic of Congo and thinks the answer lies in creating two-way information flows: “We are building in functionality that closes the information loop — people are not just giving information but also receiving information, e.g., on where to get help.” In this way, Ushahidi has potential to go beyond the realm of information collection and closer to actual aid delivery, a two-sided market providing even more public value.

Source: Coonoor Behal, senior consultant, Deloitte Consulting LLP

removes one of the biggest potential barriers to widespread adoption. "Most of the time, we don’t even hear about a deployment until it’s already out there," says David Kobia, Ushahidi’s director of technology development.

Flexibility
Ushahidi’s approach to the development of its platform also contributed to its flexibility. Rather than waiting until the platform was perfect and "ready for market," it pursued a "rapid prototype" model. As Okolloh says, "[It was] based on the premise that things could be improved as we went along by learning on the job. We believe this spurred our innovativeness and creativity. We focused on building and launching the overall framework, and addressing the details and any technical glitches later." A state of crisis is no place for the "analysis by paralysis" that can afflict traditional approaches.
In most cases, organizations embark on XBC in response to a specific demand or a desire to improve results by changing the operating model.

Launching an XBC effort

In most cases, organizations embark on XBC in response to a specific demand or a desire to improve results by changing the operating model. This means that when an organization starts to look at XBC as an approach, it likely has little or no institutional knowledge, or the knowledge it does have is based on outdated technical limitations.

The insular culture of secrecy prevailing at most intelligence agencies prior to 9/11 was totally understandable. But it meant that these organizations lacked network pathways or organizational understanding of how to promote appropriate sharing of sensitive information. Various intelligence agencies had to begin from scratch, and that included reexamining their policies and practices.

For organizations looking into XBC for the first time, the challenges are daunting. Existing practices need to be reviewed, new infrastructure has to be designed, participants carefully incentivized, and implementation strategies developed to maximize the positive impact of the collaboration. Where networks already exist, they should be re-examined to determine whether the existing structures are appropriate for the challenges at hand.

How you manage the collaboration depends on the type of cross-boundary network

The factors that make a given collaboration successful or unsuccessful depends a lot on the particular type of network and the design of the collaboration platform.

Connection networks that are primarily established to foster general sharing typically require a “light” touch from an organizer (light in terms of issuing commands, but heavy in using “social engineering” to get commitment, activity, passion, bonding). Participant partners are treated as peers. The relationship is exactly the same as a community organizer and volunteers.

A community network such as GovLoop, for example, builds a common gathering place that attracts participants based on shared common principles. Participants are free to join if they accept the common principles. The organizer cultivates and manages the network. Participants only participate as long as they realize value. It may earn them money, help address an issue they need to tackle, allow them to do something they’re passionate about, help a government organization do more with less, and so on. If not, they have little incentive to participate.

Success factors depend on the particular features of the endeavor and the success vectors of the XBC effort. Consider a Platform Network like the IRS e-file, which allows taxpayers to file their taxes online via a number of different online tax preparation (such as TurboTax or Taxslayer) tools. This network depends on a strong central organizer who creates an easily adoptable standard. The organizer issues the rules and ensures that participating partners comply. (An effective organizer will also listen to these partners and make reasonable modifications to encourage participation.) The organizer also sets precedence, resolves conflicts, and dismisses those who don’t abide by the standard. This approach also represents the model of Apple Inc’s App store. The relationship is akin to a landlord and tenant.

Successfully managing these different cross-boundary networks requires very different skills and approaches. Government workers in regulatory agencies who are used to issuing commands may need to rethink how they approach XBC.
The three laws of XBC

The inclusion paradox
The more “open” a network and the more participants, the greater the power. (Think of what Facebook might be like if it charged a $100 sign up fee.) The closer to ubiquity you can approach, the better.\textsuperscript{21}

Computing power is now “free”
The rapidly falling cost of computing power and memory storage means that incredibly powerful cross-boundary networks can be created at very low cost, assuming the design is correct.

The law of unintended XBC consequences
The terrible beauty of XBC is that it not only unleashes the creative power of individuals, it also unleashes the uncontrolled creative power of the group. Sometimes, when a cross-boundary network employs common-based peer production, everyone is in charge and no one is in charge.
Transforming the traditional government mindset to embrace XBC

The political economy of XBC
Collaborating across boundaries is a challenge to political parties. In a world governed by cross-boundary networks comprised of public, private, and nonprofit organizations, what role does traditional government play?

In the world of commerce, the “new economy” of the Internet turned traditional thinking on its head. Instead of charging for your product, in a world of minimal incremental costs and the network effect, the best business model could be to give your product away. Providing your service for free has been a winning model for companies from Hotmail, which provides free email services, to the Huffington Post, which neither pays most of its writers nor charges its readers, yet has become one of the most valuable properties on the web.

The traditional conception of government is one of a centralized disburser of rules and monopolistic enforcer of those rules. The U.S. Environmental Protection Agency (EPA) promulgates environmental regulations and enforces the same. The good news is that XBC allows more participants — corporations, individuals, local, and regional governments — to enrich the process by adding their perspectives. XBC offers the promise of less control but better results.

Online XBC networks potentially could enable more direct democracy models that have not been possible before. It enables people to have their say, and to present documents to support their words. This is producing profound changes in politics and society. Faced with the need to enact dramatic spending cuts in the face of a massive debt burden, the UK government enlisted public sector workers and regular citizens in the process of identifying cost savings. More than 100,000 cost-reduction ideas were submitted in response to the government’s “Spending Challenge” initiative, 63,000 of these from public employees themselves. Dozens of the ideas were taken forward by the government.

The challenge for governments is how to structure a governance model that invites wide and robust participation while realizing the public mission in a timely fashion. That process will stretch the thinking of all political parties. Changes in traditional political and governance relationships will be needed for XBC to deliver on its potential. Of particular importance is transitioning away from siloed legislative funding that establishes disincentives for cross-boundary-collaboration.
Providing your service for free has been a winning model for companies from Hotmail, which provides free email services, to the Huffington Post, which neither pays most of its writers nor charges its readers, yet has become one of the most valuable properties on the web.
Such opportunities have been extended to entrepreneurs in developing countries who are no longer as constrained by the geographical and market barriers that have historically prevented them from pursuing ambitious goals. This subset relied wholly on the state and the benevolence of aid groups to receive loans or hand-outs, but microfinance now produces a vibrant pool of workers who are not only equipped to provide for themselves, but may also drive the economic growth of their respective communities.

Benefits
In Uganda, favorable conditions for coffee farming and strong market demand have fuelled growth of the industry; 25 percent of the active Ugandan population is now directly or indirectly employed in the coffee sector. The majority of coffee is produced on smallholder farms that rely on credit to purchase initial agricultural inputs. Without access to savings or credit institutions, however, farms have relied on money-lenders who charge high interest rates that sometimes exceed 100 percent, limiting farms’ ability to buy the necessary inputs. With the arrival of microcredit, farmers can invest in the resources that allow them to grow more plants and increase crop yields by using basic fertilizers.

By relying on loans rather than philanthropy, Kiva supports mutually beneficial partnership over traditional benefactor models of giving. Both the lender and the borrower have the luxury of choice: the lender to choose which projects are most compelling and the borrower to choose a path to financial self-sufficiency.
In just a few years, the Kiva platform has connected interested contributors to the regional networks of MFIs in nearly 60 countries, utilizing advancements in technology to reach individuals in remote areas frequently enough to collect repayments and interest. This frequent repayment schedule has supported a 98 percent average repayment rate, further encouraging investment and partnership.

**Growth trajectory**

Kiva has been on a growth trajectory since it launched in 2005, raising $500,000 its first year and now raising that same amount every three days. Besides pursuing new paths of disruptive innovation in these segments, the prevalence of mobile banking, GPS, and other enabling technologies will continue to expand Kiva’s growth opportunities in its main segment, developing countries, by reducing the overhead costs of serving many of the remote developing regions that have been most positively impacted by microfinance. To date, Kiva has extended over $200 million in loans.

By integrating local partnerships with an international connecting platform, Kiva shows how a matchmaker network can be scalable and suited to the unique needs of disparate, often remote regions.

Source: Megan Schumann, Deloitte Consulting LLP
How to organize your workforce in an XBC world

Government is being asked to solve complex, cross-boundary twenty-first century problems with a management and workflow structure designed before the computer age. This outdated model limits organizational flexibility and the public sector’s ability to quickly react to change.

By moving knowledge workers out of agency silos and developing a government-wide “cloud,” or pool of government employees, the right mix of skills and expertise could quickly be pulled into cross boundary teams. This could help break down organizational silos and increase government-wide organizational adaptability. The workforce cloud model, enabled by quickly advancing communications and collaboration technology, would allow workers with the right skills to participate in cross-boundary networks designed to solve specific problems. It would allow the right structure with the right participants to be built to meet every challenge, rather than relying on old structures to solve new problems.

Isn’t XBC just another form of outsourcing?

No. XBC is different from contracts with a single, private provider. Under traditional contracting for services, public procurement officials tightly define the service to be provided and then seek private sector bids. In these typically one-to-one relationships, the work is entirely defined by the public purchaser, which limits the creative input of the private partner.

In some cases, contracting can be a cost-effective way of providing services, and it creates a collaborative public-private relationship. However, most contracting arrangements fail to take advantage of the full power of XBC. Some more sophisticated outsourcing arrangements, such as infrastructure partnerships in which private entities play a role in site location, facility design, and financing, begin to reflect the more dynamic aspects of true cross-boundary-collaboration.

The question is no longer whether a service should be delivered by a private or a public player, but rather, how the sectors, including nonprofits, should be arrayed and managed to produce the best services. Addressing this issue will entail moving away from a narrow outsourcing lens. Using XBC, organizations can determine what kinds of systems, platforms, organizational structures, and skill sets are needed to operate a government that orchestrates resources (rather than owning them) and funds services (rather than directly providing them).

What’s next for XBC?

Nothing is harder to predict than the future. However, our research suggests that the next few years will likely see an explosion in the use of XBC to create public value. While XBC holds the promise of massive productivity and performance gains, some of the shifts will be accompanied by wrenching organizational discomfort.

The best public leaders will embrace the benefits and manage the process. To this end, the following pages contain some organizational assessment questions and other resources that can help public agencies on their journey to a more collaborative, productive approach to creating public value. Deloitte’s GovLab will continue to refine its model for designing and executing cross-boundary-collaboration and work with public officials who are making the most of new technologies to deliver public services with limited budgets.
“The question is no longer whether a service should be delivered by a private or a public player, but rather, how the sectors, including nonprofits, should be arrayed and managed to produce the best services.”
Appendix A: Typology of cross-boundary networks

<table>
<thead>
<tr>
<th>Community</th>
<th>Developer</th>
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<tbody>
<tr>
<td>Participants share goals and interact in a space managed by an organizer. There is no specific end product, but rather an emphasis on learning and improvement.</td>
<td>Central facilitator defines desired outcome, around which participants contribute. These networks operate indefinitely, evolving over time.</td>
</tr>
<tr>
<td><strong>Keys to Success:</strong></td>
<td><strong>Keys to Success:</strong></td>
</tr>
<tr>
<td>• Common gathering place</td>
<td>• Facilitator has vision and enables free creation to meet it</td>
</tr>
<tr>
<td>• Strong rationale is provided for common principles</td>
<td>• The right mix of talent</td>
</tr>
<tr>
<td>• Participants are free to join if they accept common principles</td>
<td>• Presence of an “arbiter of good taste”</td>
</tr>
<tr>
<td>• “Community gardener,” who cultivates and manages the network</td>
<td><strong>Examples:</strong> Civic Commons, DISA, eOntario (Ontario eLearning), Random Hacks of Kindness</td>
</tr>
<tr>
<td><strong>Examples:</strong> NASA Spacebook, FedSpace, DOD Social Hub, A-Space, GovLoop, Intellipedia, Cyber Cop Portal</td>
<td><strong>Examples:</strong> Civic Commons, DISA, eOntario (Ontario eLearning), Random Hacks of Kindness</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Grassroots</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>No ongoing central facilitator, but rather a collection of participants with a common role or objective. Nor few barriers to entry.</td>
<td>Facilitator provides a platform for participants with similar roles and goals to access resources or interact for a specific, short-term purpose.</td>
</tr>
<tr>
<td><strong>Keys to Success:</strong></td>
<td><strong>Keys to Success:</strong></td>
</tr>
<tr>
<td>• An inspiring goal to ensure participants are motivated</td>
<td>• A clear overall goal and framework for participation</td>
</tr>
<tr>
<td>• Participants are be treated as equals</td>
<td>• Participants are willing to collaborate and share</td>
</tr>
<tr>
<td>• As the size of the network increases, power increases</td>
<td><strong>Examples:</strong> Emergency Operations Centers, Tiger Teams, DoD Joint Commands, National Cyber Response Coordination Group</td>
</tr>
<tr>
<td><strong>Examples:</strong> Gov 2.0 Community, Cooperative Conservation, Haiti crisis relief</td>
<td><strong>Examples:</strong> Emergency Operations Centers, Tiger Teams, DoD Joint Commands, National Cyber Response Coordination Group</td>
</tr>
</tbody>
</table>
Creating public value by unleashing the power of cross-boundary collaboration

**Platform**

Central facilitator initiates a platform and releases a standard to participants, with which they comply.

**Keys to Success:**
- Easily adoptable standard; more participants equals greater power
- Organizer sets overall direction and strategy
- Organizer sets precedence, resolves conflicts, dismisses those who don’t abide by the standard

**Examples:** IRS eFile, National Electronic Disease Tracking System, iPhone Apps, Medicare Part D Drug Program

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**Process**

Central organizer facilitates the coordination of products and services on an ongoing basis.

**Keys to Success:**
- Reward high performers
- Ability to add/dismiss participants, based on performance
- Organizer has overall, but not day-to-day oversight; outcome focused, not process focused

**Examples:** CentreLink, NYC Small Business Services, Wisconsin Works W-2 Service Contract Network, TX Child Care

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**Collection**

Central organizer participates in one- or two-way communication with network members in order to aggregate or disseminate information/goods.

**Keys to Success:**
- Clearly defined roles for participant interaction
- Organizer has full visibility
- Established structure

**Examples:** NHINWatch, TSA Secure Flight, National Cyber Alert System

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**Contest**

Participants compete to develop the best solution to a specific challenge made public by an organizer.

**Keys to Success:**
- CA clearly defined finish line
- Few constraints; allow for creativity
- Low barriers to entry; the more contestants, the better
- Monetary or other reward

**Examples:** NASA Innovation Pavilion, Challenge.gov, U.S. Dept. of Education Race to the Top, DARPA Red Balloon Challenge, TSA IdeaFactory, Apps for Democracy

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**Matchmaker**

Central organizer connects network participants to meet a specific objective

**Keys to Success:**
- Willingness to recruit participants
- Ability to convince participants of value of collaboration
- Pairings produce exponentially more value for participants

**Examples:** U.S. Commercial Service, TroopSwap, Corporation for National and Community Service, Golden Gate Recreational Area, Central Park Conservancy, Chicago Millennial Park

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**Project**

Organizer structures network resources to execute specific steps in pursuit of defined end-state. Project networks exist for a finite timeframe.

**Keys to Success:**
- Network exists until project is complete
- Clearly defined roles for participants
- Time-based milestones

**Examples:** American Recovery and Reinvestment Act, Manhattan Project, Apollo Space Program, Iraqi Freedom Contractor Troop Support

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More tightly managed
Appendix B: Matching the right network to your needs

Where do you fit?
Weigh the six success vectors against your organization’s objective, using the following questions. Begin at 0 and track your scores for each question. Then, plot your objective on the spectrum below. The resulting spot should be a starting point for you to investigate the network that is best suited to help you achieve your objective.

When it comes to the actions performed within my networks, it’s important that all participants can see…
- 5 ....everything.
- 2 ....if they see a little more than they need to know, no harm.
+2 ....just what they need to know.
+5 ....nothing.

When it comes to resources available in meeting this objective, I have…
+5 ....generous monetary/human capital resources.
+2 ....sufficient monetary/human capital resources.
- 2 ....limited monetary/human capital resources
- 5 ....what resources?

In meeting this objective…
+5 ....people must have clearly defined roles and responsibilities, so they can be held accountable.
+2 ....there are a few key milestones for which people need to be held accountable, but what matters most is that the objective is met.
- 2 ....if something goes terribly awry I’d like to know who was accountable, but otherwise, it’s all about the objective.
- 5 ....what matters is that the objective is met, not who meets it.
If someone wants to join my network…
+5 …they have to go through a rigid vetting process to get a foot in the door.
+2 …they are free to join, but have specific rules for interaction.
- 2 …welcome aboard — here’s an objective. Meet it however you’d like.
- 5 …come and go as you please, and do what you think is most valuable while here.

When it comes to solutions/methods for achieving my objective, I need…
- 5 …the newest, best idea that no one has ever heard of.
- 2 …to achieve my objective, but I’m open to new ideas on how to meet it.
+2 …something familiar, ideally.
+5 …to achieve my objective using a tried-and-true method.

If I do not achieve my objective…
+5 …my project will be on the front page of the newspaper.
+2 …I can look forward to testifying before an oversight panel.
- 2 …I can avoid the press, but there will be consequences for my organization/agency.
- 5 …it will not make or break my organization. It was an attempt to create greater value.

In working towards my objective…
- 5 …I am willing to cede control if it is the most effective way of accomplishing my goal.
- 2 …I need to act as a gatekeeper, but am open to working collaboratively with others.
+2 …I must maintain mild control over the participants involved.
+5 …I must maintain absolute control over the participants involved
About the authors

William Eggers
An author, columnist, and popular speaker for two decades, William Eggers is a leading authority on government reform. A director for Deloitte Research and Deloitte's GovLab, he is responsible for research and thought leadership for the organization’s Public Sector industry practice. His latest book (with John O’Leary) is If We Can Put a Man on the Moon: Getting Big Things Done in Government (Harvard Business Press, 2009), a Washington Post best seller.

His books include Governing by Network (Brookings, 2004), Government 2.0 (Rowman and Littlefield, 2005), The Public Innovator’s Playbook (Deloitte Research 2009) and Letting Go of the Status Quo (Deloitte Research 2010). His writings have won numerous awards including the Louis Brownlow award for best book on public management, the Sir Antony Fisher award for best book promoting an understanding of the free economy, and the Roe Award for leadership and innovation in public policy research.

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Endnotes

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9 Ibid.
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17 Change at Hand: Web 2.0 for Development (Participatory Learning and Action (2009
18 http://irevolution.net/2011/03/04/crisis-mapping-libya/
19 Change at Hand: Web 2.0 for Development (Participatory Learning and Action (2009
20 Mehrdad Baghai and James Quigley, As One, (New York City; Portfolio Hardcover, February 2011)
21 But with inclusion comes risk. The Internet is a font of misinformation on a wide variety of topics. Incorrect "facts," nasty comments from anonymous posters, spam, and other consequences of open contributions come with the territory.
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