“The longer-term future presents an opportunity to set up institutionalized structures for engagement across local, state, and federal levels of government—creating a “civic layer.” …its precise form will evolve, but the basic concept is to establish a centralized interface within a community to engage residents in governance decision making that interweaves digital and in-person engagement.”
What is the future of civic engagement for governance that focuses primarily on the interactions between citizens and public policy? While the focus of civic engagement is often on government, the realm of public policy is not constricted to one sector; rather, as public administration scholar Don Kettl notes, it involves the interweaving of the public and private sectors. More specifically, civic engagement scholar Harry Boyte finds that it includes “an emphasis on the interactions among governments, civil society, and business groups.”

In the last few decades, the conversation around public administration, public sector reform, and designing innovated institutional structures that are more adaptive, responsive, and accountable has focused on “innovating government.” But, there has not been enough focus on how to build structures, models, and opportunities for proactively engaging citizens with meaningful opportunities to participate in decision-making.

Citizen trust in government institutions remains alarmingly low in democracies across the globe. Leveraging transformations in technology and accelerating the current promising models from experiments in civic engagement allows us to imagine a more responsive, participatory, collaborative, and adaptive future for civic engagement in governance decision making. This can start by creating a civic layer.

What is a civic layer? Its precise form will continue to take shape, but the basic concept is to create a centralized interface to involve citizens in governance decision making that interweaves digital and in-person engagement. People will earn “civic points” for engagement every time they sign a petition, report a pothole, or volunteer in their local community.

Without reimagining how to engage citizens with governance institutions, innovations themselves will not enhance trust, legitimacy, or engagement with public sector institutions. This chapter identifies the potential societal contributions of creating a “civic layer.” It also identifies examples of the possible components of a civic layer, and the opportunity of emerging technologies to support meaningful, large-scale engagement via this civic layer.
THE NEAR-TERM FUTURE: UNDERTAKING EXPERIMENTATION AT THE LOCAL LEVEL TO CREATE THE FOUNDATION FOR A CIVIC LAYER

In the near term, an opportunity exists to tap energy and excitement at the local level to re-engage citizens in governance, solve public problems, and combine local engagement with new institutional structures and digital tools to deepen civic engagement. People are often inspired by their ability to affect change on the local level and spend more of their time in local communities actively participating in civic, social, and communal life. This points to an opportunity to focus on effective civic engagement, moving beyond initiatives that deliver time and resource efficiencies. In the near term, merely opening access to public data can be an important step in increasing the effectiveness of citizen engagement. The next step is using these data to innovate new ways of engagement.

So, how can government tap into citizens’ expertise in the 21st century? This will require creative thinking about how to equip people with the resources and information they need.

Why Begin at the Local Level?

Building the civic layer should begin at the local level because outdated federal statutory citizen participation mechanisms stymie robust civic engagement at the national level. National legislation should be revisited, revised, and adapted to reflect the way citizens interact in the 21st century. There are currently limited opportunities for people to engage in governance decision making at the federal level. Pre-internet statutory mechanisms for citizen engagement, such as the Freedom of Information Act, the Federal Advisory Committee Act, and the Paperwork Reduction Act, are antiquated and have the effect of limiting rather than expanding opportunities for citizen engagement. As Beth Noveck contends, a “new legal framework is needed” to tap into citizens’ individual expertise—a framework “that encourages people to contribute their highest and best skills, experiences, and know-how to public service; and that cultivates ongoing communities of practice where citizen experts can convene and disband as needed and can engage with each other and with government.”

The First Step: Opening Data

The first step in creating the foundation for a civic layer is to provide government information through a forward-leaning Open Data policy. Only then can citizen expertise be developed that is anchored in fact and data. However,
the next generation of open data initiatives needs to not only release data, but also proactively engage communities in how that data is released and shared to make it useful. For example, some communities model the use of Civic User Testing Groups. Miami, Florida, and Chicago, Illinois, partner with community members to empower traditionally marginalized voices in identifying which types and forms of data would be most useful. Several philanthropies, including the Knight Foundation, have supported this model.

This model of civic engagement involves people—with no tech literacy necessary and paid for their time with a gift card—in providing their feedback on apps the city wants to release. This model also involves in-person engagement throughout communities, including in community centers, with little investment in tech literacy or training. Finally, this model puts a premium on engaging people with diverse expertise to create a civic layer in a community.

Brenna Berman, in her role as Chicago Chief Information Officer, explained how the city executes on its open data strategy: “At the Department of Innovation and Technology, our clients are the residents and businesses of Chicago. We’re driven by what they need, and how we can serve them.” Data is an asset that cannot be released in a vacuum. Data must be coupled with a strategy around engagement that brings marginalized voices to the table, sampling everyone who can effectively use data and relevant applications.

Traditionally, the more information released, the better. In practice, this often included government passively releasing information to the public to engender greater transparency, accountability, and participation. However, this also led to serious limitations for engagement involving a broad cross-section of the public.

Through systems such as the federal e-petitions site “We the People” or e-Rulemaking for comments and notice, the federal government provides opportunities for empowered communities or informed interest groups. For example, after the release of financial spending data with the Recovery Act via the Recovery.gov website, the majority of data users were the traditional “elites” (e.g., journalists or non-profits). In fact, evidence demonstrates that the majority of content produced on blogs and Wikipedia comes from a small subset of informed groups and people. Even the movement to democratize data or information is often dominated by a growing cadre of civic technology enthusiasts with technical or professional expertise.

The Second Step: Promoting Innovative Uses of Data

In the near-term future, the second step will involve the innovative use of information that communities can use to empower more diverse and inclusive viewpoints. The focus here is not just on information, but on targeting the right type of information with proactive outreach to local communities.

An example of this broader local-level engagement is provided in New York’s Public Engagement Unit (PEU), created by New York Mayor Bill de
Blasio in 2015. The concept of the unit is simple yet powerful. Instead of the usual engagement model, where city officials wait for residents to reach out to them, staff from the PEU use neighborhood-level data to identify and reach out to vulnerable populations. In this way, the staff members build face-to-face relationships to engender trust and sign people up for vital services. Some of the programs they connect people to include health insurance, anti-eviction legal counsel, homelessness financial assistance, workforce training, and rent freeze programs.

PEU both generates new cases and works directly with people in their neighborhoods to resolve their disconnects with their communities and city government. As Regina Schwartz, who served as PEU’s director, puts it:

“We serve as a connector and a case manager. If we meet you at your door, or at an elected official’s office hours and you’re about to be evicted, we’ll connect you with a legal service provider to help you fight your case in court. If you need health insurance, we’ll schedule an in-person appointment with a certified enroller and help you go through the process of collecting the paperwork and scheduling a wellness visit.”

THE LONGER-TERM FUTURE: INSTITUTIONALIZING A CIVIC LAYER

The longer-term future presents an opportunity to set up institutionalized structures for engagement across local, state, and federal levels of government—creating a “civic layer.” As noted earlier, its precise form will evolve, but the basic concept is to establish a centralized interface within a community to engage residents in governance decision making that interweaves digital and in-person engagement. People will earn “civic points” for engagement across a variety of activities—including every time they sign a petition, report a pot hole, or volunteer in their local community.

While creating a civic layer will require new institutional approaches, emerging technologies such as the Internet of Things (IoT), artificial intelligence (AI), and distributed ledger (e.g., blockchain) will also play a critical enabling role. These technologies will allow new institutional models to expand the concept of citizen coproduction of services in building a more responsive, connected, and engaged citizenry. Within the civic layer, government will need to acknowledge citizens’ time, data, and trust. For this model to be effective, government will genuinely empower people with decision-making authority to move engagement beyond a public relations campaign.

The following examples show different collaborative governance and technology components that will comprise the civic layer. Each could be expanded and become interwoven into the fabric of civic life.
The institutional design of these pilots drives their outcomes. Each example involves potentially serious privacy, ethical, and normative challenges and design considerations to ensure that the creation of “civic points” does not amount to a social score card, such as the one China’s government is developing to influence citizens’ behaviors and rights. The proposed civic layer would need to incorporate a universal identifier—e.g., a digital identity for each citizen. A challenge with tying civic engagement to a digital identity is to preserve civil rights, civil liberties, and privacy protections.

While technology represents a critical component for deepening civic engagement with governance, institutional structures are essential to facilitate effective engagement processes. Civic engagement scholar Tina Nabatchi argues for more deliberative, collaborative structures within public administration. Models of collaborative policymaking exist where citizens serve as co-producers of policy that can be scaled in the near-term future. Other exciting initiatives are emerging to more actively empower citizens in decision-making.

Increasing the Use of Collaborative Policymaking Models to Build a Civic Layer

While we currently think of elections as a primary mode of citizen engagement with government, in the medium- to long-range future we could see collaborative policy models that become the de facto way people engage to supplement elections. Several of these engagement models are on the local level. However, with the formation of a civic layer these forms of engagement could become integrated into a federated structure enabling more scale, scope, and impact. Following are two promising models.

**Participatory Budgeting** lets community residents allocate a portion of taxpayer dollars to public projects. Originating from the Brazilian city of Porto Alegre in 1989, participatory budgeting can be broadly defined as the participation of citizens in the decision-making process of how to allocate their community’s budget among different priorities and in the monitoring of public spending. The process first came to the United States in 2009 through the work of the nonprofit Participatory Budgeting Project. Unlike traditional budget consultations held by some governments—which often amount to “selective listening” exercises—with participatory budgeting, citizens have an actual say in how a portion of a government’s investment budget is spent, with more money often allocated to poorer communities. Experts estimate that up to 2,500 local governments around the world have implemented participatory budgeting, from major cities such as New York, Paris, Seville, and Lima, to small and medium cities in countries as diverse as Poland, South Korea, India, Bangladesh and nation-wide in Portugal. While this process has currently been used on a small portion of public budgets, it could be scaled to included sizable portions of public monies in communities across the globe.
Another promising collaborative policymaking engagement model is the Citizens' Jury method, pioneered in the 1980s and currently advocated by the nonprofit Jefferson Center in Minnesota. Three counties in rural Minnesota use this method as a foundation for Rural Climate Dialogues—regular gatherings where local residents hear from rural experts, work directly with their neighbors to design actionable community and policy recommendations, and share their feedback with public officials at a statewide meeting of rural Minnesota citizens, state agency representatives, and nonprofit organizations. Participants also pledge to undertake local action to mitigate climate change. As one participant said, “Before I was a part of these events, I really didn’t think there was anything I could do about [climate change]. I was always just one of those who thought, ‘It’s too big of an issue. It’s happening. My hands are tied.’ [By participating in] these events, I realize that there are things we can do, even me personally, in my community.” While this method has proven successful on a range of topics, it has yet to become integrated into the core process of engagement that provide an opportunity for civic engagement in the medium-range future.

Increasing Applications of Emerging Technologies to Build a Civic Layer

In addition to institutional collaborative governance and policymaking models for engagement, the application of digital technologies to decision making creates the potential for a dramatically more connected, distributed, and empowered civic life in the future. The following are some promising technologies to incorporate into a civic layer:

- **Distributed ledger technology to connect citizens with government services.** Austin, Texas is already experimenting with the use of blockchain technology to provide a digital ID for homeless residents, and to use this ID for accessing city services. This project has been named a Champion City semi-finalist for the 2018 Bloomberg Philanthropies Mayors Challenge Award. Distributed ledger technology could be used for a variety of other public service activities, including public comment, public voting, and civic record keeping.

- **Smart phone data to inform public policy.** Governments will increasingly engage citizens through their smart phones. This will include informing decisions through the data acquired from smart phones (with explicit user consent), conducting real-time user feedback, leveraging information through sensors, and communicating to citizens via their phones.

- **Digital one-stop interfaces for engaging.** Governments around the globe will build one-stop interfaces for engaging with government across all levels (national, state, and local). Estonia has been a leader in creating streamlined digital engagement with government. Think of the way e-commerce companies have centralized services for customers. This
will include the ability to report non-emergency 311 issues, participate in collaborative policy making, access open data, co-create policy, and give real-time feedback.

- **Virtual reality for civic engagement.** By 2030 there will be more opportunities for civic engagement using virtual and augmented reality (VR/AR). VR is already contributing to decision making. For example, the Moreton Bay Regional Council in Queensland, Australia, offered several VR experiences for a major development scheme. Through VR, community members and various stakeholders could experience the proposals up close before giving feedback via an online submission form. Moreton Bay even printed customized Google Cardboard Goggles to generate awareness about the project. This pilot example offers just the tip of the iceberg for how VR could give citizens access to inform policy before development occurs.

- **Sensors and networks of physical devices which comprise the Internet of Things (IoT) to inform public assets distribution.** Sensors placed throughout communities can be used to report real-time information on a variety of issues, from solar trash cans to water, energy, and transportability. One challenge with sensors and other IoT Smart Cities initiatives involves their vulnerability to hackers and unchecked data, which citizens are handing over to government without regulation. More connected devices with sensitive information (including household devices such as thermostats, fridges, and personal assistances) mean greater potential cyber risk for public services.

- **Artificial intelligence (AI) to directly communicate between public administrators and residents.** AI can help reduce the burden of paperwork and other redundant tasks for public administrators, and free up capacity to more deeply engage with community members. AI faces the challenge of ensuring authenticity and fairness with engagement. For example, fake bots can pose as public commenters. During the Federal Communications Commission public comments period around their net neutrality regulation, more than 1 million out of 22 million comments came from bots that used natural language generation to artificially amplify positions.

By 2040, these technologies will become integrated into the core fabric of government at all levels to ensure more seamless interactions between our online and offline selves. This will result in a more responsive government that pulsates with vibrancy and information from its citizens. In this structure, government must ensure that people do not simply become data points, but are also genuinely empowered in decision-making. These models only work if public administrators can give people authentic decision-making power. Transparency in data collection methods and algorithmic decision processes will be essential. Direct civic oversight by community groups, non-profits, academics, and residents will strengthen these decisions. Another important
concern will be to empower traditionally marginalized groups and ensure that not only those with more resources or digital literacy can participate.

**FINAL THOUGHTS: BUILDING A TOOLKIT FOR TWENTY-FIRST CENTURY GOVERNANCE**

The rapid pace of technological change will outpace public sector progress in civic engagement unless precautions are taken to ensure that government has enough capacity, skilled personnel, and training to leverage technology effectively. Each of the examples offered above could become essential components of a civic layer or civic toolkit to develop civic engagement with twenty-first century governance.

As pilots expand to become institutionalized processes, several normative and ethical questions arise for ensuring democratic and equitable access and use. Authoritarian countries will continue to use technology (e.g., facial recognition and digital identity) for control. The question is precisely if and how democracies can ensure more (not fewer) opportunities for genuine civic engagement that moves beyond public relations campaigns, while addressing concerns around privacy and equity front and center.

In 2040, proposals for civic engagement will be contingent upon trust in public institutions, reducing levels of inequality, adequate public resources, and addressing the privacy and ethical considerations at the intersection of digital technology, equity, and civil rights. While specific nation-state geopolitics will vary considerably, regaining civic legitimacy and trust in public sector institutions across democracies will be essential.

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Endnotes


3 The term “Citizen,” as used here, denotes their status in a democratic republic, not their legal status.


8 Sean Thornton, Chicago Launches OpenGride to Democratize Open Data, Harvard Data-Smart Solutions, January 20, 2016.


13 Kettl, “The Job of Government.”


22 The Internet of Things includes networks of physical devices which enable objects to connect and exchange data (e.g. sensors, software, electronics, etc.)
