CHAPTER NINE

Engaged Government:
Five Predictions for 2040

Lora Frecks

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By Lora Frecks

By 2040, we will be nearing the end of the Internet Revolution. As the Industrial Revolution altered how we organized labor at the start of the twentieth century, the Internet Revolution changed how we share information and work. Looking to the Post-Internet-Revolution Era, we can make some predictions based on identifiable trends. What will an engaged government look like in 2040? To answer that question, this chapter presents five predictions:
- Prediction One: A more agile government
- Prediction Two: An increased reliance on artificial and augmented intelligence (AI)
- Prediction Three: The ubiquitous need for collaborative skills
- Prediction Four: The rise of volunteerism
- Prediction Five: Increased citizen trust in government

Prediction One: A More Agile Government

Aided by the quality and quantity of data available from artificial and augmented intelligence (Prediction Two) and the support of a more trusting public (Prediction Five), government organizations large and small will embrace an agile approach to problem solving. Government will experiment with small trials of multiple innovative solutions derived from a wide variety of sources. Government will alter its plans in response to evolving data and feedback.

Nearly all problems addressed by government will benefit from a more agile approach. Innovation will become the norm. For example, in its efforts to provide potable water to the public, an agile 2040 government will run dozens of small trials in multiple locations, testing different types of water quality sensors and systems that automatically measure and report water quality. These mini-trials will provide valuable data for deciding which sensors and systems are best used under specific circumstances. With the idea that water conservation leads to less potable water loss, agile governments will run small trials to test which water conservation methods work best, which have the greatest impact in specific areas, which have the most public support, and how best to communicate new conservation policies to residents. At any point, during either the testing or the implementation of plans derived from the testing, an agile government will stop, reassess, and decide to adjust the plan as needed.

A more agile government will also have a different approach to long-term problem solving. Once a solution is chosen and the plan implemented, government will periodically collaborate with the public and other partner organizations to assess how well the solution is working and whether changes

are needed. These assessments could be triggered by a preset calendar term, which may be overridden by a predetermined number or severity of concerns from the public, organizations, or government employees. The assessments will be regular events with all parties understanding the norms necessary to productively reach decisions. In 2040, participating in assessments will be viewed as a civic duty similar to voting or jury duty.

In our potable water example, an assessment could be triggered from concerns raised by contractors maintaining water sensors, residents worried about a change in their tap water, a business planning to greatly increase its water consumption, or government employees analyzing data. Notice of a formal assessment and the necessary timeframe will then be issued and the participants (some required and some self-selected) will gather. Collaborative skills (Prediction Three) and more public trust in government (Prediction Five) will be critical to the success of these assessments.

What is Agility?

This prediction on agility is derived from agile software development. The term "agile" has been applied in a wide variety of situations and fields. Agile development was first used to describe an iterative process where, instead of coding a program completely from start to finish, the process stops at several points to reevaluate the goals and progress of the program. During any of these reassessments, a new direction may be chosen for moving forward, if it's deemed appropriate. In other words, agile approaches don't have to stick to the original plan. Instead, plans change and adapt as the original plan is implemented. In 2040, the operations of government will follow a more agile approach and have the ability to swiftly change course when needed. For a more detailed discussion of agility, see Paul Gorans and Philippe Krutchen, *A Guide to Critical Success Factors in Agile Delivery*, IBM Center for The Business of Government, 2014.

Prediction Two: An Increased Reliance on Artificial and Augmented Intelligence (AI)

AI will increase the volume and sources of data collected and decrease the amount of "drudge work" which currently requires lots of human attention, time, and energy. AI will generate two giant leaps forward for government. First, it will provide government with the information necessary to make informed decisions in ways never possible before. Second, it will free employees to focus on data quality and using data to make better decisions.

The rise of AI will be a radical change for government. Executives will have more time to consider and evaluate the work to be done rather than

spending all their time overseeing the day-to-day operations of government. There will be multiple databases of information available to government for answering questions surrounding any issue under consideration.

Every field will be impacted. Remote sensors will collect and report information from many sources. Like the water quality sensors discussed earlier, sensors will track metrics relevant to the weather, traffic patterns, community health, criminal activities, economic development, environmental conditions and usage of public resources such as parks, recreational facilities, buildings and roads. Continuing advancements in technologies with increasingly more affordable pricing will make the testing of almost anything possible.

Government will only be limited by its imagination and what society decides to allow government to measure. Such augmented intelligence will enable government to quickly detect disease outbreaks and protect vulnerable populations. Government will be able to better predict when weather conditions and road usages will require extra work to maintain roads. Economically, government will have a host of new tools for predicting when a region or individual household requires access to public assistance programs. AI will enable the government of 2040 to be more predictive than reactive.

Government employees will spend their time in different ways. Thinking through and discussing decisions takes time. These discussions will require new skills to successfully navigate change. Not everyone will have to be an expert in everything, but they will need a basic operating knowledge of data collection, management, analysis, knowledge sharing and the ethics surrounding these processes. They will also need to learn how to work with others who possess the necessary expertise in other policy and technology fields.

By 2040, government will have developed guidelines and general practices for the use of AI. Government and the public will have agreed on standards for protecting confidential information and where to draw the line between an individual's privacy rights and the good of the larger population. Government will have rules and norms on how data is accessed. The public will be comfortable with the flow of information and will benefit greatly from the use of "augmented intelligence," where artificial intelligence supports a human decision. After much testing, routine decisions will benefit greatly when AI supports human decisions.

Prediction Three: The Ubiquitous Need for Collaborative Skills

With the extra time provided by artificial and augmented intelligence, government employees will be able to invest time in new ways to work with each other and to work with the public. Collaboration will be necessary, because problems will become more complex. This rise in complexity will derive from our ability to perceive new levels of intricacy in the problems we face. In 2040, it will be impossible for one person or organization to have all the skills, knowledge, and resources needed to understand or solve a particular problem.

To return to the potable water 2040 example, the sensor selection process

will require collaboration between sensor engineers, water system managers, water system maintenance workers, health professionals, politicians, statisticians, and community members. This will involve collaboration across government departments (public works, public health, a data analysis team) as well as with the private sector (water sensor providers) and the public. The expertise of all parties will be valued and used in 2040 for making decisions.

Collaboration will require mastery of a diverse skillset including communication, negotiation, storytelling and project management skills, and competence with the ever-evolving technologies supporting collaborative efforts. Many of these soft skills have seldom been taught in schools. Universities will add collaboration to their curriculums.

Collaborative skills will be used in many different ways. From our potable water example, good communication skills enable participants to clearly be understood and to recognize when accommodations in communication modes or styles are necessary. Training in negotiations sets expectations for making compromises and adopting a standard of amicable behavior during discussions. Storytelling helps each individual and group share their perspective and reasoning in a manner easily comprehended by others. Storytelling is also useful in conveying not only the level of importance of the information being shared, but also why it is so important. Project management skills allow all parties to appreciate the volume of work to be done and the associated expected timeframes.

Prediction Four: A Rise in Volunteerism

By 2040, government employees will regularly produce public services side-by-side with volunteers. Community members will be frequent and active volunteer participants in the work of government. Volunteers will provide both labor and input in the form of ideas, feedback and opinions. Today, there is an ebb and flow of employees between government and the private sector. By 2040, government will have a similar ebb and flow between volunteer and paid employees.

This influx of volunteers will be driven by several forces. First, as the nation's population ages, more people will retire and seek ways to remain actively involved in their communities. Second, the increased use of artificial intelligence and augmented intelligence for routine tasks will give citizens more time to engage with the community on higher-level activities. Third, people will want to contribute to society and help solve the problems facing their communities and the nation.

Volunteers' "nonemployee" status will require management and operational adaptations to avoid problems for either the government or the volunteer. Governments will develop guidelines for identifying the line between volunteer work and paid employment. A spectrum or matrix of employment and volunteering will develop.

Government will also need to develop ways for inventorying volunteers' skills, desires, focus areas, past experiences, availabilities, goals, commitments, needs and expectations. Their expectations should align with organizational needs. Such a system will require frequent updating and AI will assist in maintaining a complex volunteer tracking system. Volunteer managers will become masters at interacting with these tracking systems.

Volunteers will be treasured by government. Volunteerism will provide government with access to expertise not otherwise available. Volunteerism will have a dollar cost but, when organized properly, volunteerism will save government both time and money. However, the most valuable benefit of volunteerism will be increased trust in government.

Prediction Five: Increased Citizen Trust in Government

Trust has a value that societies often don't recognize until it's gone. Trust is also something difficult to regain once lost. Government has been coping with a loss of public trust since the 1960s. When viewed as something that can be gained or lost, it becomes clear that trust is a resource. In 2040, trust will be perceived as a valuable resource.

Trust is also the means by which government will obtain the ability to risk the mistakes that happen when solving problems. National and local problems are far more difficult to address without the public's trust. Additionally, trust will enable governments to make long-term investments. In terms of management and operations, trust buys governments time and goodwill, with the public being well-served.

Three changes in government operations will lead to large increases in public trust in government by 2040.

First, governmant will include volunteers in its work. Government organizations that invite citizens into the work of government will be more open and trusted by the communities they serve. This manifests in the form of engagement and participation when government asks the public for ideas or input regarding what should be done or feedback regarding what government is presently doing or has done in the past. Both engagement and participation are public investments in government. They are also a means by which the public learns about government and its employees. This knowledge demystifies government decisions and actions. In 2040, most government operations will routinely include both public engagement and participation.

Second, governments will devote more time and effort toward making operations and decisions transparent. This transparency will be manifested in communications between government and the public. These communications will include sharing datasets like those described in Prediction Two above. They will also include information about how government operates, what government does, who runs each portion of it, and how the public can contact government. In 2040, it will be unacceptable for anyone to not be able to easily and quickly find answers to their questions about government.

Third, frequent, well-organized, productive, and thoughtful interactions between government and the public will generate trust. Today, trust in government is most visibly demonstrated by votes for public bonds to invest in infrastructure such as roads, educational efforts, or economic development investments. In 2040, there will be new, regular, and visible acts of trust in government. With enough support, community members will be able to petition that specific topics be added to ballots. Moreover, there will be public forums for government issues to be discussed. There will be a means for the public to suggest problems for government to solve and provide feedback for how solutions are progressing.

In 2040, the above three changes will take place via multiple platforms, locations, and times. Government will have determined (likely through small trials) how best to ensure that these options are accessible to all segments of society. In addition to making sure that information is physically or digitally available, governments will make sure it is understandable in terms of language, reading levels and cultural references. Whether working with digital interfaces, physical offices or phone systems, government interactions will be designed and tested to ensure accessibility for all in 2040. Differences in sensory abilities, mobility, comprehension, educational levels or any other areas will not hamper anyone's ability to interact with their government. Governments that listen to and talk with community members and organizations are governments that can be trusted.

Lora Frecks is a public administration doctoral candidate at the University of Nebraska at Omaha. Previously, Ms. Frecks managed a public medical research university's intellectual property portfolio. Continuing her collaborative work with innovators and inventions, she's volunteered with other civic hackers in Nebraska and serves as the treasurer for the American Society of Public Administration's Section for Science & Technology in Government. Her research focuses on the co-production of services and resources by community members, governments and nonprofits.