Municipal Digital Transformation Guidebook

A guide for municipal leaders with the drive to embark on digital transformation programs



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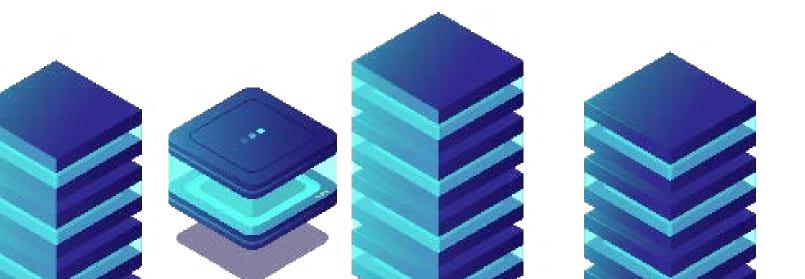


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Strengthening Democracy - Through Government Technology?

The National Democratic Institute (NDI) has spent the last 35 years working to support democratic institutions around the world, including local governments. Technology can be empowering – but is often a double-edged sword, and never a neutral problem solver.

Government tech solutions often come from major private sector giants with an incentive to mine citizens' data for their profit, or from consultants eager to earn fat fees, or as inexpensive packages from techno-authoritarians like China that come with built-in surveillance and censorship capabilities which can be catastrophic for human rights.

Leaders who want to help their citizens by modernizing their cities while strengthening democracy have had few resources outlining a better approach to government technology. NDI has written this guide to help municipal leaders think through the "why" of new technology approaches, the "what" of the things your citizens particularly need, and the "how" of successfully implementing a technology transformation project.

At their core, government institutions should exist to help their citizens: to create cities that are better and safer to live in, to provide services that improve our quality of life, and to address shifting community needs, concerns, and values. In an increasingly digitized era, where people use online services daily for everything from doctors to dinners to drivers, government entities at all levels need to keep up to meet their people's expectations.



Digital technology has improved phenomenally in the past 10 years, and customer's expectations have grown with it. Customers expect to be able to transact online at the time of their choosing and on whatever device they deserve, they expect all their online experiences to be tailored to their unique requirements, and they expect all interactions to be entirely seamless and frictionless."

> Clayton Wehner, Manager, Marketing Strategy and Innovation for the City of Adelaide, Australia

This shift to digital is a challenge for cities but also an opportunity to update existing services, create new systems made possible by the internet, and redefine the relationships between constituents and their governments in more inclusive, transparent, and accessible ways. From enabling faster responses to crises, better planning and allocation of resources for public programs, and increased quality of customer experience across departments, technology can be a powerful tool for increasing community trust and confidence in both elected officials and democracy.

Building new systems to take advantage of the potential of the internet age is not an easy task. Technology projects can be expensive and confusing. Vendors and contractors often make big promises and are unable to follow through. Obsession with innovative technologies can overshadow better, less technical solutions.

Technology can all too often actually undermine democracy. Using the internet to connect government and constituents can worsen existing digital divides for those who do not have access or the skills to navigate new tools. Government technology projects can infringe on digital human rights through increased surveillance, insecure data storage, unethical usage of community data, and the use of unknowable and unaccountable algorithms to make important public decisions. Who will benefit from new technology – and who decides? How do services that are only accessible online create new barriers for community members who don't have access to or can't use computers or mobile devices?

Cities, as the laboratories of democracy, have an opportunity to prove that democracy delivers and use this digitally connected era to increase understanding of community needs, create effective, equitable, and accessible solutions, and build for a sustainable and ethical future.

How To Use This Guidebook

This guide was written in two halves; "Part 1: Designing your City's Program" is for mayors and other government officials, while "Part 2: From Idea to Implementation" is written for project implementers (i.e. project managers, IT departments, etc.) While this guide does not have all the answers, it provides your team with important questions to ask and proven processes to use. Approached thoughtfully, you can minimize costs and increase the odds that your initiative will help your people, strengthen democracy, protect human rights - and get done on time and in budget. This guide is far from comprehensive; you should be sure to reach out to other experts and consult other materials, many of which you'll find listed at the end of this document.

Use this guide to prompt your team to be more intentional, to make sure that you have the right expertise, that you are gathering feedback often, and that your decisions are guided by evidence rather than just a hunch. Whether you are redesigning your city website or increase an agency's use of metrics to measure the success of an existing program, use these questions to guide your thinking, to make sure that you understand what you are trying to accomplish, why, and for whom.

As you pursue government technology and innovation projects in your own city, it is important to not lose sight of the goal: it's not about the tech, it's about how we can use the right tools to build better cities and strengthen local democracy, building a government that is transparent, inclusive, data-driven, and motivated by an understanding and recognition of what its constituents need to thrive.

Part 1: Designing Your City's Program

Technology can help achieve a range of goals for building better communities, but it is important to decide in advance what the goal is – technology for its own sake is a waste of resources. Governments across the world are experimenting with a wide variety of responsible technology uses, but it is critical to be focused on real problems and realizable opportunities that make sense for your citizens.

What is your top-level goal?

Tech projects can transform municipal government or improve relations with citizens in a variety of categories:

Better understanding of citizen desires or frustrations Digitizing paperbased processes to speed service and reduce costs Automated metrics to understand how services or infrastructure are being used Opening data and creating new ways citizens can access information to improve transparency and accountability

A first step in the design of a digital transformation project is to determine the top-level goal and any specific issue areas (i.e. transportation or permitting) that are priorities for your administration.

Case Studies in Democratic Digital Transformation

Often an example is worth a thousand words. Below are a handful of innovative examples of municipalities doing great work with technology to improve the lives of their residents.



Tracking Urban Data in Bogotá, Medellín

Bogotá Cómo Vamos is a program that allows local government officials to measure the quality of life of citizens through a combination of public opinion surveys and data analysis of indicators like housing and transit.

<u>Bogotá, Medellín –</u>

Bogotá Cómo Vamos

This initiative was created to combat the short-term priority setting incentivized by the election cycle. This "stop-go" problem solving meant that very few new innovations were sustained for more than a few years. By implementing consistent policies and formats for collecting and analyzing data about public problems across agencies, Bogotá has been able to create a common baseline understanding about the success of government services for both policymakers and residents.

Improving Government Services in California, USA

GetCalFresh is a website and application that supports users through each step of an otherwise confusing and lengthy food benefits eligibility and enrollment process.

California, USA –

GetCalFresh

While an online application to apply for food benefits previously could take upwards of 45 minutes to complete, GetCalFresh has reduced the process to 8 minutes while also ensuring that registrants receive follow up text confirmation and important reminders related to the application process. In addition to helping people access the benefits that they are entitled to, the GetCalFresh team also documents barriers that users face accessing benefits to both improve their digital tool and inform government partners.

Building Better Relationships with Residents in Jakarta, Indonesia

Jakarta, Indonesia –

The Citizens Relation Management program was created to confront the negative impression community members had about the Indonesian civil service. They created a city performance data system to collect complaints from citizens, intake progress reports from city workers, and track responsiveness to constituent requests. The ease of managing incoming comments and concerns, combined with the decision to evaluate civil servants based on how well they responded has created the powerful perception that it is easier for citizens to communicate with and receive information from the government, that the administration is becoming cleaner, more representative, and more effective.

Increasing Resilience and Responsiveness in New York City, USA

<u>New York City, USA —</u>

Data drills are exercises that help cities improve their ability to identify, understand and use data to solve a range of challenges. In New York, data drills are conducted with challenges that involve data and cooperation across multiple organizations. During Data Drills, **Commissioners of various NYC agencies,** senior staff, emergency responders (i.e. police, fire fighters), and private sector partners (i.e. gas/electric utilities) come together to review and discuss actions they would need to take during a particular emergency (i.e. hurricane, outbreak). This setup allows the city to preemptively address capacity issues, ask questions, and test their plans in a practice environment.

Getting Started: Principles for Success

Successful projects are done (close to) on schedule and (mostly) on budget without too much disruption to the lives of residents – or staff working on the initiative. Even with that, however, most technology projects tend to be failures because at the end of the day the new project did not in fact make a significant positive impact in the community. Basic democratic principles on quality citizen participation can dramatically improve your odds.

Build Trust By Moving Carefully and Focusing on User Needs

New technology can increase the government's ability to deliver essential services to the community, but if done poorly, it often erodes public trust. It is critical that you are solving problems your constituents actually have, not what you think they might be. Adopting a human-centered design approach, such as with NDI's Co/Act toolkit, can help you understand your community needs while designing your next digital product, service, or campaign. New technology and systems can be confusing or threatening; if implemented without citizen awareness and input, projects can seem - and be - an unnecessary waste. Explain the value that your initiative brings and consult them throughout each stage of the project. Failed tech projects also undermine these relationships and cause citizens to be doubly skeptical in the future.

Consider Human Rights Implications of New Tech

As the private sector's development of technology has outpaced government's ability to understand and regulate it, it is increasingly important to have conversations about how you will assess, manage, and regulate new technology solutions with a focus on human rights. This includes considering the biases behind artificial intelligence models that automate decision making, and the potential for abuse of data being collected by the government or by malicious hackers.

Build for Inclusion

As you design your project, consider how accessible your service is for those without access to the internet, such as those in rural areas or for whom tech is unaffordable; those who may not know how to use digital tools, such as older people or those with lower literacy; as well as those with physical disabilities such as vision impairment that makes systems impossible to access. While new technology tools can increase access to information, they can further isolate and marginalize those who already face barriers. Governments have an obligation to serve all of their citizens, so design must include all citizens. For those unable to access the needed technology, make sure there's an analogue fallback.

Be Strategically Technical - Which Doesn't Always Mean Cutting Edge

Effective tech transformation for the government often means not choosing the most sophisticated technology available. The right technology may have to work with existing systems, be run by current employees, and connect to previous systems. There is always a significant challenge in picking the right tech - the most cutting-edge software may not be stable, or may be irrelevant in a few years. However, if one invests in tech that is too old, it may be obsolete before you finish. Leaders should ask questions to get at that happy medium: where has it been implemented before? How widely supported is it? What are the most innovative governments doing? How difficult will it be to integrate into our systems? Will we be able to manage it internally with some training, or will we always need external support?

Communicate Communicate Communicate

You are building these systems for your citizens, which means they should understand what it is for and how it can make their lives better. Frequent engagement during development reduces the fear of the unknown, and lets residents know a good idea is coming. If your citizens don't use your project it will be a failure, however technically successful, so bear in mind the need to advertise the service when completed.

Start Small, Measure, Test, and Iterate

Technology projects are challenging, and the bigger and more complex the more prone to fail they are. Starting with a small pilot initiative and learning as you go, making adjustments as needed based on citizen feedback, is more likely to succeed than attempting to design the entire system on paper in advance. It is important to have a good testing system in place to track how things are working, who is using it, and what challenges they have. Before the project begins, you should define what success looks like with metrics that demonstrate if you are achieving those goals, then regularly have conversations with your team on progress. It is critical that you understand how your target audience is engaging with your project and if it is in fact making their world better.

Building the Right Project Team

A technology project's success is in the hands of those managing the initiative. It is critical that the political leadership of the city trusts them and gives them the space to work, that they have the ability to manage the project in an agile, iterative way, and that they are effectively able to communicate with stakeholders and the wider community.

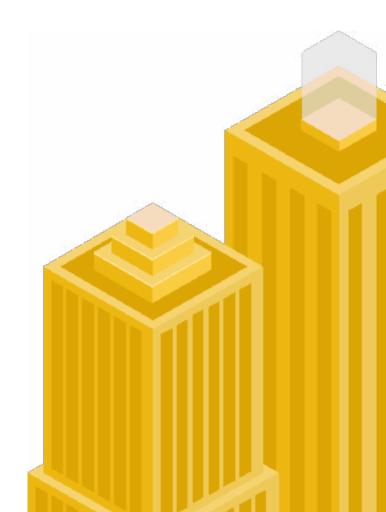
In assigning your project team, consider who is responsible for the budget and handles any strategic project shifts? Who manages outside vendors and keeps them on task? Who can provide communications and grassroots outreach expertise? Also consider how representative and credible your project team is. Do you have members who understand all relevant stakeholders? Are there any perspectives that have been left out? Without diverse voices, your team will be unable to identify and overcome barriers that intended users might experience when trying to engage with or make use of your project.

Your project team may include your IT expert, your community outreach and gender or inclusion expert, and the program manager expected to implement your idea. You can also decide the inclusion of organizational leadership and other higher-level stakeholders (such as donors) as core participants based on buyin, organizational culture, or other relevant factors. Once you have the right team in place, city leadership will need to trust them with execution on the details, while discussing major changes as needed and keeping track of progress on agreed metrics.

Part 2: From Idea to Implementation

Before beginning this section, city leadership will have decided on a broad top level goal and selected a project team to implement this initiative.

The following sections are written to help the selected project team move from that great idea to a successful plan to take the project to completion and beyond.



Scoping the Project

The project team's first step will be to scope the project. The process outlined below will ensure you understand:

- The causes behind the identified issue
- Lessons learned from existing initiatives
- What success might look like

Remember to move through this section with a problem-first mindset. If the team starts with a certain technology or predetermined solution and tries to make it fit the problem, the project is more likely to fail, resulting in you spending money and time on the wrong technology while failing to solve the problems that are actually frustrating your constituents.



Develop a Problem Statement

A problem statement describes what the project aims to accomplish and for whom, providing clarity in the project journey. The following questions can help you develop your problem statement, with the linked tools and interviews with community members and government stakeholders to document community needs.

Step 1 - Identify the Problem

1. What do your constituents want to be able to do that they currently cannot?

- Is there an existing experience that you are trying to improve? What is it?
- Why is this problem worth solving?

2. Do you understand what is causing the problem?

- Which causes are you planning to address with this project? There may be multiple.
- If you aren't able to address all of the causes, will it impact the success of your initiative?
- If you are trying to improve something that already exists, make sure you understand why the current system was put in place.
 - What are the institutional incentives for it being the way it is?
 - How do you plan to work around or within the existing system?

TOOL: How to Build a Problem Statement

TOOL: 18F: How to Prioritize Problem Statements

TOOL: 18F: Five Whys Exercise for Understanding Root Causes

TOOL: D.School: Design Project Scoping Guide

Step 2 - Understanding your Users

User needs should be the number one priority throughout your project cycle. Talking to and validating your own big idea with users is crucial to designing a useful project, program, or service. The "Stakeholder Assessment" and "Ensuring success through public input" will help you further understand your users; an overview is provided below.

1. Who are your users? Who is affected by this problem?

- Who will benefit from a solution to this problem?
- Consider historically underrepresented or marginalized communities will this help them as well, or will they be excluded from this system as well?
- Who are the government stakeholders, civil society organizations, or business leaders who are related to this problem?

TOOL: Co/Act Identifying your Target Audience Module

2. What are your user's challenges?

- Have you seen the problem in real life or spoken to people who have experienced it?
- Do you have website analytics, anecdotes from civil servants, interviews with users, or diagrams of how current services are delivered? Remember, both quantitative and qualitative research can be valuable.
- How are individuals of different races, gender, age, economic status, and/or digital access experiencing your stated problem? Do you understand what the problem looks like from each of these perspectives?

TOOL: Co/Act User Persona Module

TOOL: Co/Act User Research and Assumption Testing Module

TOOL: IDEO — Design Kit Methods For Understanding People

Learn from Past Experience

It's always better to learn from someone else's mistakes. When looking for historical or existing initiatives, note that ongoing efforts may not be publicized or official.

Step 1 - Identify who has done this before

Ask around to see if individuals in peer cities, local government, community groups, universities, or InnovationHubs are coming up with their own ways to solve the problem for themselves.

- 1. What has or hasn't worked in the past?
- 2. What mistakes can we learn from?
- 3. What have you learned from previous roadblocks or challenges?
- 4. Who were your stakeholders and what other interested parties emerged from previous attempts?
- 5. How can we do better this time or support your ongoing efforts?

Inspiration can be found in surprising and unexpected places, so think broadly about the types of people and organizations you could potentially learn from. Don't limit yourself solely to other government entities.

Step 2 - Learn From Case Studies

Contact people outside your community who have undertaken a similar initiative (counties, cities, companies, NGOs, etc.) or read case studies. Make note of what you can learn from their experiences.

Case Study Libraries:

CASE STUDY 1. GovLaunch: The free wiki for local government innovation

CASE STUDY 2. Observatory of Public Sector Innovation: Case Studies

CASE STUDY 3. Big Bold Cities: <u>Democratic Innovation in World Cities Case Studies</u>

CASE STUDY 4. National Co-ordinating Centre for Public Engagement: Case Studies

CASE STUDY 5. Digital.gov: Government Usability Case Studies

CASE STUDY 6. TechFAR Hub: Case Studies

Identify Internal and External Barriers to your Project

A problem statement describes what the project aims to accomplish and for whom, providing clarity in the project journey. The following questions can help you develop your problem statement, with the linked tools and interviews with community members and government stakeholders to document community needs.

- 1. Do you have funds for this project? Not just initial implementation, but training and long-term support as well?
- 2. Do you have access to the right technical expertise? Both for the initial setup of the project and longer term management.
 - Do you have existing employees who are able and willing to learn the skills to implement, run, and manage this?
- 3. Are there any policy or legal barriers to implementation?



For example, in many countries data privacy or cybersecurity regulations may impact what data you can collect and how you store it.

- 4. Do you have the authority to implement the project? If not, do you have plans to gain support from a project sponsor?
- 5. Have you budgeted time to consult with and implement feedback from the community in both design and implementation of the project?
 - Has outreach to women and marginalized communities taken place?
- 6. Will this project be short can you finish it in one go or will it be a multi-year initiative?
 - Are you resourced for the timeframe you think this will take (plus some buffer for inevitable delays?)
 - · Could you be prepared to hand project work off to another team?

Decide What Success Looks Like

Adopting a new technology to solve a problem without having a clear understanding of what "better" looks like could lead to a project that fails to meaningfully improve the problem it was designed to solve. Worse, without thinking through unintended consequences, many digital transformation projects can set antidemocratic norms (ex. hyper-surveillance, lack of data privacy, increased control by technology companies that are not accountable to the public).

- 1. Do you have a baseline for how things work in the status quo?
- 2. What does success look like for the project team? For government officials responsible for delivering the end result? For the community? Remember, success for each group might not look the same.
- 3. Which requirements are most important for project success and which are nice to have?
- 4. How will those requirements be measured? Will these metrics be shared with the public? If so, how frequently? Remember, it is okay if these metrics change over the course of the project. Returning to this question frequently will ensure that your work evolves based on new project priorities and research findings.

TOOL: Google: Objectives and Key Results (OKR) Playbook

TOOL: EPA: Lean Government Metrics Guide
TOOL: GovLab — Digital Policy Model Canvas

At the end of the

SCOPING THE PROJECT SECTION,

you should be able to answer the following questions:

- What is the problem you are attempting to solve and for whom?
- Why is it a problem and how do you know? (backed up by data, survey results, and anecdotes)
- What will successful completion of this project look like for each of your stakeholders? How will you measure it?
- Have you collected a list of best practices and most common mistakes from other attempts at a similar initiative?
- Do you have the resources (time, people, skills) you need to accomplish this project?
- Do you understand what barriers you will be facing?
- Have you adjusted your project plan to account for barriers and reflect initial research findings?
- Are your project team members and stakeholders in agreement about the primary goals and workplan for the project?
- How will your track updates about the project work and direction, so that the whole team has access to it? What is the single source of truth for information about the project (roadmap, memo, visualization, etc.)?



This will need to be a living document that changes across the lifecycle of the project.

Stakeholder Assesment

To increase the likelihood of a successful project, make sure your work is informed by diverse voices. This includes the full array of potential users (including demographics, technical access and abilities, etc.) as well as those who will be responsible for implementing, building, and enforcing various components of your project. Use the following section to make sure that you are not leaving anybody out of the planning process.



Identify Your Project Stakeholders

Stakeholders are individuals whose support or input you will need for your project to be successful. They should include:

People who will build the technology

People who will deliver/manage the system after launch

People who control the resources and have the authority you need to complete the project (an executive sponsor)

People who are trying to or have tried to solve the same problem

Users, Community Members, Local Businesses, Etc. Legal, Human Resource and relevant Policy experts (look for people who can fill gaps in your team's expertise — ex. security, IT, metric tracking, chat bots, etc.)

Ensure the Diversity of Team and Stakeholders

Make sure that members of your team, and specifically project decision makers, are reflective of your target users. Create a plan to engage with community members who represent diversity across all the following categories: race, disability, gender, digital ability/technical access, economic status, etc.

- Ensure that your consultation process includes representatives from marginalized populations and women who can speak to how new technology may impact or fail to be useful to them.
- **2. Identify leaders from marginalized communities** who can help you get feedback from groups that don't normally participate in government processes and establish trust.

Particularly for communities that already face exclusion or discrimination, it is important that new technologies do not magnify these inequalities. Keep in mind that individuals can belong to different communities at the same time - so be sure consider the intersectionality of being, e.g. a woman in a low-infrastructure region, or an elderly person from an ethnic or linguistic minority, when thinking about your users

Step 1

Define Internal Decision Makers

Clearly define who has the power to make decisions and map out scenarios and timelines for when decisions are likely needed to be made.



Many programs are late not because of the vendors but because necessary feedback and support from the client is delayed.

1. Make Process Inclusive: Decision-making should be as inclusive as possible on project teams to ensure diverse voices are integrated throughout project design, implementation, and monitoring.

TOOL: How to do a Stakeholder Analysis

TOOL: Talk with People: Mapping out the Stakeholders

Step 2

Define External Contributors

Team up with external organizations and community members to better understand how this project will impact different groups. Make sure that you reach out to external stakeholders who can help you understand:

- Human rights, accessibility, and privacy implications of your effort
- Which community members might be adversely affected
- Perspectives of other impacted groups (ex. Local businesses).

Including civic, consumer protection, or activist groups in the design and implementation process will improve your understanding of potential negative impacts to the community and including them in the process may give you the opportunity to turn political opponents into supporters.

TOOL: Gender Impact Assessment

TOOL: What is Gender-Based Analysis?

Step 3

Develop a Stakeholder Consultation Plan

Make sure that all your internal and external stakeholders know about the project and that you have a plan to invite them into the planning process and to give feedback throughout the project.

At the end of the

STAKEHOLDER ASSESSMENT,

you should be able to answer the following questions:

- Who does your project need to work with and learn from in order for it to be successful and useful for as many people as possible?
- Have you considered how you will incorporate each stakeholder's thoughts and feedback throughout the project?

Ensure Project Success Through Public Input

The public consultation process is essential for your project's success. By working with the community to understand their needs, challenges, and perceptions of the usefulness of existing tools and services, you will be better positioned to create something that makes a meaningful difference for your constituents. In addition to improving your project's chances of success, a well done community engagement process can improve the relationship and increase levels of trust between constituents and their government.

The goal of this section is to help you develop a process to source and implement public feedback based on your stakeholder and target audience analysis, and promote transparency and public understanding throughout your project.

Step 1:

Develop a Public Feedback Process

Step 2:

Decide How You Will Source Public Comment On The Project

Step 3:

Decide How You Will Incorporate Public Comment Into Your Project Plan

Step 4:

Create an
Inclusive Public
Communications
Strategy

Step 1.

Develop a Public Feedback Process

When it comes to public feedback — the earlier and more continuous the better. This will help ensure that you build and maintain public trust throughout the process and are able to make design changes or programmatic shifts based on real world needs and problems that you discover along the way. Do not wait until the end to ask for community feedback.

- Break down which parts of the project require inputs from which stakeholders.
 Different stakeholders will be applicable for different portions of the project based on their expertise.
- Consider looking backwards. If someone has attempted to tackle this problem before, what was the public response and what can you learn moving forward?

TOOL: Community Engagement during the COVID-19
Pandemic and Beyond

TOOL: Tips for Improving Your Feedback Practice during COVID-19

TOOL: Gov Lab: Key Takeaways for Engaging Public In
Legislative Process

Step 2.

Decide How You Will Source Public Comment On The Project

Make sure that you offer different ways for people to provide comments to ensure that the process is inclusive and accessible. For example, if you only allow feedback through digital tools, you'll create a barrier to participation for those without internet access that may result in you designing a system that will not only further inequalities, but many people will be unable to use.

Remember to utilize existing channels of communication and relationships with community leaders to make sure that people know that public comment is being requested, and use multiple channels. For example, prior to a public hearing allow interested community members to send an email or written comment to be read during the meeting or included in the formal meeting minutes. During the meeting itself, make time for in-person public comments and, if meetings are streamed online, allow people to submit comments live on social media platforms.

Answering the following questions will help you ensure that all community members regardless of disability or lack of digital savvy are able to submit their feedback.

- 1. Do you have plans to experiment with digital and analog public engagement methods to engage a wider array of community members?
- Do you have relationships with leaders from disenfranchised and hard to reach communities? The right connection can help you access and establish trust with individuals who don't normally participate in local government initiatives.
- 3. How will you ensure the accessibility of your online and offline meeting spaces, feedback forums, and forms (disability, technical savvy, access to devices)?

TOOL: Internet Society: Accessible Virtual Meetings
Checklist

TOOL: Cornell University: Accessible In-Person
Meetings Checklist

Step 3.

Decide How You Will Incorporate Public Comment Into Your Project Plan

People care a great deal about being heard and a willingness to genuinely listen and implement ideas and concerns from the public has historically improved the perception of elected officials.

Now that you have determined how the community can provide input, it is time to decide how this public input will be factored into the project. It is important that the process to incorporate public comment is transparent to the public. In other words, the community should be aware of what happens to their feedback once they give it. The following questions should be answered at this stage:

- Who decides on whether or not the feedback gets incorporated? Why do those individuals decide?
- How does the decision get made? Is there a rubric that helps evaluate public suggestions?
- What is the timeline in which the decision on a comment is made?
- How are these decisions communicated back to the public?

Step 4.

Create an Inclusive Public Communications Strategy

An inclusive public communications strategy can help you explain the progress of your project throughout its life cycle. Clearly defining a communication strategy can help bring transparency to the project, create trust in the new product or service being offered, and help generate buy-in and excitement for the project when it launches. The communications and outreach expert on your project team can help develop your strategy.

1. Does the public understand what you're doing and why you're doing it?



Pay particular attention to your target users - are they aware of the positive changes coming? Send representatives into community meetings to explain what's going on and collect feedback, questions and concerns.

- 2. How will the public be informed about the new system or process, including its potential costs and benefits?
 - Do you understand who your audience is? Do you understand where they currently get their information and what information will be clear or persuasive to them?
 - In what ways will you use social media and relationships with the press to communicate the new initiative to the public?
 - In what ways will you communicate with people who don't have access to digital media?
 - How can the public provide feedback throughout to help inform project implementation?



Consider ways in which you can create a communications strategy that invites community members to participate in the process rather than solely broadcasting decisions that have already been made

TOOL:

Community ToolBox: Developing a Plan for Communication

At the end of the

PUBLIC INPUT SECTION,

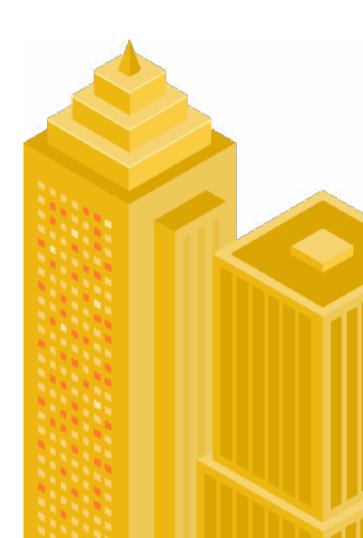
you should be able to answer the following questions:

- What is your plan to engage a representative portion of the public?
- How will you provide clear communication to the public as the project progresses?
- What is your plan to actually allow public feedback to inform project work?

Making Responsible Technology Decisions

When thinking about how technology can be used to improve the government's ability to serve and communicate with its constituents, it is important to remember that technology isn't a solution in itself. In many cases, challenges are better addressed through non-technical means.

However, if you have identified a problem that is well suited for technology-based improvement, it is important to make sure that the technology you've chosen matches the problem you've identified. This section will help you decide if your project is really a technology project, if you are choosing the right technology, and ways to prevent unintended harms. This section can help you identify the right technology solution for your project.



Technology Relevance and Responsibility Check

Now that you have a deep understanding of the problem and your users, take a moment to consider whether the right solution is really a technology solution.

1. Do you really need technology for this project?

Is there a less technical solution to this problem?



Sometimes this just means making a service accessible by phone in addition to online

- Do the advantages of a new technology outweigh the costs of implementation and organizational change?
- Does a particular technology suit this use case? Is it clear how it can be used to achieve your specific goals/ address your particular problem?
- 2. Does your agency have sufficient in-house expertise to assess whether a certain technology is the right solution? Factor hiring external experts into your budget to help you make these kinds of decisions — look for someone with technical expertise as well as an understanding of the business problem or policy issue that you are addressing with this project.
- 3. Is there existing technology that your organization already uses that you can use?



Sometimes existing systems can be adapted for new purposes, radically reducing adoption costs.

- 4. Have you thought through potential unexpected consequences?
- 5. Is this the right technology based on community access and technical capacity?

SIMLab: Context Analysis of Technologies in Social Change Projects

6. Does your agency have the ability to budget for and oversee this technology project? Including hiring or training technical staff for the ongoing management of this technology and project once it has been implemented?

TOOL: 18F: Best practices for budgeting and overseeing tech project

Ensure that your project will do good and minimize harms

This section will ensure that you have adequate plans, expertise, and resourcing to ensure your solution is democracy-affirmative. This includes considerations on the security and responsible use of community data; that existing inequalities are reduced and not increased; and that your solution is accessible to all members of the community who might benefit from it.

1. What is the impact on vulnerable populations?

- Will the technology solution have an outsized impact on vulnerable groups?
- Will those already marginalized be further excluded through use of this technology?
- Does it increase opportunities and alleviate burden for often overlooked community members?
- Is there a non-technical equivalent accessible for those without the access or skills to use a digital tool?
- Are there plans to ensure that the digital tool itself is accessible?

TOOL: Web Accessibility Initiative: Accessibility Fundamentals Overview

TOOL: Digital.gov: Introduction to Accessibility

2. What precedents are being set — specifically around surveillance, storage and use of community data?

- Are the surveillance, data collection, and monitoring aspects of your technology solution necessary and proportionate to the problem you are trying to solve?
- What safeguards will you put in place to protect the privacy of community members?



Regardless of whether or not you have your own framework for ethical decision making around technology, consider the principles outlined in the following examples as your move throughout the planning and implementation of your project

- Electronic Frontier Foundation's 10 Surveillance For Public Health Principles
- City of Portland Privacy and Information Protection Principles
- Center for Democracy & Technology Mission and Principles

Collecting data on how your users engage with your systems can help you understand what works and what doesn't - but can also compromise the privacy of your citizens.

3. Have you created data security and governance agreements that will prevent un-democratic, non-transparent, or otherwise unagreed upon use of community data in the future?

- Have you established a data protection plan?
 - What data will your project require you to collect?
 - Will residents need to supply information about themselves to use the technology, such as through an account creation process, creation of a personal profile,

- providing permissions for an app to access information on their computer or phone, or via consent waivers for the collection of data?
- How are you making sure that you are only collecting information that is necessary for the project's success?
 - Can you explain why you need the data you are collecting?
- How are you planning to meet your local data protection laws (ex. General Data Protection Regulation (GDPR), California Consumer Privacy Act (CCPA))
- Who will own and/or manage any data being collected?
 - Who will have access to the data (organizations, companies, individuals, etc.)?
 - Will there be any access restrictions (ex. time-based, only access anonymized data, only access certain pieces of information)?
- Who gets to decide how the data will be accessed, and by whom?
- How will data ownership and governance approaches be decided and communicated to the public?
- Are there policies set up for what happens to the data if the initiative is discontinued?
- Are there rules preventing re-use of the data for other initiatives without public notification and consent?

4. What steps have you taken to make sure that any data collected is secure?

- Will the technology interconnect with other existing databases or tools? If so, what information will it have access to?
- Who is managing the application? Who is managing the servers and where are they hosted? Who is managing the network?
- Do all these people have access to your data? Are there audit logs to document access?
- How are they keeping the software and systems up to date?
- Are you adopting a security by design approach when developing new technology?
- Have your tools had independent security audits? Have you run penetration tests on the systems after deployment? Are there firewalls between the systems to prevent unauthorized access to data? How are you keeping your software up to date?

At the end of the

MAKING RESPONSIBLE TECHNOLOGY SECTION,

you should be able to answer the following questions:

- Do I need technology for this project?
- Am I using the right technology for this project?
- Do I have the resources and skills to implement and maintain this technology responsibly?
- Will my use of this technology be inaccessible, create barriers, or do harm to members of the community?
- Do I understand what data this project will require me to collect?
- Do I know how the systems and data are kept safe?
- Do I know who will be managing or accessing that data?
 - Have I worked with those people to ensure community data will be protected and used responsibly and transparently?

Identifying Vendors and External Partners

Many government technology projects require public-private partnerships for successful implementation. This section can help you develop a plan to work with and recruit external partners, whether they are technology vendors or civic technology civil society partners.

This section will provide guidance on what questions to ask external partners, how to maintain internal capacity, and how to develop shared working norms with external partners.

Develop a Plan to Recruit Vendors/Suppliers

Step 1 - Follow procurement laws and best practices

- 1. Review all your cities existing laws and policies on procurement practices, including those on conflicts of interest, to ensure proper compliance and to reduce opportunities for corruptive behavior.
- 2. Find ways to engage in a public procurement competition when choosing vendors.

TOOL: OECD: Checklist for Implementing the Participation Principle

Step 2 - Set your procurement process

Involving a variety of stakeholders in the procurement process can produce increased trust and the likelihood of finding a better vendor fit.

- 1. Include technical experts in drafting the Request for Proposals (RFP) and evaluating the proposals.
 - Requests for Information (RFIs) are a great way to engage with potential future vendors and learn more about the industry before submitting a Request For Proposal (RFPs)
- 2. Ensure that there is ample competition, including from vendors who may not have worked with the government before. Make sure to maintain diversity in the pool of potential vendors/partners. How are you making it easy for all types of organizations to apply?
 - Traditionally, larger vendors have the resources to apply to complicated RFPs, while smaller vendors prefer simpler applications. Also bear in mind that vetting on the basis of sophistication of proposal, or even the use of jargon, could exclude new entrants who would be excellent collaborators.
 - Consider vendors who are willing and able to adjust their deliverables based on feedback you receive during community consultation.
 - How are individuals of different races, gender, age, economic status, and/or digital access experiencing your stated problem? Do you understand what the problem looks like from each of these perspectives?
- 3. Make sure your call for proposals and scoring criteria include relevant elements:
 - Does the vendor have a plan to address privacy and security concerns?
 - Does the vendor have a plan to support transparency and public participation in the project?
 - Does the vendor have a plan to make their tools as accessible to as many people as possible (language, bandwidth, tech knowledge, visual impairment, etc)?
 - What are the long-term maintenance requirements and costs?
 - Who owns the code that is used to run the systems?
 - Does the vendor have any ownership or access rights to the data in the system?
 - Do they have a system for data portability eg, that you can get your data out for use with a different vendor?

TOOL:

OECD: Public Procurement Toolbox

TOOL:

Refresh Market Research to Find Top Tech

Considerations For Vetting Partners

The following considerations can help you identify the right external partner for collaboration.

- 1. Does the vendor or partner have a track record can they show you an example of how their product/technology has worked elsewhere or examples of where and why it has failed and they've learned from it? Remember, it's not enough for a vendor to have worked on a similar initiative in the past, you want to make sure that they were successful (ex. solved a problem, users enjoyed or compensated on the ease of the experience)
 - Do they have experience working on your particular problem/policy area?
 - · Have other people in the community worked with them?
 - Are their investors well known and respected in the community?
 - Can they handle the amount of work that would be required for this project to succeed?
- 2. Have they spoken to other community members before pitching to you? Do they incorporate user testing and feedback into their development process?
 - How well do they understand the community? And how do they plan to incorporate community feedback in the process?
 - · How well do they understand the problem as you've described it? Can they explain it in their own words?
 - Can they articulate the benefits of their product/technology other than cost/efficiency?
- 3. Have they considered how their solution impacts the government's relationship to the community?

Make sure that you and your vendor or partner are on the same page

- 1. Do you have shared norms, values, ways of working?
 - Do they understand how the local government works the opportunities and limitations for this project?
- 2. Is there a shared understanding of the big picture/goal?
- 3. Is there a shared understanding of the context you are operating in (existing systems, budget, culture, policy, etc.)
- 4. Have you developed a data governance structure?
 - · Where will the data come from? Will your organization supply the vendor with information or data?
 - · Have you discussed who will own and have access to the data and what the collected data can be used for?



It is best to keep those with access to the data limited in order to protect people's privacy. You should also consider creating an agreement preventing the sharing and resale of community data. It is a best practice that the government retains all rights and ownership of any underlying data shared with a vendor.

Does the vendor plan to create a tool that is interoperable with your current systems?

Take Steps to Maintain your Internal Capacity

Engaging with an external partner still necessitates government staff to build capacity to support the project. The following considerations can help you ensure that your team is equipped to support the project in the long-term.

1. Does the project result in a private company or partner taking over a government responsibility?

• [If yes] have you taken care to protect the capacity of government institutions in case the company stops providing this service?



Reducing local government's internal capacity to carry out services by increasing its dependency on external partners or vendors can cause numerous problems later on. If the city runs out of funds or the partnership ends unexpectedly, you need to make sure that contingency plans are in place. You should also take care to avoid vendor lock-in (becoming dependent and unable to switch to another vendor without substantial cost) during the contracting process.

• [If yes] what is the mechanism to ensure the government remains accountable to the public for this tool and its

2. What is the plan if the tool or vendor aren't working out?

- · Can your city extract itself?
- How quickly could you turn off the system and what would the impacts be?
- Who owns the data? How can you extract it? Will it be easy to import someplace else?
- 3. What steps have you taken to make sure that the voices of internal stakeholders and members of the public are prioritized over the vendor/partners?
 - How will you hold your partners accountable to your stakeholders?

Are you prepared to manage a vendor/partner?

- 1. Do you know who your vendor's/partner's primary point of contact will be? Who will they be working with?
- 2. Do you have the capacity and time to work with the vendor/partner and ensure they have what they need in order to help you complete this project?
- 3. Can you and the other relevant people get them what they need in a timely fashion?
- 4. Do you have a way for the vendor/partner to communicate their unmet needs back to you?
- 5. Is the project set up with the right balance of specificity and flexibility, to ensure that you are working towards the same goal, but able to pivot when new information comes to light?

At the end of the

IDENTIFYING VENDORS AND EXTERNAL PARTNERS SECTION,

you should be able to answer the following questions:

- Will your procurement/partner recruiting process be inclusive and fair? Did
 you create a call for proposals asking the right questions and looking for the
 right skills and experience?
- Do you understand enough about your vendors or partners to ensure they are working in the best interest of the community?
- Are you sure they share a project vision and what the best interests of the community are?
- Do you have checks in place to prevent vendor lock-in/complete dependency on the partner/vendor?
- Can you effectively track progress and quality of output and hold them accountable for not meeting expectations?
- Is the vendor/partner on the same page as the team about the project, working in a government context, and data security/privacy?

Planning For Short-Term Implementation and Long-Term Sustainability

Dreaming up a new digitization effort is only half the struggle, if you want the work to have lasting impact for your city. Initial implementation is hard, and long-term sustainability is crucial.

From the beginning, it is important to start answering questions about initial rollout and training, advertising and public communication, long-term funding, technical expertise required internally and externally, security updates, training opportunities for existing staff, data protection and maintenance, and processes for continuous improvement and public feedback. This will ensure that your project doesn't fall into irrelevance or become an unmaintained cybersecurity risk after the initial launch.



1.

Funding

Even in the early stages of the project, plan ahead! Make sure that you have enough funding to complete and maintain this project.

- 1. How has the proposed solution been budgeted for? How reliable/flexible are these funds?
- What would be the process for ensuring delays, maintenance and support costs are included in future budgets? (unanticipated costs, change in scope)



A guiding principle is that any new tools take 10-30% of their initial cost, annually, for support and updates

- 3. What is the structure of any inkind contribution or public-private partnerships that are important to implementation?
- 4. Is the project connected to existing technology investment in the municipality and/or other governmental bodies?



Having integrated systems will increase the likelihood that the project will continue to receive resource allocation (time, staff, technical expertise, money).

2.

Technical Expertise

The long-term success of the project depends on maintaining internal capacity and ensuring your solution can adapt to a changing context.

- 1. Who manages hosting and maintenance of the product or service? Is it in-house or external?
 - Will the team that built the product/ designed the service stay engaged?
 What information/training needs to be passed down? Has that been budgeted for?
 - Will you need to hire people to maintain what has been built? Has that been budgeted for?
- 2. How will you make sure data remains available and up to date?
- 3. Who will update the system if a new needed feature is identified or there is a glitch after launch?
- 4. Who will provide training on this new tool?
 - Will users of the application/tool/ approach require instructions or training to use it? If so, who will be responsible for designing, developing, and delivering the training materials?
 - Will those delivering the application/ tool/ approach require instructions or training to use it/help people use it? If so, who will be responsible for designing and developing the training materials?

3.

Accountability & Transparency

Refer back to the previous sections where you defined success and developed your inclusive communications strategy.

- 1. How will you understand how successful you've been?
 - How are you adjusting the tool based on what you learn?
- 2. Who can the public contact you if there is a problem?
 - Is it easy for them to get help? Every request for assistance not only aids a citizen; it provides you with information about what you could be doing better.
 - What if they have privacy or rights concerns?
- 3. How will updates about the project's status and results be communicated to the public throughout the implementation and piloting period (government website, social media, etc.)?
 - How are you monitoring the analytics from the new system?
 - Who gets reports, and how often on how the system is working, being used?
 - What is the process for making amendments for any policy violations/ mis-use?
 - Is there a way for people to check on the status of their questions and complaints?
- 4. How will you source public input on iterations of the project?
- 5. How will it be regulated will the project be supported by policy, ordinance, establishment of an oversight task force?
 - Examples:
 - Oakland Privacy Advisory Commission
 - 2. NYC Algorithm Advisory Task Force
 - 3. <u>City of Portland Equitable Data</u> <u>Collection Decision Making</u> Framework

4.

Orderly Sun-setting and Shutdown

Nothing lasts forever. Make sure that you have a strategy in place to retire the system when you no longer need it. This includes conducting a retrospective where your team is able to sit down and talk about what worked, what didn't, and how you can improve your process in the future.

At the end of the

SUSTAINABILITY SECTION,

you should be able to answer the following questions:

- Do we have the ability and funding to train the initial set of people who will manage this system?
- How will we let the community know about this project?
- How will the long-term hosting and maintaining of this system be funded?
 Who is responsible for security and updates?
- How will we continue to include public feedback to iterate and improve this product?
- How will we communicate to the city about the successes of the project to demonstrate its value?
- Do we have a plan to sunset this service and shut it down at some point.

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Useful Resources

A list of excellent online resources that can be a jumping-off point for learning more about this rich topic.



Collecting Citizen Input

- 18F: Methods for Building a Better Understanding of Your Problem and The People It Impacts (LINK)
- NYC Design Studio: Talk with People: Creating a Field Research Agenda (LINK)
- Digital.gov: US Public Participation Playbook (LINK)
- Community ToolBox: Assessing Community Needs and Resources (LINK)
- Next Century Cities & Google: Lessons for Tech-Powered Civic Engagement (LINK)
- Digital Citizenship and Engagement: Guides, Playbooks, and Resources (LINK)
- City of Seattle: Inclusive Outreach and Public Engagement Guide (LINK)
- Big Bold Cities: Engaging Residents Case Studies (LINK)
- International Association for Public Participation: Core Values, Ethics,
 Spectrum The 3 Pillars of Public Participation (LINK)
- Institute For Local Government: Broadening Public Participation Using Online Engagement Tool (LINK)
- Living Cities: Accelerating Public Engagement: A Roadmap for Local Government (LINK)

Working with Civic Groups or Volunteers

- Code for All Resources
- We Are Commons: Tech Volunteering: How Things Get Done During a Pandemic
- Civic Hacking Guide: How to Talk to Civic Hackers
- New Urban Mechanics: <u>Boston Smart City Playbook</u>
- Harvard Kennedy School: What Should You Consider When Investing in Smart City Technology
- Results for America: Contracting For Outcomes
- MIT D-Lab: Partnership Co-Design Toolkit

Cybersecurity

- NIST cybersecurity (LINK)
- Tactical tech inclusive cybersecurity and technology (<u>LINK</u> and <u>LINK</u>)
- SAFETAG: A Security Auditing Framework and Evaluation Template for Advocacy Groups (LINK)
- EFF Surveillance Self Defense (LINK)



This guide is written for individuals, but captures best practices that are relevant for all.

Open Data and Responsible Use

- CARE: Responsible Data Maturity Model (LINK)
- USAID: Considerations for Using Data Responsibly (<u>LINK</u>)
- Responsible Data Resource List (<u>LINK</u>)
- GovLoop: The Open Data Playbook for Government (LINK)
- Beeck Center: Sharing Data for Social Impact: Guidebook to Establishing Responsible Governance Practices (LINK)
- Future of Privacy Forum: Nothing to Hide: Tools for Talking (and Listening)
 About Data Privacy for Integrated Data Systems (LINK)
- Open Government Data: The Book (LINK)
- Sunlight Foundation: Open Data Policy Guidelines (LINK)
- Open Data Institute: Data and Public Services Toolkit Guide & Checklist (LINK)
- Open Data Handbook (<u>LINK</u>)

Digital Service Design and Innovative Government

- NDI: Co/Act Toolkit (LINK)
- Ad Hoc: Government Digital Services Playbook (LINK)
- UK Government: Design Principles (LINK)
- Code for America: Blueprint for a Human Centered Safety Net (LINK)
- NYC City Hall: Civic Service Design Tools & Tactics (<u>LINK</u>)
- USDS: Digital Services Playbook (<u>LINK</u>)
- Nava PBC: Toolkit (<u>LINK</u>)
- Digital.gov: Customer Experience Toolkit (LINK)
- GovLoop: Customer Service Playbook for Government (LINK)
- Partnership for Public Service: Serving Citizens: Strategies for Customer-Centered Government in the Digital Age (<u>LINK</u>)
- Digital Scotland Service Standard (LINK)
- Code for America: Qualitative Research Practice Guide (LINK)
- Doing Ethical Research with Vulnerable Users (LINK)
- Resources for getting started in user research (LINK)
- UK Gov: Building A Digital Services Team (LINK)
- Living Cities: City Accelerator Guide for Embedding Innovation in Local Government (LINK)

Public Outreach

- Digital.gov: US Public Participation Playbook (<u>LINK</u>)
- Next Century Cities & Google: Lessons for Tech-Powered Civic Engagement (LINK)
- UK Government: Social Media Playbook (LINK)
- GovLab: Open Policymaking Playbook (LINK)
- Creative Reaction Lab: Field Guide: Equity-Centered Community Design (LINK)
- Smart Chicago Collaborative: Civic User Testing Group as New Model for UX
 Testing, Digital Skills Development, and Community Engagement in Civic Tech
 (LINK)
- Blogging and working in the open (<u>LINK</u>)
- Digital Citizenship and Engagement: Guides, Playbooks, and Resources (LINK)
- Nesta: Digital Democracy: The Tools Transforming Political Engagement (<u>LINK</u>)
- UK Govt: Open Government Playbook (LINK)

Product Management

- 18F: Building Product Management Capacity in Government (LINK)
- Scott Colfer: Product Management Handbook (LINK)
- Google OKR Playbook (LINK)
- AGL: Agile Government Handbook (LINK)
- 18F: Product Management Guide (LINK)

Accessibility & Equity

- Urban Institute: Creating Equitable Technology Programs A Guide for Cities (LINK)
- PlainLanguage.gov (LINK)
- Internet Society: Accessible Virtual Meetings Checklist (LINK)
- Cornell: Accessible In-Person Meetings Checklist (<u>LINK</u>)
- WAVE Web Accessibility Evaluation Tool (<u>LINK</u>)
- Digital A11y: Mobile Accessibility Testing Tools (LINK)



