

THE SMART CITIES

PLAYBOOK

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Cities Of All Sizes Can Be Smart-er Communities

A Smart City. This is the stuff of magic. A utopia where technology anticipates, automates and alleviates every municipal nightmare. Things work as they should, costs are down, satisfaction is up, everyone is happy and no one is stuck in traffic. Spoiler alert: that place doesn't exist. But don't despair.

Smart cities are not a panacea to solve every urban ill. Smart cities are a framework for “information and communication technologies to increase operational efficiency, share information with the public and improve both the quality of government services and citizen (ahem resident) welfare.” (Source: IoT World).

And by the way, we don't just have to limit this conversation to cities. We use the term because

that is how it was defined early on - but where you see "city" you can substitute "town, county, community, state, nation." You decide.

If you're still perplexed about what this is and is not all about, it's okay. Just keep reading.

In this document we get real, go beyond the hype and outline in human terms what it means to be smart. We designed this Playbook to be easy to absorb with a focus on action.

[Part 1 is a quick True / False overview](#)

[Part 2 is a bite-sized view of best practices](#)

[Part 3 is the work](#)

But before we get started, we thought it would be helpful to give some insight on who we are and why are we writing this in the first place...



Chelsea Collier



Dustin Haisler

About Us

We are two smart city enthusiasts who believe that technology (when applied thoughtfully) can positively impact the way people connect with their government(s). We wear multiple hats at all times so we'll spare you the company names and titles. Check out our LinkedIn profiles for more details, history and bios.

We've both worked in the public and the private sectors (including startups). We've traveled thousands of miles to hundreds of cities and had the chance to witness some best practices and common challenges. Through our different platforms we talk, write and think a lot about this era of digital transformation in government.

So we've seen some things... including lots of smart city articles, presentations, white papers, books, case studies, road maps and more. These are useful tools, but we think what's missing is a no-nonsense, common-language playbook (emphasis on play) that goes beyond the shiny objects and outlines the basics of being smart.

People have some preconceived notions about smart cities so let's bust some myths...

Part 1: Smart Cities Mythbusters

Myth: Smart cities are all about technology

False. Smart cities are about people. Technology is the enabler. It is the application. Being smarter is about a process where government learns to work with industry (including startups) and the community (nonprofits, civic groups and actual residents) to address challenges. The journey to becoming smart requires a human-centered mindset and approach.

The blur of digital solutions can be overwhelming for both city leaders and residents. Many things are changing quickly and the future is unpredictable.

People do strange things when faced with the unknown. Sometimes they react by shutting down new ideas, protecting turf, or rejecting the opportunity to work with different types of

people. This can feel awfully frustrating for innovators.

Clarity about the mission can help alleviate some of that discomfort. When people frame the appropriate problems to solve, the vulnerability factor goes way down and the creativity element goes way up. That's the good stuff. THEN you apply technology.

People first. Always.

Myth: Smart cities are only for big cities

False. In fact, [30 percent of all smart city projects](#) are in areas with a population of 150,000 or less.

Some of the most exciting, innovative projects are in tiny towns with as few as 5,000 people. Size doesn't matter here. The ability to embrace new ways of thinking/doing is what makes the difference.

Being a smaller city can

actually be an advantage.

Smaller towns can be nimble and overcome the gridlock and regulatory red tape that plague many large government bodies. Also, in a smaller city/town there are often personal connections that can ease the difficulty of getting things done.

If you're interested in some examples of smart city projects in smaller municipalities, let us know and we're happy to brag on some extraordinary civic tech innovators. Often they are not in the headlines, but behind the scenes doing the work.

Myth: You need a bunch of money to do smart city projects

False. There are many creative ways to approach smart city projects. The private sector - corporations, small businesses, startups - are excited to work with city

Part 1: Smart Cities Mythbusters

leaders. It's a chance to deploy technology that can improve service delivery and enhance the quality of life for residents. That is work with real impact and meaning.

The hard part is that government and industry are very different creatures.

Some cities can be difficult to work with due to bureaucracy, regulatory constraints and outdated policies.

Cities aren't exactly harbingers of change - nor is it appropriate for them to be. The public sector is responsible for the full public - not just a subset of the most desirable market. And there are all sorts of rules in place to protect that. Some of those rules are important. Some of them are annoying. Some of them are meaningless. Most of them are well-intentioned even if they are misinformed.

But creative people are overcoming the limitations

and are using new approaches to design, test and scale smart city deployments. We'll address the ways to pay for smart city projects in one of our future sections. So please keep reading.

[Myth: Smart cities projects require being 'bleeding edge'](#)

False. Instead of being consumed by the latest and greatest tech, it is more important to use technology and smart practices to deliver government services more effectively and efficiently.

It is most important to first define who you are as a city and what your priorities are and then apply technology to help deliver.

Once you lay your smart city foundation, you can test and then scale those emerging technologies. But don't let the fear of going all in right away stop you from getting started.

[Myth: Smart city projects can only be facilitated and executed by government leaders](#)

False. It is helpful to have the right stakeholders, including key government actors, involved in the deployment of smart cities technologies, it is not a requirement.

If you think this sounds crazy, check out the [Center for Digital Government's finding](#) that only 25% of smart cities deployments today are being led by government.

Smart city experiments can be successfully executed and measured at the line of business helping to further justify the need for an enterprise approach to future smart city deployments.

However, if you want to go beyond a project and scale, that is when city leadership needs to be involved.

Part 1: Smart Cities Mythbusters

Myth: Smart city projects require cities to own their own infrastructure

False. Cities no longer have to do this alone. The era of the smart city is all about partnership across sectors - public, private, nonprofit and academic.

Before rushing to implement a “we own it” solution, cities must first go through the process of understanding what they have in the ways of communications (wireless and broadband Internet) and utility infrastructure.

And even before this step, it is important to outline who you are as a city, what your goals and priorities are. Only then can you implement the correct solutions. We'll guide you on how to do this in Part 3.

One thing to be clear about - owning your own infrastructure (i.e., fiber,

electric poles, streetlights, etc.) gives cities an advantage with testing or incubating new technologies, but is not a requirement.

Cities can test new approaches to nudge behavior or make existing processes more efficient and effective. The ideal state is that public, private, academic and nonprofit sectors are working in tandem. Again this is where partnerships come into play. Working across sectors to test and deploy smart technologies is the success model

If you want more information check out Digi.City's [Utility Checklist](#) and [Connectivity Checklist](#). (And there are [other checklists, too](#))

There are more myths to bust but let's move on

Okay, so now you have a better idea about what a smart city is and what it is not. Perhaps you are feeling more confident about how smart cities could be applied in your community. Let's hope that is the case.

So what now?

Next we'll do a quick overview of what successful cities are doing to connect their infrastructure, their people and intelligence.

Then in Part 3 we'll outline the **7 Steps to a Smarter Community**. That's where the real (fun) work begins.

Let's get started.

Part 2: Best Practices

Follow the leaders

As you look to mature your smart cities programs, it's important to have a diversified portfolio of projects. The Center for Digital Government's [Exponential Government](#) presents one lens on key characteristics of high-performing government agencies separated into three categories:

Infrastructure, People and Intelligence. Keep in mind that is an overview. If you want to dive deeper, go to the source!

Infrastructure

A. Scalable Infrastructure

Agencies leverage virtual infrastructure, such as the cloud, in order to scale their digital infrastructure to the immediate needs of their populations.

B. Leveraged Ecosystem

Agencies leverage the wider govtech ecosystem rather than trying to invent their own solutions for each problem they face.

C. Leveraged Internet-Connected Devices

Rather than deploying unique sets of sensors, agencies seek ways, when possible, to leverage the sensors of existing devices (i.e., think about how Waze uses each user cell phone as a sensor for the wider network).

D. Open Data

Agencies design and use open data experiences for internal (i.e., employees and electeds) and external (i.e., residents) consumption of information and performance.

E. Data Standards

Agencies focus on collaborating and adopting shared data standards for government data.

F. Exponential Planning

Agencies focus on planning capital projects and infrastructure with an exponential mindset.

Part 2: Best Practices

People

A. Crowdsourced Work & Microtasking

Agencies leverage crowdsourcing to source problems, solutions, funding, implementation, and validation in projects.

B. On-Demand or Hybrid Labor Pools

Agencies plug into the freelance economy through sites like Upwork to incubate new labor pools or fill workforce gaps.

C. Adaptive Organizational Structures

Agencies leverage new, agile models of organizational management to be more open to change.

D. Engaged Communities

Agencies focus on building committed groups of employees, residents and even visitors to leverage insights and validation. You cannot crowdsource without an engaged crowd.

Intelligence

A. Third-Party Data Integrations

Agencies find ways to take their data and services to where the people are. No one goes to a city's website to look up food inspections, but they do use Yelp.

B. Performance & Innovation Metrics

Agencies set key performance indicators (KPIs) and regularly benchmark, review, and adapt their services to be more effective.

C. Predictive & Contextual User Experiences

Agencies build predictive and contextual user experiences like Gov2Go that let users customize their government experience.

D. Human-Centered Design

Part 3: Seven Steps to a Smart-er Community

Let's get to work.

So the early days of the smart cities movement was dominated by shiny objects rather than examples of sustainable, scalable change. Now that the movement has matured a bit, it's time to outline a few meaningful steps that community leaders can take to be smart-er.

Here is a 7-Step process. We're going to go through each of these, well, step by step. And at the end of the fill in the blank worksheets, we'll use examples to make it all real. None of this stuff is rocket science. You don't need a computer science degree to move forward. You **do** need an open mind and a willingness to embrace some new ideas.

And we don't know everything. So along the way, make some notes of questions you have, things we need to clarify, add or remove. We're all in this together.

Part 3: Seven Steps to a Smart-er Community

Step 0 - Set the foundation

Before we get into the 7 Steps, let's set yourself up for success. This means having the right people in place, agreement on the process and your values defined. This is foundational work - don't skip it.

The Working Group

Build a team that is a representative sample of your (future) smart city. Engage individuals early on who will co-create the program and be resources for its success. The best smart city projects require participation from a diverse set of stakeholders including representation from city department heads, elected officials, global and local companies, community advocates/non-profits, academia, local residents, etc. Each city's group will look different.

A democratic process that includes lots of different voices and perspectives is essential, but **there needs to be one leader.**

This person sets the tone, sets the pace and is ultimately responsible for the process. They need to be able to work well with people, be a great project manager and be able to balance thoughtful discussion with keep things moving.

Choose wisely.

Common Q&A:

Q: How big should our working group be?

It's up to you but we suggest 5 - 7 people. Odd numbers are important to keep it balanced. You want it big enough to be representative but small enough to be fluid.

Q: Should our mayor be involved? Or an elected city council member?

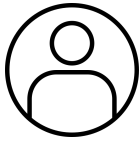
You definitely want leadership from the top engaged, informed and inspired. The obvious thing to watch out for is scheduling conflicts. You don't want to get bogged down - keep a steady pace of work.

Q: Can we change members?

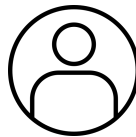
There are no hard rules here. You're in charge.

WORKSHEET: THE WORKING GROUP

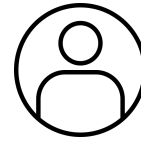
The Leader: _____



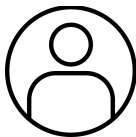
Government



Industry



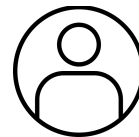
Startups



Academia



Advocates



Others?

Part 3: Seven Steps to a Smart-er Community

Values

The first order of business for the working group is to collectively identify your values. Understanding who you are - the attributes that describe your community - is a critical step towards transitioning to who you want to be and what you want to build.

To make this easy, on the following page is a Worksheet - we love worksheets - that has list of words. You'll give this list of words to a group of people that you assemble (it can be 5 people or 500 people, your choice). You'll ask them to choose (and agree) on 20 values from the list. Then they will collectively narrow that list down to five.

You can have people fill out the pages individually and then discuss as a group. You can have the group simply shout out words and put them on sticky notes on a wall, or project them in an auditorium, or you can do this on social media.

This doesn't have to be scientific and you don't all have to agree. The point is to pay attention to how different people view and experience the same city. Notice: Which words come up most frequently? Which words are never mentioned? Are there words that you wish described your city but don't (yet)? Can everyone agree on 5 words? This should inform your processes as you are building technology to meet the needs of a diverse population.

Keep it simple

- 1- Get people together
- 2 - Give them the worksheet/exercise
- 3 - They will narrow a list of words from 150 to 20 then to 5.

Let people talk, discuss, debate and then decide.

Do this exercises as many times as you can with as many people as you can from different experience levels, ages, professions, socioeconomic groups, genders, etc.

Invite as many residents (and even visitors!) to play and get creative.

The process and the results may surprise (and even delight) you.

WORKSHEET: VALUES DEFINITION

Accomplished	Eco-Conscious	Legacy-Oriented	Refined
Adaptable	Educated	Logical	Relaxing
Adventurous	Elegant	Love	Reliable
Affluent	Empathetic	Luxurious	Resourceful
Aggressive	Ethical	Mature	Responsible
Altruistic	Excellent	Merit-Based	Restrained
Ambitious	Exclusive	Motivated	Results-Oriented
Appreciated	Experienced	Natural	Scientific
Art-y	Faith-Based	Nurturing	Secure
Aspirational	Famous	Open	Self-Actualized
Assertive	Family-Oriented	Opportunity	Self-Controlled
Attractive	Fashionable	Optimistic	Self-Reliant
Authentic	Free	Orderly	Selfless
Beautiful	Friendly	Original	Sensitive
Brilliant	Fun	Outrageous	Service-Oriented
Calm	Generous	Partner	Sexy
Caring	Graceful	Passionate	Sharing
Celebrity	Gracious	Patient	Shrewd
Charming	Growing	Peaceful	Simple
Civic-Minded	Happy	Perfect	Soulful
Clean	Hard Working	Perseverant	Spiritual
Collaborative	Healthy	Persuasive	Sportsmanlike
Comforting	Helpful	Philanthropic	Stable
Committed	Heroic	Playful	Strong
Community Focused	Honest	Pleasurable	Structured
Compassionate	Honorable	Poised	Successful
Confident	Hopeful	Polished	Supportive
Content	Humble	Polite	Team Oriented
Cool	Independent	Political	Thoughtful
Cooperative	Influential	Positive	Tolerant
Courteous	Innovative	Practical	Traditional
Creative	Inspiring	Prideful	Trustworthy
Curious	Integrity	Private	Understanding
Dedicated	Intelligent	Proactive	Unique
Determined	Inventive	Professional	Unified
Diverse	Joyful	Prudent	Visionary
Driven	Just	Purposeful	
Dynamic	Kind	Recreational	



WORKSHEET: VALUES DEFINITION

From the list of words on the next page, pick 20 that you believe describe your city.

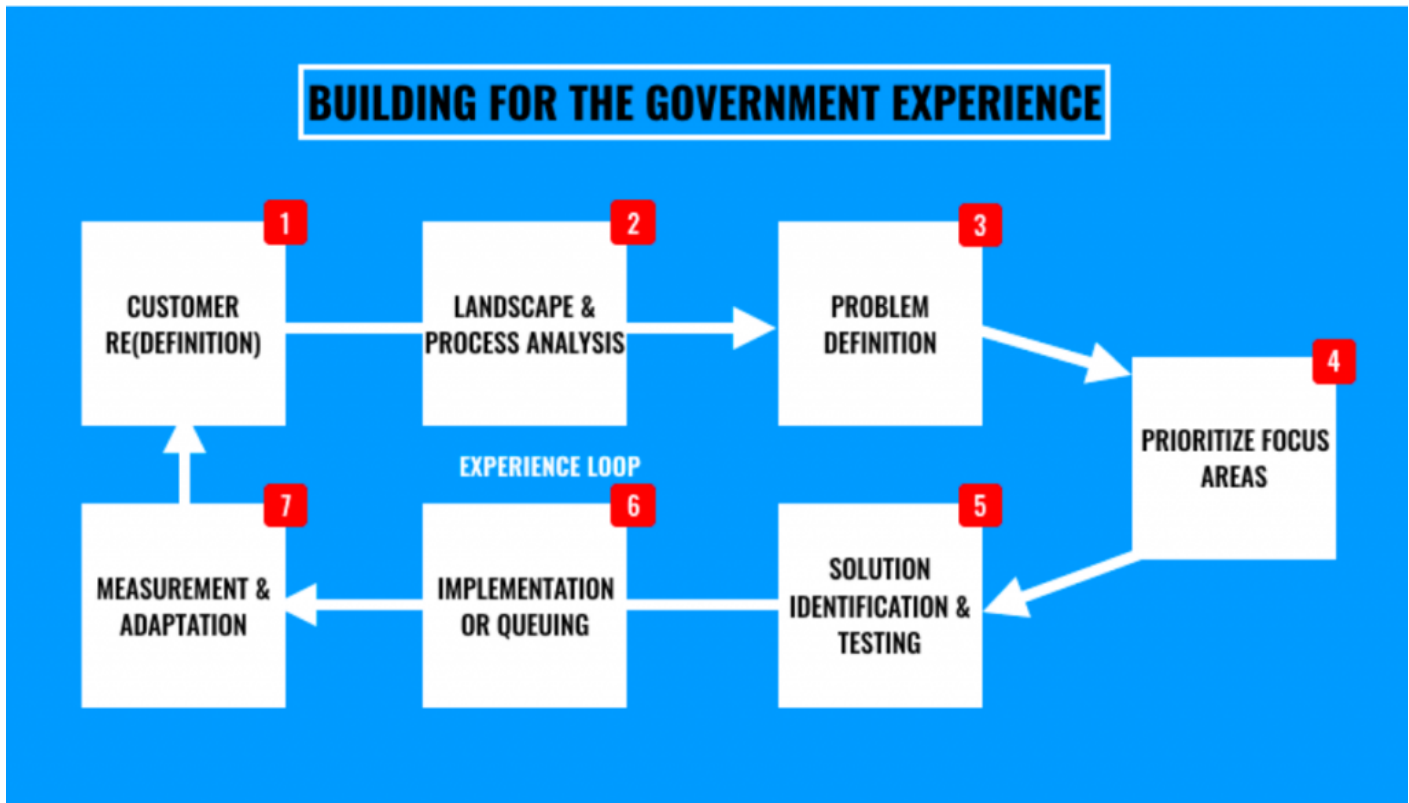
- | | | | |
|---|----|----|----|
| 1 | 6 | 11 | 16 |
| 2 | 7 | 12 | 17 |
| 3 | 8 | 13 | 18 |
| 4 | 9 | 14 | 19 |
| 5 | 10 | 15 | 20 |

Now narrow that list down to 5.

- 1
- 2
- 3
- 4
- 5

Part 3: Seven Steps to a Smart-er Community

Okay now we're ready to get started with the 7 Steps.



Part 3: Seven Steps to a Smart-er Community

Step 1 - Define your customer

Yes, we know. You want to start with the problem. We can hear your thoughts right now. “But wait, you don’t understand. Our city is in a real crisis and we have to do something right now about the _____.”

Take a breath. People first. Always.

Understanding who you are building services for and letting this knowledge influence how you build the solution is probably the most important differentiator between modernized and traditional government.

The old guard creates products and services that work for government agencies and processes. The new way is to create mechanisms to serve people. That’s what we’re doing here.

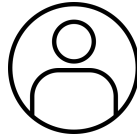
Start by identifying the people or groups who engage you today and then look to the future and list other types of individuals. A good starting point is the [Census Community Facts section](#), which provides the basic demographics of your community. Keep in mind that this

database will be a few years old, so it’s always good to leverage your own customer relationship management (CRM) system to understand who are your current customers and taxpayers.

Finally, you’ll want to identify potential groups who could be affected and engaged in your project but may not currently be part of your ecosystem today. Examples include academia, small businesses, financing institutions, non-profits, etc. These are the people who could be engaged in our smart city project.



WORKSHEET: PEOPLE + PERSONAS



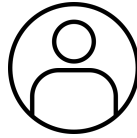
This is where you answer the question: For whom are we building services?

There are a variety of approaches when it comes to customer definition, segmentation and exploration. We like to keep things simple so we like this [Buyer Canvas by TonyZambito.com](#). You'll notice references to the word "buyer" but don't be distracted by the terminology. As city administrators, you do have buyers but the currency is engagement instead of dollars. Also, keep in mind that city employees are also important customers in any smart cities project. To get you started, here is a subset of the important questions to ask about your customer:

- Who are they?
-
- What do they want?
-
- How do they live?
-
- What motivates them?
-
- What is standing in the way for them in terms of the outcome that you seek?
-
- What are their challenges?
-
- What services do they use today and how do they access them?

[Download the Buyer Canvas](#)

WORKSHEET: PEOPLE + PERSONAS



Now let's develop a series of **personas** to help you dive deeper. These are stories that you write about the individuals who will be interacting with the solution(s). You should be able to develop a persona that ties to each of the groups of people that were identified in Step 1.

Here's an example:

Mary has lived in City X for 8 years. She is 36 years old, employed full time, is a single mother of two children under the age of 10, owns her home and has a reliable vehicle. Between work and caring for her family she has little time for herself. Technology is critical as she is often juggling schedules and relies on a network of friends, family and services (meal delivery) to make it all happen. She cares about civic issues but prefers that the city work for her without too much hassle. She values efficiency and cares about her quality of life.

Now it's your turn...

Part 3: Seven Steps to a Smart-er Community

Step 2 - Map Your Landscape

The [Business Model Canvas](#) is a handy tool for this exercise. Alexander Osterwalder originally came up with this methodology and since it has been used by millions of people around the world, mostly in the [business and entrepreneur](#) community. But there is no reason that only the private sector gets to have all of the fun.

The Business Model Canvas can help city governments connect with their customers (which in this case may be residents, visitors, other department leads, employees, etc) to better inform the creation of meaningful programs and services. There are a few things that make government different so you need to consider things such as the political environment, how departments, budgets and projects are prioritized, etc. You know your community best so just take those into account. You own this process.

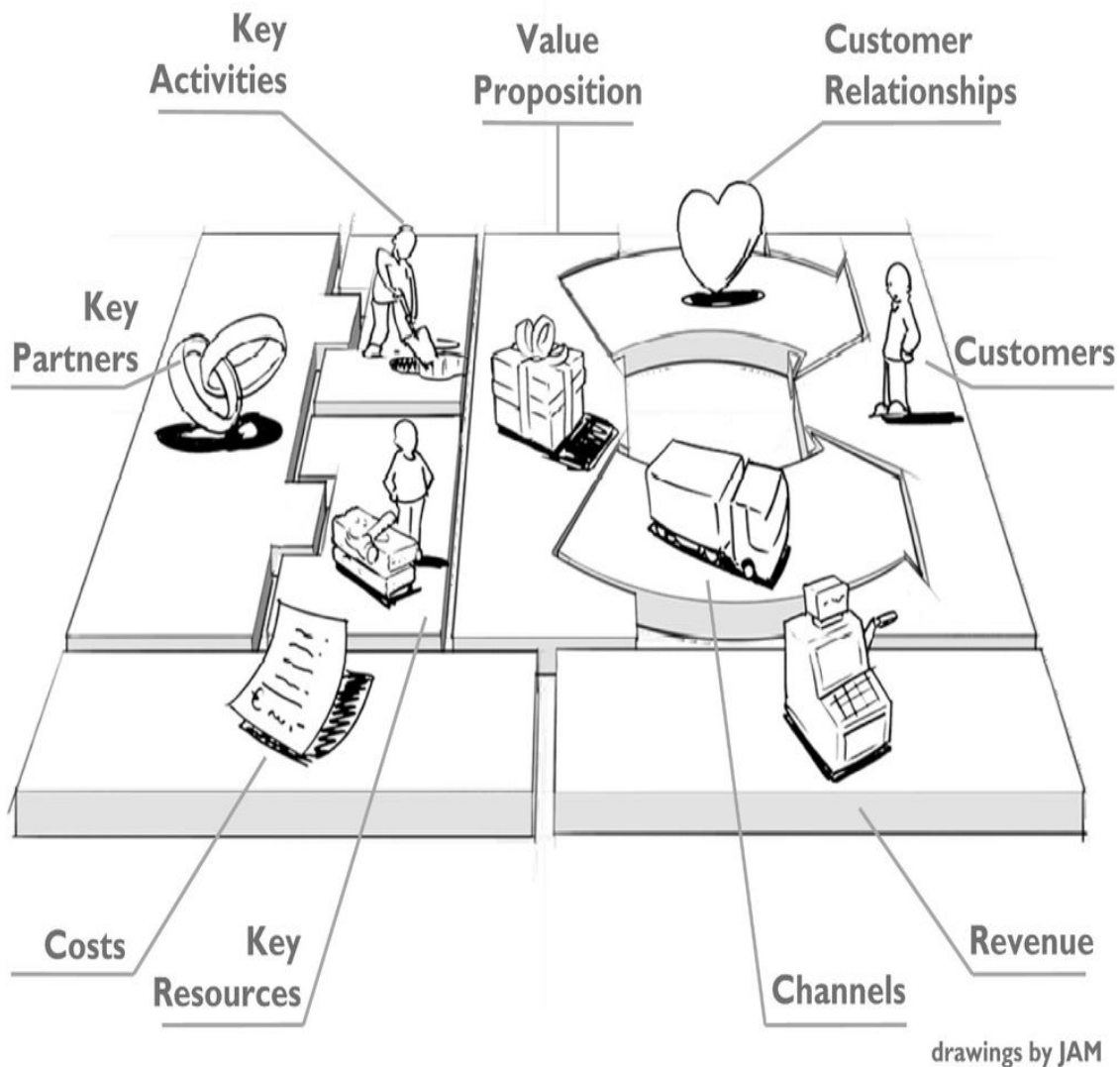
[Download the Business Model Canvas](#)

Just to be helpful, here are each of the sections in the Canvas and how they apply to government:

- **Partners** - These are the stakeholders for your city and smart initiatives.
- **Activities** - These are the actions your city must take to support the value proposition.
- **Resources** - These are the assets necessary to delivery on the value proposition.
- **Value Proposition** - This is the meat of the canvas - what makes you special and unique? This may be your existing way of delivering services and you can test potential new smart initiatives (i.e., online bill payment).
- **Customer Relationships** - This is how your customers connect with you (i.e., self-service).
- **Channels** - These are the methods for how your customers engages with you (i.e. ,web).
- **Customer Segments** - This should be easy since you've done this exercise. Breakdown who your customers are today and who potential customers may be.
- **Cost Structure** - This is the financial aspect of delivering on the value proposition.
- **Revenue Streams** - This is how your customers pay for the value proposition.

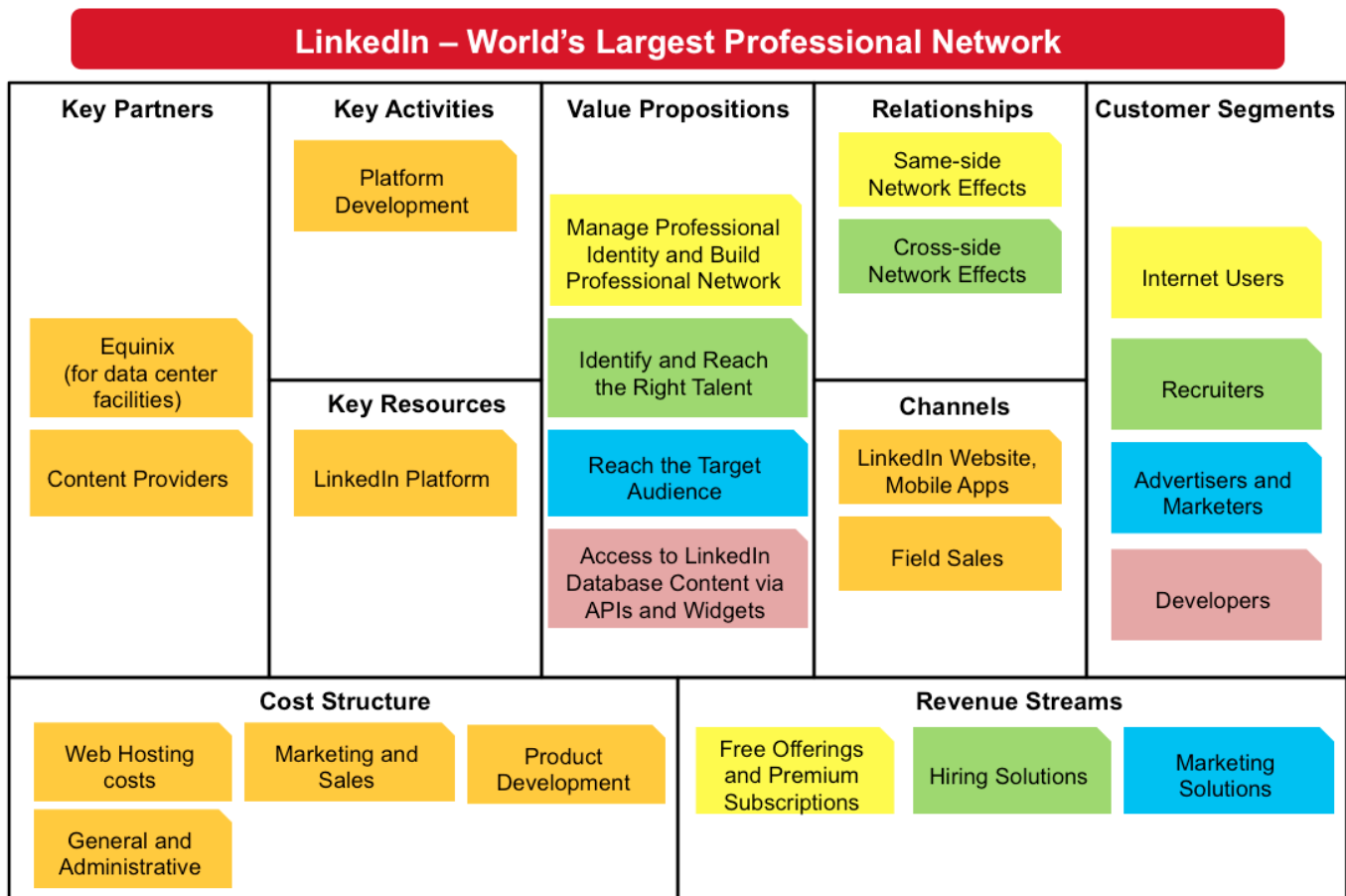
Part 3: Seven Steps to a Smart-er Community

The Business Model Canvas



Part 3: Seven Steps to a Smart-er Community

Here's an example of what LinkedIn's business looks like plugged into The Business Model Canvas.



source: <https://www.pinterest.com/pin/2811337643792102/>

www.businessmodelgeneration.com

Part 3: Seven Steps to a Smart-er Community

For this phase, map out the Business Model Canvas based on how your customers access you **today** - your existing processes. It's important to take an inventory of what's already in place. In the next section, we'll use the canvas to test new approaches. One thing at a time.

As we've mentioned before, becoming a smart -er city is a *process*. It is the journey, not the destination. There will be a never-ending, overwhelming number of areas to explore and evolve in the digital age. Breathe.

To nudge the process along, on the next page are the major areas for you to address. We focus on the tech piece here. We know that government is concerned about traditional (ahem aging) physical infrastructure (i.e., bridges, roads, etc.). Tech can help here for sure, but in this guide we focus on the *underlying* technology infrastructure of cities. Also make notes and questions. We can connect you with subject matter experts on any number of specific issues, no matter how granular or specialized.

So I bet you're ready for another worksheet. Well here ya go, next page.



WORKSHEET: INTERNAL TECH ASSESSMENT

In this step it is important to examine where you are in reality. Take an inventory. Map your assets and processes. Having a policy, a procedure or a program that sits in a book that hangs out on the shelf that nobody reads doesn't count.

- What is your Privacy/Data Use Policy?
- What is your cybersecurity infrastructure (hardware/software/people)?
- What is your approach to cloud infrastructure? If you don't have one, what is your plan to migrate?
- What is your connectivity landscape? (Include fixed and wireless).
- What is your Internet-enabled infrastructure. This goes beyond broadband availability and will include utility items such as your Automated Meter Reading (AMR).
- What is your software-defined infrastructure? (i.e., Virtual Desktop enabling workers to work from anywhere, etc.)
- What is overall condition of your infrastructure and/or plans to modernize it?

WORKSHEET: EXTERNAL TECH ASSESSMENT

Next, look at the macro trends of how people are using technology. Look beyond your own city limits and examine what is happening in other urban and even rural areas. Map out cities of similar size and metrics, but don't rule out examining what is emerging in other non-similar cities and even other countries.

Not sure where to start your research? You can follow editorial on Smart Cities from [Government Technology magazine](#).

- What cities are you looking at that are similar to your city? Why are they similar?
- What cities are not at all like your city but still of interest? Why are they of interest?
- What are these cities doing "right" (funding models, problem-solution fit, etc.)? Can you adopt and adapt?
- What approaches *wouldn't* work for your community? Could it be a moonshot project?
- What are the gaps? What resources are you missing?

WORKSHEET: YOUR CUSTOMER & TECH USAGE

Now think about the broader landscape of how your customer (remember the people part) is interacting with technology. Don't be limited to your own internal technology applications. Go beyond the expected and ask questions like:

- How do people engage with other private sector companies and/or services?
- How do companies balance in-person and online transactions? (i.e., What is the most common way for people to pay their bills?)
- What is the role of the mobile phone?
- Do your people have an adequate Internet connection?
- What other technologies are applicable here?
- What other questions do you want to ask?

Part 3: Seven Steps to a Smart-er Community

Step 3 - Define your problem

Once you understand who your customer is and the larger landscape that they are operating in, you can now look for gaps in between the two, which is where you're able to identify problems. Many city leaders want to start with Step 3, but don't realize how their own perceptions and experiences bias the outcome. Steps 1 and 2 are essential to defining "your" problem.

So let's break it down:

- Where is there a disconnect between your people and how they access services?
- What problem does each of your identified groups of customers want to solve?
- Is there any private-sector (or other government) parallels with the identified problem? If so, how do those group address the challenge?

You can have a long list of problems - that's okay. We'll focus it and prioritize on the next page. But first, now that you know the problem(s), let's build a design question around each. Work this through until the problem statements feel right. And be sure to get input from others.

WORKSHEET: PROBLEM STATEMENT

What if we could.....

- What is the ultimate impact you are trying to have?
- What are some of the constraints that could impede your progress?
- Now time to look at the original question. Is there any re-framing necessary?

Part 3: 7 Steps to a Smart-er Community

Step 4 -Prioritize your focus areas

In order to maximize your input, you'll need to prioritize the problems you want to solve. One of the best ways to do so is by evaluating the number of people impacted. As an added filter for prioritization, you can estimate the time, complexity (partner involvement, etc.) and/or costs associated with addressing a problem statement. You can also look for gaps in how you're delivering service today and how your constituents are accessing services from third-parties like Amazon. Want some inspiration on priority areas? Here are a few of the most common as defined by surveyed city leaders:

DIGITAL CITIES TOP 10 PRIORITIES

2018

1. Cybersecurity
2. Citizen Engagement / Experience
3. Hire & Retain Competant IT Personnel
4. Transparency / Open Data / Data Governance
5. Disaster Recover / Continuity of Operations
6. Mobile Applications
7. Budget & Cost Control
8. Business Intelligence / Analytics
9. Networking: Broadband & Connectivity
10. Smarter Infrastructure / IoT

2017

1. Cybersecurity
2. Citizen Engagement / Experience
3. Mobile Devices / Applications
4. Transparency / Open Data / Data Governance
5. Disaster Recover / Continuity of Operations
6. Hire & Retain Competant IT Personnel
7. Networking: Broadband & Connectivity
8. Budget & Cost Control
9. Business Intelligence / Analytics
10. Cloud Computing

WORKSHEET: FOCUS AREAS

Map out what your goals are at this stage so you have a mechanism to evaluate success. Back in the day, Peter Drucker came up with criteria to measure progress which has a nifty little acronym - S.M.A.R.T. So as you are crafting your goals, make sure they are:

- Specific (simple, sensible, significant)
- Measurable (meaningful, motivating)
- Achievable (agreed, attainable)
- Relevant (reasonable, realistic and resourced, results-based)
- Time-bound (time-based, time-limited, time/cost limited, timely, time-sensitive)

Focus Area 1

Focus Area 1

Focus Area 1

Part 3: Seven Steps to a Smart-er Community

It's important to also go outside of your traditional methods for finding solutions and involve your community leaders in sourcing new approaches. This is a great stage to pilot technologies and validate their effectiveness, especially new startups that are working in the government technology space. Note that more than 30 percent of state agencies are already using startups to implement technology and many of these large scale implementations started with a pilot.

While we're talking about new and non-traditional approaches (especially related to procurement), there are several other ways to source potential solutions from your ecosystem:

- **Open innovation** - Tools like [Brightidea](#), [Ideascale](#), [Planview](#), and even [Trello](#) can be used to source and validate ideas from your employees or your wider community. You can also tap Hackathons, Accelerators, Incubators, Reverse Pitches. Let us know if you need more information about what these are and who can help.
- **Request For Ideas** - A new practice in government is to issue a Request For Ideas - similar to Request For Information, but not as formal. Also tools like [Citymart](#), [UrbanLeap](#) and [Marketplace.city](#) are great vehicles to source ideas from startup communities.
- **Tap the govtech ecosystem** - You can also look to glean insights from other government agencies through initiatives like [Startups-in-Residence](#) and [the Metro Lab Network](#). It's also a good idea to plug into organizations like [NLC](#), [ICMA](#) to keep up with how agencies are tackling smart cities.

Part 3: Seven Steps to a Smart-er Community

Step 6 - Implement solutions & funding

Once you've successfully identified and tested solutions, now it's time to plan for their formal rollout, which ultimately is about how you're going to pay for it. As a starting point, you can refer back to the cost structures you outlined during your ideation phase and compare that to any revenues that are brought on by the use of the value proposition. For example: Can the cost of offering online bill payment be offset by customers paying at \$3 dollar transaction fee?

Once you understand the cost structure, it's important to find a vehicle to pay for rolling out the new solution. For starters, Deloitte put together [some great research](#) on how smart cities can be procured based on the delivery approach they take. To expand upon Deloitte's work, the Center for Digital Government surveyed smart city leaders to understand how cities were funding their smart initiatives today.

Innovative City Funding Strategies

How city leaders are finding new ways to pay for projects.



government technology | Source: 2017 Governing/Living Cities Equipt Survey

If funding still remains an issue, look at setting up a smaller scale roll out to proof validate and attract additional support from the community and potential corporate partners. Many cities have set up Innovation Districts or Zones to accomplish just this, by providing a smaller scale

P3s

Many smart cities projects today have relied on an ecosystem of public-private partnerships (P3s) for initial deployment. Potential partners include:

Telecoms

Local tech companies (especially those working in IoT)

Local academic institutions

Regional consortiums of government agencies, etc

Part 3: Seven Steps to a Smart-er Community

Step 7 - Measure & adapt

The final stage of the cycle is to measure the impact of your solution based on the original challenge. You should be able to answer questions such as: What percentage of my addressable users are using the new process? Is it trending up or down?

You can also look for opportunities to make these goals part of your overall open data initiatives. [LouieStat](#), from the City of Louisville, is a great example of what it looks like to publish progress and context around a transparent set of goals. This is valuable not just for your residents, but also internally as a way to keep everyone on the same page with the larger objectives.

And remember those S.M.A.R.T. Goals? Dust them off and see how reality has helped you adjust some of those early thoughts. Don't get discouraged if it turned out differently than you anticipated. Experimentation and adaption is all a part of the process.

Part 3: Seven Steps to a Smart-er Community

Things to Consider Long Term

Develop a cadence

As you continue with your smart city planning, you want to have a regular governance process that includes a meeting with a regular body of key stakeholders that help direct and inform your smart cities decisions. For example, the [State of Utah has a Product Management Council \(PMC\) / Digital Government Experience Council](#) that meets on a regular basis to “ensure that the State’s digital resources are well coordinated. [The committee] has developed numerous cross-agency / enterprise services that improve the way services are delivered to the public.” Even if you’re a smaller agency, having a regular convening - even with just a few key stakeholders - is key to continuing forward progress on your initiatives.

Don’t go at it alone

Being a smart city is more than just incorporating new technologies and process in your own community, it’s also about looking for opportunities to have a broader impact regionally. Make sure to keep regional opportunities for collaboration on your radar, which can ultimately reduce the financial and

operational burden but strengthen your knowledge (and data sets) and impact. [Colorado](#) is doing some very impressive work in this area.

Think about how everything connects

Although many smart city initiatives start out focus on a single vertical (i.e., transportation, public safety, etc.) make sure you’re looking at the big picture of how each of these smart city use-cases connect and ultimately, how you can generate value for your agency and constituents long term by connecting the dots.

Keep your board in the loop

All too many times, we see smart city initiatives shutdown by governing boards - especially after an administration transitions - because they haven’t been involved or briefed on any of the progress. Make sure that you are finding opportunities to inform your governing board on the progress, impact, learnings and next-steps for your smart initiatives. Each member of your board as a key-stakeholder that should be vested in your project’s success as much as you are.



Where We Go From Here

Starting with understanding the intersection of city and people will give you a foundation to identify, test, and adopt new, lasting solutions that create an impact that last well-beyond a vapid headline, shiny application or short-term pilot project.

Hopefully we've made the case that this process is not limited to big municipalities with booming populations. While larger cities certainly have more resources, they are also challenged to move quickly. And speed is a necessary ingredient in the global smart cities race. Smaller cities, counties and even state-level organizations can follow this process to create more connected cities that are ready for the modern marketplace.

Also consider this as a Version 1 introduction to help get you started on the exploration of becoming a smart-er city. The journey to smart isn't a one-time event, it's an iterative process. It's important to follow these steps and adapt them to your unique organization.

This process is not all-inclusive and there is much to be added and adjusted, which is where you come in. **We want to hear from you** as you implement and learn from the tactics we outlined - and you can be apart of Version 2 in the process. E-mail us your feedback, successes, lessons learned: Connect@Digi.City

Okay, ready? Let's do this!

Chelsea & Dustin