

A person stands on a curved, metallic walkway, looking up at a tall, modern building at night. The building has many windows, some of which are illuminated from within, creating a warm glow against the dark sky. The walkway has a grid-like pattern and is flanked by curved metal railings.

PEOPLE-LED INNOVATION

Toward a Methodology for Solving Urban Problems in the 21st Century

Andrew Young, Jeffrey Brown, Hannah Pierce and Stefaan Verhulst



Bertelsmann
FOUNDATION

PEOPLE-LED INNOVATION

Toward a Methodology for Solving Urban Problems in the 21st Century

Andrew Young, Jeffrey Brown, Hannah Pierce and Stefaan Verhulst

January 2018

ACKNOWLEDGMENTS

It won't be a surprise to readers that developing a people-led innovation methodology depends on the input of many people. While it is impossible to acknowledge everyone who shared their expertise and input, we would like to thank in particular all the Chief Resilience Officers and organizers who participated in the People-Led Innovation Workshop during the July 2017 100 Resilient Cities Summit in New York City; their feedback ensured that we integrated the expertise and experience of those public entrepreneurs we hope will put them into practice. Dinorah Cantú-Pedraza and Michelle Winowatan – both from the GovLab – provided important research assistance. We are also grateful for Claudio Mendonca, creative lead at GovLab, for adding magic to the formatting of the report. Finally, thank you to the peer reviewers who provided input on a pre-published draft: Kirsten Van Dam, Fanny Giordano, Amalia de Götzen, Nicola Morelli, and Luca Simeone of the Service Systems Design Research Group at Aalborg University; and Neil Kleiman of the Robert F. Wagner Graduate School of Public Service at New York University.



Table of Contents

Cities Need People-Led Innovation (and a Methodology to be People-Led).	5
Introduction and Overview: Unlocking People's Expertise to Solve Urban Challenges	7
FAQ	9
Toward a Matrix of People Engagement	10
Segmentation of People and their Groups	11
Engagement Roles	14
People-Led Innovation – A Step-by-Step Guide	16
Phase 1. Define.	17
Step 1. Problem Identification.	18
Step 2. Problem Definition	20
Step 3. Problem Prioritization.	23
Further Reading	25
Learning from the Field: Singapore's Resilience Team	26
Phase 2. Ideate	27
Step 4. Expertise Mapping	28
Step 5. Data-Driven Insights	30
Step 6. Idea Prioritization	33
Further Reading	35
Phase 3. Experiment	36
Step 7. Agile Development.	37
Step 8. User Testing	39
Step 9. Impact Evaluation.	41
Further Reading	43
Phase 4. Expand	44
Step 10. Course Correction	45
Step 11. Transfer (and Integrate) Learning	47
Step 12. Replicate Results.	49
Further Reading	51
A Final Word: Walking the Talk.	52
Appendix I: People-Led Innovation at the GovLab and Bertelsmann Foundation	54
People-Led Problem-Solving in Monterrey, Mexico	54
Transatlantic Policy Lab: Boston & Athens	56
Appendix II: People-Led Innovation Methodology Worksheet	59



Photo by Brian Minear on Unsplash

Why Cities Need People-Led Innovation (AND A METHODOLOGY TO TO BE PEOPLE-LED)

FOREWORD

With more than half the world residing in cities¹, addressing societal challenges – ranging from climate change to terrorism and the future of work – is increasingly falling to officials at the local level. However, deteriorating fiscal conditions, coupled with a long-term decline in public trust in government, has diminished local leaders' ability to meet citizens' increasingly complex demands.

As cities take the lead on complex public policy challenges, leaders are in urgent need of new tools and methods that allow them to tap into their most important, yet often underused asset – people. Today, cities have become our policy laboratories where bold approaches are tested and solutions are proven – and their leaders are hungry for innovative ways of including more people in the problem-solving process.

¹ The World Bank, World Development Indicators (2016). Urban population (% of total) [Data file]. Retrieved from <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>

When the potential of people is unlocked, cities can design and deliver services in the most efficient way possible – for the people that need them most. But in order to create a virtuous circle of democratic legitimacy and effective interventions, they will need to unlock the knowledge and expertise of citizens and stakeholders at all levels.

Our “People-Led Innovation” Methodology seeks to provide city officials, and all those who are seeking ways to improve people’s lives, an iterative approach to determine how to become more empowered and effective by placing people, and the groups that mobilize and organize them, at the center of the problem-solving process.

The methodology fuses, scales and formalizes lessons gleaned from city-oriented work undertaken by both our organizations. The Governance Lab (GovLab)’s mission is to strengthen the ability of institutions – including but not limited to governments – and people to work more openly, collaboratively, effectively and legitimately to make better decisions and solve public problems. The methodology incorporates the lessons learned and the evidence gained on what works by the GovLab across all its projects, and draws heavily on the Bertelsmann Foundation’s Transatlantic Policy Lab project, which employed weeklong living labs in Boston and Athens to source innovative and neighborhood-specific recommendations [see Appendix I for more information on our experience in this space].

Development of the methodology was a highly iterative process that incorporated feedback shared by Chief Resilience Officers and others during the 100 Resilient Cities “Peer and Partner Session” held on July 25, 2017 in New York City.

Going forward, we look forward to engaging with cities and others as they attempt to innovate in a people-led manner.

Stefaan Verhulst

Co-Founder and Chief Research
and Development Officer
The Governance Lab

Irene Braam

Executive Director
Bertelsmann Foundation

INTRODUCTION AND OVERVIEW

UNLOCKING PEOPLE'S EXPERTISE
TO SOLVE URBAN CHALLENGES

Cities worldwide are seeking to become more resilient to environmental, social, and economic shocks and stresses. However, traditional methods and existing resources often fall short of tackling today's challenges. Cities not only need to provide innovative solutions to a complex array of problems, they also need to innovate in the way that they develop these solutions.

The People-Led Innovation Methodology focuses on unlocking a too-often ignored and undervalued asset for innovation in cities: people and their expertise. People's expertise comes in a range of flavors – from interests and experiences to skills and credentialed knowledge – yet all are equally valuable to engage when solving problems.

In this publication, we seek to provide guidance on how to become more “people-led” when seeking to address today's urban challenges in innovative ways.

TOWARD A PEOPLE-LED INNOVATION METHODOLOGY

Four phases: Our People-Led Innovation Methodology is premised on the idea that unlocking and applying the expertise of people requires city government decision-makers to design engagements with a focus on curation – ensuring that the problems, solutions, inputs, and approaches remain targeted and implementable rather than ill-defined and un-actionable. The methodology comprises four key phases (see figure below) with related activities:

- ▶ **Define and curate problems** – engaging people to identify, define, and prioritize problem(s) to be addressed;
- ▶ **Ideate and curate solutions** – tapping into people's expertise and leveraging data to ideate approaches to the curated problems;
- ▶ **Experiment and curate capacity** – leveraging people's capacity to implement innovations in an agile manner while testing what works in practice; and
- ▶ **Expand and curate feedback** – collaborating with people to transfer lessons learned to a wider audience and to enable strategic iteration and course corrections.

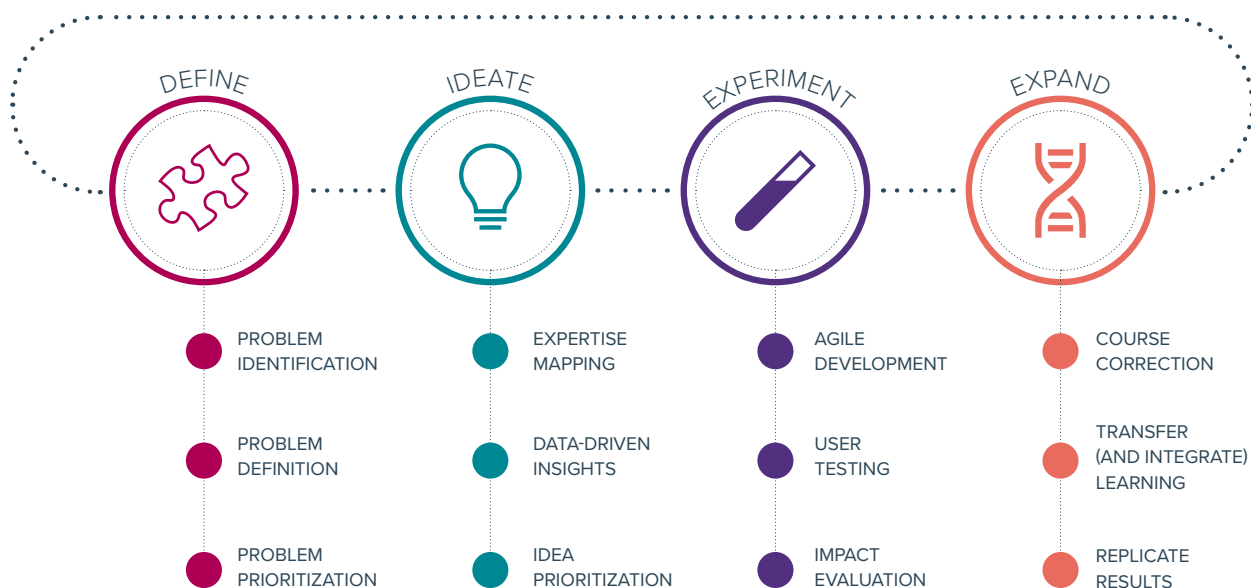


Figure 1:
The four phases and twelve steps of People-Led Innovation, The GovLab and Bertelsmann Foundation

Flexible in nature: The People-Led Innovation Methodology is not meant to be rigid or prescriptive – rather it seeks to provide a checklist to enable a more people-led approach when developing innovative approaches to urban challenges.

Different contexts may require a different sequence, a different type of engagement and different people to be engaged.

Segmentation: A key task toward implementing the four stages in a people-led manner requires assessing what role different people (both individuals and groups) can play at each stage. In the Matrix of People Engagement [Figure 2], we identify eight distinctive segments with whom to collaborate, and outline four different roles those different groups of people can play to innovate and improve problem-solving.

Become inspired: Next, we present our detailed, step-by-step methodology by highlighting the questions to consider when designing people-led innovation engagements. This guide is not meant to be prescriptive but inspirational. As such we have curated at each phase a set of inspirational examples of efforts to create positive impacts by engaging people in practice.

FAQ

WHO SHOULD USE THIS METHODOLOGY?

The People-Led Innovation Methodology was developed for city government officials who have experimented with different tools for solving 21st Century challenges, and recognize the need for a new approach. In general terms, if you represent a community that has a good sense of what the core issues are but are not exactly sure which direction or policy path to pursue than you are at the right fork in the road and this could be the right approach for you.

WHY NOW?

The problems facing cities today are more interdependent, complex, and dynamic than ever. We urgently need to change the way we activate the diversity of existing skills and expertise if we are going to successfully address problems like inequality, gun violence, wildfires, corruption, pollution, and beyond.

WHERE COULD THIS METHODOLOGY BE APPLIED?

In recognition of increasing levels of urbanization across the world, the People-Led Innovation Methodology was developed for application in urban settings globally. The techniques included, however, are agnostic to specific topic areas and regions.

HOW CAN IT BE USED?

This methodology provides a series of tools, probing questions, and inspirational examples aimed at providing practitioners with a flexible guidebook for experimenting with new ways to solve public problems in an iterative manner.

TOWARD A MATRIX OF PEOPLE ENGAGEMENT

Throughout the People-Led Innovation Methodology, we make an effort to tap into the distributed expertise of people. Yet determining with whom to collaborate, and at which stage, can be difficult, especially since plans for engagement need to be fixed early in the process. Context varies between cities, the nature of a problem, and the people themselves.

Moreover, while our People-Led Innovation methodology is designed to engage with individuals at every stage of the innovation cycle, it is equally important to include different groups – whether formally or informally organized – of people that may have different needs, expertise and capacity.

Toward that end, we have developed the Matrix of People Engagement to enable public entrepreneurs within cities and elsewhere to identify whom to engage, at what stage and for what purpose.

COLLABORATION TYPES		DEFINE			IDEATE			EXPERIMENT			EXPAND		
CC	CO-CREATE	Problem Identification	Problem Definition	Problem Prioritization	Expertise Mapping	Data-Driven Insights	Idea Prioritization	Agile Development	User Testing	Impact Evaluation	Course Correction	Transfer Learning	Replicate Results
RV	REVIEW												
CO	COMMENT												
RP	REPORT												
	Residents												
	Domain Experts												
	Non-Governmental Organizations												
	Community-Based Organizations												
	Area Business Owners												
	Anchor Institutions												
	Municipal Government Administration												
	Resource Partners												

Figure 2: Matrix of People Engagement [see Worksheet in Appendix II]

MATRIX OF PEOPLE ENGAGEMENT

While non-exhaustive, the vertical axis reflects the diversity of different types and groups of people outside of government that can play different roles across the innovation life-cycle. It allows public entrepreneurs in cities to determine who to include, at what stage and for what purpose – including, for instance:

Residents – the inhabitants of the neighborhoods or cities who are or will be affected.

- ▶ *How they can provide value:* The experience of residents is particularly important for defining and prioritizing problems that will have the greatest impact on the community. Residents are also crucial to the effective implementation of any plan developed, and their buy-in can help to ensure that solutions will have maximum impact.
- ▶ *Possible segmentation criteria:* Long-term (>10 years), New Domestic (<5 years), New Foreign (<5 years), Transient, and Part-time/Seasonal.

Domain Experts – including researchers, consultants, and other specialists.

- ▶ *How they can provide value:* Tapping into domain experts' knowledge can enhance the ideation process and expand the scope of possible solutions. Across sectors, municipalities are likely home to individuals with in-depth knowledge that could be brought to bear for problem-solving.
- ▶ *Possible segmentation criteria:* Technologists, Social and Political Scientists, Practitioners, Economist, Architects, Urban Planners, Consultants, and Former Elected or Appointment Officials.

Non-Governmental Organizations – not-for-profit organizations that are independent of the government.²

- ▶ *How they can provide value:* NGOs bring extensive knowledge of and experience with a given problem area that would require years to piece together individually. Some organizations may be working directly in the problem area; partnering with them can result with them can result in robust solutions with built-in tiers of support.
- ▶ **Possible segmentation criteria:** Economic Development, Legal, Workforce Training, Research/Academia, Environmental, Health, Human Rights, State, City, Charitable and Faith-Based.

² In the context of this methodology, NGOs are international and/or domestic groups that may or may not have an existing relationship with a neighborhood



Photo by author on Visualhunt

Community-Based Organizations – not-for-profit organizations that are bound to the places where they are located. They serve their communities, and are often organized by residents.

- ▶ **How they can provide value:** Community-based organizations, like non-governmental organizations, have extensive knowledge of a problem area, but their expertise is focused on the needs of smaller geographic areas. Members of community-based organizations provide a unique perspective of the problem area, they also have ties to other stakeholder groups that may typically be difficult to access (e.g., transient residents).
- ▶ **Possible segmentation criteria:** Educational, Economic (Commerce), Economic Equality, Environmental, Human Rights, Health, Faith-Based.

Neighborhood/Area Business Owners – small, medium, and large companies that are either rooted within a community (e.g. mom and pop shops, family restaurants), or exert great influence over the economic health of an area (e.g. tech companies like Amazon).

- ▶ **How they can provide value:** Local businesses obviously have a vested interest in the well-being of the communities in which they are located. A clean, vibrant, and safe neighborhood is good for business, and workforce development can provide a larger pool for local hiring. Businesses serve different community needs, and their involvement in the problem-solving process can encourage them to collaborate toward mutually beneficial outcomes in line with public goals.



Photo by Michal Parzuchowski on Unsplash

- ▶ **Possible segmentation criteria:** Retail, Real Estate, Service (Restaurants, Bars, Cafes), White Collar, Blue Collar, Specialized Healthcare (Optometry, Chiropractic, Dental), Fitness, Manufacturing, Grocery.

Anchor Institutions – place-based non-profit entities that often play an important role in their local economy.

- ▶ **How they can provide value:** As anchor institutions are often the largest hiring entities in a municipality, and can play a significant role in workforce development and job growth. Workplace policies deeply impact these institutions, and working with them to craft and implement initiatives can ensure the success of a policy. Anchor institutions, especially universities, also attract experts with potentially useful insights and experience.
- ▶ **Possible segmentation criteria :** Universities, Libraries, Museums, Art Institutions.

Municipal Government Administration – including elected government officials and their staff, as well as career civil servants.

- ▶ **How they can provide value:** Not only are government administrators immediately concerned with improving their represented communities, but they have the power to ensure the integration and continued success of urban innovations. Their expertise differs from community groups, as they have practice determining feasible and impactful projects that can be written into policy.
- ▶ **Possible segmentation criteria:** Mayor's Office, City Planning, Parks Department, Housing Authority, Public Health, Transportation Authority and City Council Members.

Resource Partners – domestic or international firms or organizations that have a specific interest in supporting and funding innovative initiatives.

- ▶ **How they can provide value:** These organizations can provide additional resources and may be willing to be more experimental. In addition, some of these organizations fund programs with other partner cities and bring comparative insights.
- ▶ **Possible segmentation criteria:** Foundations/Philanthropies, Corporate social responsibility officers from the private sector, and other industry leaders.



Photo by Nik MacMillan on Unsplash

ENGAGEMENT ROLES

To surface useful input during the innovation process, urban officials need to determine the role people can play and how their input will be solicited, integrated and acted upon. The more targeted and well-defined the engagement process, the greater the likelihood of actionable input from people and stakeholder groups. In the below we briefly describe four engagement roles to help public entrepreneurs in cities consider how best to tap into the diverse expertise distributed among people outside of government.

Commenting: Individuals and/or groups are given opportunities to share their opinions, priorities and preferences.

For example, using a discussion platform to solicit complaints or experiences among residents to help prioritize problem areas.

Co-creating: Individuals and/or groups are asked to apply their skills and creativity to the different phases of the innovation cycle with the problem-solving team.

For example, a sector-specific hackathon wherein people seek to leverage datasets to create new solutions to public problems.

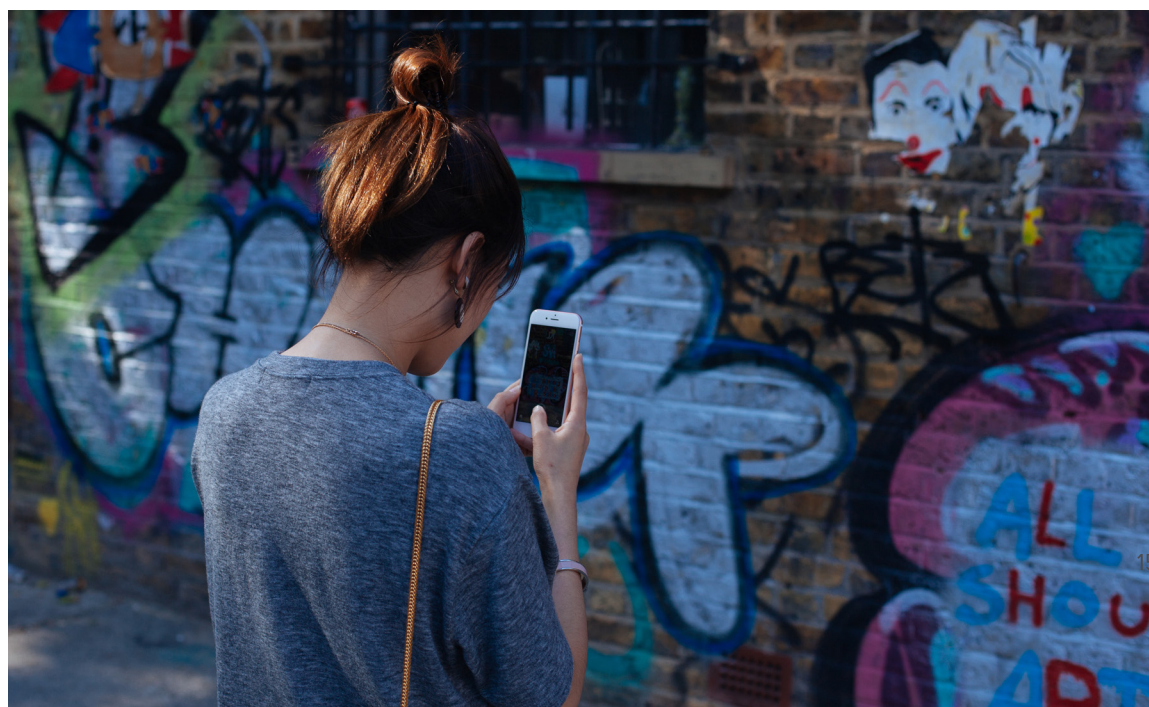
Reviewing: Individuals and/or groups are asked to review approaches or initiatives in a more targeted manner – including assessing and evaluating proposals and/or interventions.

For example, online or offline engagements allowing people to “upvote” or “downvote” specific proposals or ideas, or using annotation platforms to leave suggestions.

Reporting: In the Reporting role, individuals and/or groups are asked to contribute data and facts to inform problem definitions, solution plans, and evaluations.

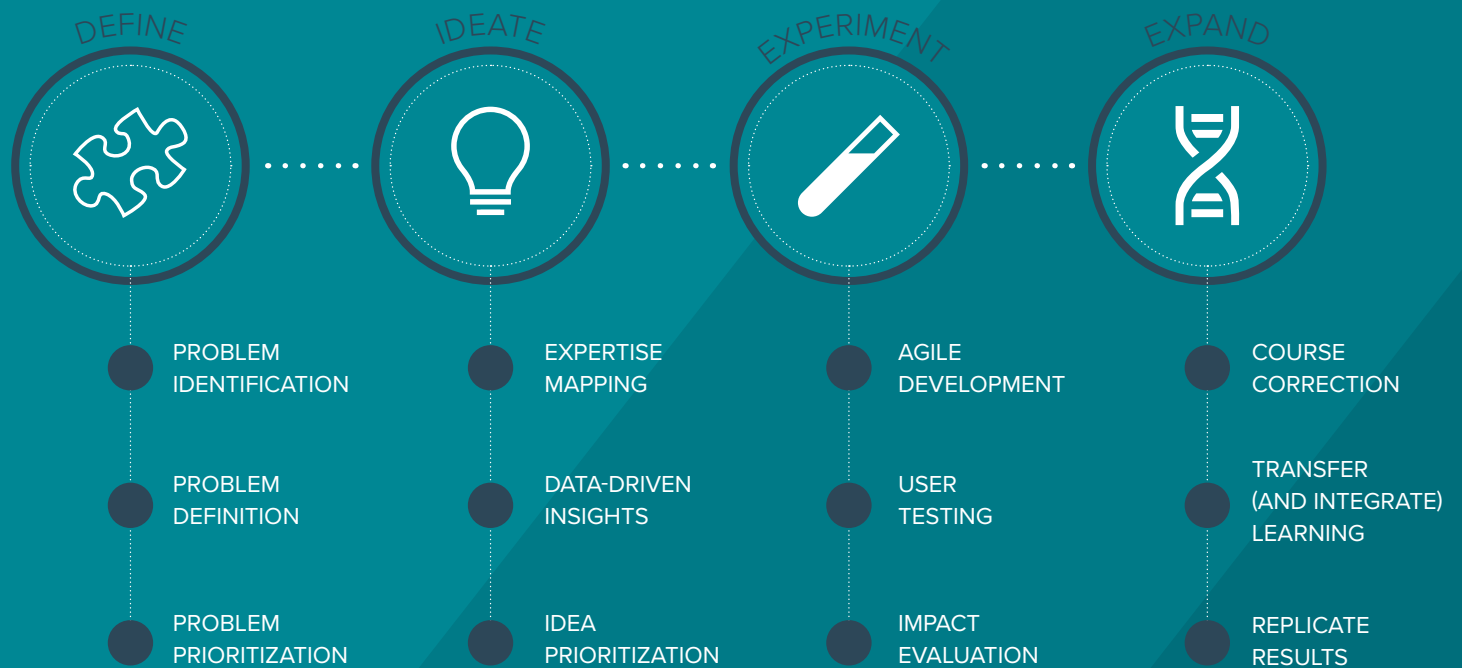
For example, a crowdsourcing platform for citizens to collect incidences of local issues like graffiti or potholes for government officials to address.

Photo by Clem Onojeghuro on Unsplash



PEOPLE-LED INNOVATION

A STEP-BY-STEP GUIDE



PHASE 1

DEFINE



- PROBLEM IDENTIFICATION
- PROBLEM DEFINITION
- PROBLEM PRIORITIZATION

STEP 1

Problem Identification

People-Led Problem Identification

Engaging people in the problem identification process can help decision-makers get smarter about the city's problems.

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

What criteria should guide the problem identification process?

Are there certain urban priorities that should be articulated to potential collaborators at the outset to ensure useful participation?

What underserved populations should be targeted for engagement early in the problem identification process, and what are the optimal approaches for reaching them?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED PROBLEM IDENTIFICATION

COMMENTING

In order to better identify workplace problems that face people with disabilities in Canada, the Department of Health and the Central Innovation Hub of the Privy Council Office asked people with disabilities to write [hypothetical “break-up” or “love”](#) letters to their employers stating why they would leave or stay in their current position. Insights gained from this exercise helped to clearly identify the problems that needed to be addressed.

REPORTING

Social enterprise [Qlue](#) created an app called MyCity which allows users to report problems in multiple cities in Indonesia, such as flooding, road hazard, or sanitation issues. Each report is geo-tagged and the information provided by users is delivered to the relevant local government agencies to be addressed. The app also provides status updates so that users can track their issues from receipt to resolution.

CO-CREATING

In Austin, Texas, the City Council sought out people-led solutions to homelessness with the guidance of [Reboot](#). To narrow their focus within the realm of solving homelessness, the two organizations hosted community events that brought together homeless individuals, government agencies, service providers, and other community members. At one of these events, participants helped to create a system map of the cycle of homelessness.

REVIEWING

In collaboration with [CitizenLab](#), the city of Hasselt, Belgium sought to expand their of-line participatory engagement practices in the renewal of the city's largest park. The city's department for youth and environment determined the scope of the project with CitizenLab, as well as problem areas to address in redevelopment, including protection, culture, animals, events, youth, nature, and sport. These themes were then taken to an online platform, where residents of Hasselt could propose, debate, and vote on ideas.

REPORTING

mySociety's [FixMyStreet](#) was one of the earliest examples of people-led reporting through civic technology, and has subsequently inspired many regions to experiment with similar approaches. For example, created in light of Ghana's Open Data Initiative, [TransGov](#) is an app that allows Ghanaians to photograph and report projects, which are then sent to the appropriate authorities. This information is also stored so that others in the community can check in on the progress of a project and add their own details and insights regarding a problem.

STEP 2

Problem Definition

People-Led Problem Definition

Once a problem is identified, tapping into the expertise and lived experiences of people can help to create a more comprehensive picture of a problem and identify the root causes of prominent urban challenges, such as homelessness or mobility. Bringing diverse stakeholders together early in the innovation process can also encourage further community involvement, identify unexpected consequences, surface different facets of the problem, and provide a space to build trust between cities and their constituents.

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

Which communities might have access to data, research or other knowledge that could help create a clear, concise problem definition – including, for example, through a citizen science effort?

Which actors are likely to understand the potential follow-on effects of addressing a problem (both positive and negative)?

Who has worked on the problem until now (both locally and in other urban settings)? And what are their lessons learned?

Which community actors should be engaged in the problem definition process to ensure the credibility of the undertaking (e.g., influential CBOs working to address the problem(s) under consideration)?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED PROBLEM DEFINITION

COMMENTING

The Department of School Education and Literacy and Ministry of Human Resource Development of India organized a two-day National Workshop called [Chintan Shivir](#) to bring together stakeholders from Government, NGOs and the private sector to discuss problems and ideate around digital learning, physical education, life skills in education, value education, and experiential learning. Participants were selected by online application, via India's [online innovation hub](#).

COMMENTING

The U.S. General Services Administration (GSA) used the online annotation software [Genius](#) to gain input from diverse stakeholders on its policies and services. GSA first used Genius for its Mentor-Protégé program, opening its policies to feedback from current and previous participants aimed at identifying problems that were raising the barrier to entry for the initiative.

CO-CREATING

The GovLab's online [Public Problem Solving Canvas](#) asks users a number of guiding questions to help them reach a more granular and actionable problem definition. The canvas also allows users to save and revise their answers to reflect changes in the problem space.



REPORTING

Coming Clean is an environmental health and justice network using citizen science to collect facts and deepen institutional understanding of public problems. The network has worked in a number of areas, including people-led identification of potentially dangerous chemical exposure from dollar store purchases in low-income, minority communities, and a cross-state initiative partnering with residents for the collection and testing of air samples near fracking sites.

REPORTING

To track commodity prices in one of Indonesia's poorest provinces, Nusa Tenggara Barat, **Pulse Lab Jakarta** (an collaboration between the United Nations Global Pulse and the Indonesian government) recruited a cadre of more than 200 trusted "citizen reporters" to visit markets and stalls, most of which are informal and cash-only. They reported more than 65,000 observations via SMS-text. This data provided critical information that will aid to inform problem definitions in food security.

STEP 3

Problem Prioritization

People-Led Problem Prioritization

Engaging knowledgeable stakeholders can aid government decision-makers in prioritizing which problems to address and in what sequence. From citizens directly affected by the problems under consideration, to community-based organizations already engaged in developing solutions to domain experts studying the problem in various contexts, a people-led approach to problem prioritization can surface new insight into the current on-the-ground impacts of problems under consideration, as well as the feasibility of meaningfully addressing them.

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

What types of background information should be provided to citizens to ensure that they are prioritizing problems armed with a complete understanding of opportunities and constraints?

Are relevant communities more likely to participate through an online or offline process, or is a hybrid approach most likely to generate high levels of (useful) participation?

Are more powerful local actors (e.g., industry groups, corporations) having an outsized voice regarding the types of problems to be prioritized based on their vested interests?

What criteria should guide the prioritization process?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED PROBLEM PRIORITIZATION

COMMENTING

In Colombia, the [Bogota: Como Vamos](#) initiative, originally launched in 1999, engages citizens to assess the performance of public management, and provide indicators on quality of life. In particular, the platform focuses on providing citizens with the means to highlight their concerns and priorities as they relate to current government agendas and services.

COMMENTING

[vTaiwan](#) is a citizen- and expert-engagement process being pioneered in Taiwan with the goal of integrating more diverse and relevant input into policymaking. The first step in this process leverages the AI-driven [pol.is](#) discussion platform to collect questions, suggestions, and comments from citizens. Once collected, these questions are addressed in public meetings, broadcast online, to inform consensus-building around priority problem areas and important considerations for solving those problems, and eventually, crowdsourced legislation drafting, or [crowdlaw](#).

COMMENTING

In Indonesia, an NGO called [Solo Kota Kita](#) develops tools for neighborhood advocacy and citizen planning to address various issues in the city of Solo. They train community facilitators to collect data through a survey from the neighborhood managers (the smallest administrative unit in Indonesia) who do not own a mobile phone and also use text messages for those who have phones. The data collected ranges from the distance kids have to walk to schools to access, to clean water. Once collected, a map is generated, called The Mini Atlas, to help the people and community leaders in prioritizing issues when participating in public budgeting.

CO-CREATING

In response to a proposed rezoning of 73 blocks in the Bronx, New York, the [Bronx Coalition for A Community Vision](#) was formed to proactively create a rezoning plan formed through a participatory process. During visioning workshops with neighborhood residents, facilitators from Community Action for Safe Apartments (CASA) asked small groups to devise a number of problem statements associated with rezoning and new construction in the neighborhood. Problems were then prioritized based on their current impact and feasibility of being solved. This list was then presented to their community board and council members for further development.

FURTHER READING

Laurenellen McCann, [Experimental Modes of Civic Engagement in Civic Tech](#), Smart Chicago, September 2015.

U.S. Government and Nonprofits, [“U.S. Public Participation Playbook,”](#) February 3, 2015.

Satish Nambisan and Priya Nambisan, [“Engaging Citizens in Co-Creation in Public Services: Lessons Learned and Best Practices,”](#) IBM Center for the Business of Government, 2013.

Dwayne Spradlin, [“Are You Solving the Right Problem?”](#) Harvard Business Review, September 2012.

Nesta, [“Asking the right questions,”](#) January 6, 2013.

LEARNING FROM THE FIELD: SINGAPORE'S RESILIENCE TEAM

By

Sophieanne Araib
Director

Lim Wei Da
Assistant Director

Centre for Liveable Cities

To better understand the challenges of increasing diversity and urban planning in Singapore, the Centre for Liveable Cities (CLC) conducted systematic research to better understand the concerns and lived reality of the stakeholders on the ground. Our problem identification process involved engagement with a number of stakeholder groups, and this resulted in better understanding and appreciation of the challenges and interests of the relevant stakeholders. It was useful to discover that business owners and residents did not always agree about same problem priorities. Working with the different groups of people helped us to focus on impactful problems and prioritized the problems that were are within our capacity to engage solve.

In order to identify, define and prioritize the problems facing their city, Singapore's Resilience team in the Centre for Liveable Cities (CLC) conducted fieldwork and engaged with relevant neighborhood communities through focus groups. For each stakeholder group, they conducted door-to-door interviews with residents, had conversations with grassroots organizations, and spent time observing the neighborhoods, businesses, and public spaces they sought to better understand.

PHASE 2

IDEATE



- EXPERTISE MAPPING
- DATA-DRIVEN INSIGHTS
- IDEA PRIORITIZATION

STEP 4

Expertise Mapping

People-Led Expertise Mapping

Mapping and curating the skills, interests and experiences of people relevant to addressing a specific problem can provide a clear roadmap for more targeted engagement and collaboration. Moreover, those affected by or currently working to address the problem are likely to be connected with other individuals or entities with useful knowledge or capacity that could be leveraged.

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

Which people or groups are likely to be in possession of actionable knowledge or experience for innovative solution development and/or collaboration?

Are any groups already doing relevant work that should not be replicated and/or could feed into the solution development process?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED EXPERTISE MAPPING

CO-CREATING

The GovLab has developed a methodology known as [Smarter Crowdsourcing](#), which maps interdisciplinary experts and stakeholders relevant to a problem area. Once identified, these global experts are brought into conversation with government officials, through a series of online conferences, in order to co-develop solutions to difficult problems, like the spread of the Zika virus, corruption in the Mexican judiciary system, and disaster preparation in light of the imminent eruption of the Cotopaxi Volcano near Quito, Ecuador.

CO-CREATING

The [World Bank's Skillfinder](#) brings together self-reported information on skills and experience, institutional records, and endorsements to create a distributed, interactive mapping of international development expertise. Current employees, consultants, and alumni of the World Bank are all included on the platform, enabling problem-solvers at the Bank to browse and tap into a wide diversity of expertise when seeking solutions to development problems.

STEP 5

Data-Driven Insights

People-Led Data and Data-Driven Insights

People can enable the development of useful data-driven insights to improve problem-solving in a number of ways. When data is collected and/or analyzed in a people-led manner, solutions can be developed based on a mix of quantitative information and a more human understanding of problems as they actually exist on the ground.

DESIGN AND IMPLEMENTATION

QUESTIONS TO CONSIDER

Is the problem well-suited for a citizen science or other crowdsourced data collection approach?

Could outside data science expertise be engaged and brought to bear to improve solution development?

Do any non-governmental institutions (including NGOs or private sector businesses) hold data that would be useful for problem-solving if that data were shared in a targeted and responsible manner?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED AND DATA-DRIVEN INSIGHTS

CO-CREATING

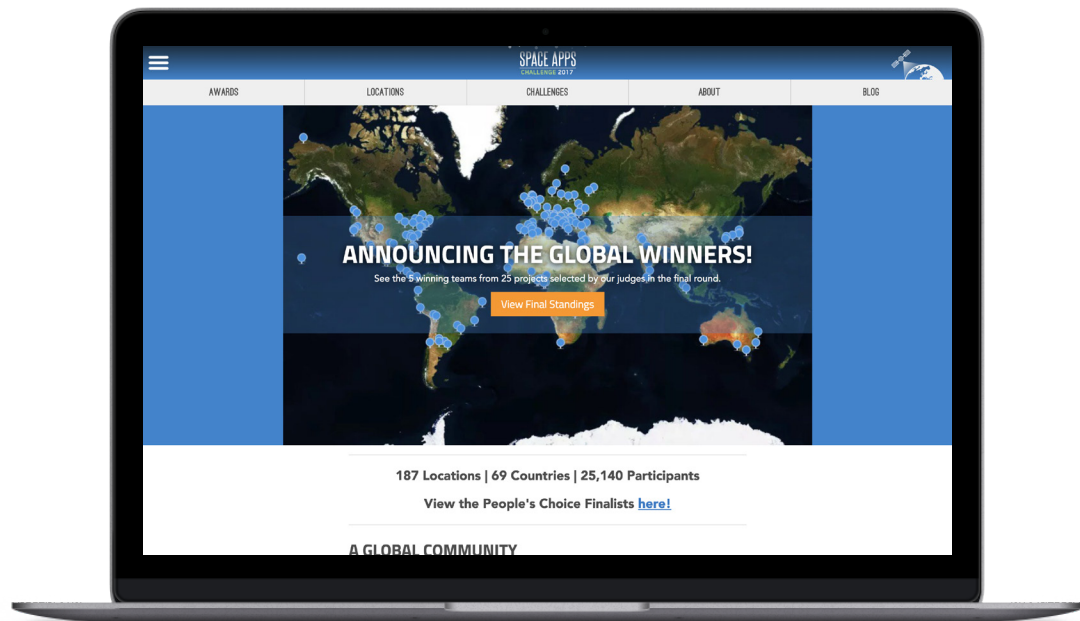
[Data Collaboratives](#) are public-private partnerships that leverage private data for public good. Private businesses share their data with intermediaries, like non-governmental organizations or research groups to aid in building solutions to large problems. One notable data collaborative is a partnership between telecommunications company Safaricom and the Harvard School of Public Health, where Safaricom provides de-identified mobile phone data to researchers, that, in turn, map the incidence of malaria and the movement of people.

COMMENTING

The [National Citizen Feedback Dashboard](#) visualizes comments and complaints from Indonesian citizens, using data from Lapor!, a national feedback platform, and from relevant comments appearing in public social media postings. The tool allows public officials to deal with complaints on a case-by-case basis, but it also visualizes trends and offers an early warning system to alert officials to problems within a certain theme or area that need to be addressed. The analytics used allow officials to prioritize problems based on the number of people reporting on an issue.

CO-CREATING

The [National Neighborhood Indicators Partnership](#) is an initiative spearheaded by the Urban Institute in partnership with a diversity of local data intermediaries seeking to “democratize information.” The partnership, originally launched in 1996, focuses especially on collaboratively developing a dynamic information system with neighborhood-level data across diverse topic areas, and enabling the targeted use of these datasets by local residents, government officials, and community-based organizations, especially those representing lower-income neighborhoods.



CO-CREATING

The U.S. National Aeronautics and Space Administration (NASA) has held “hackathons” for the past five years through their [International Space Apps Challenge](#). Each year, there is a 48-hour international competition to use open data from NASA and other administrations to build open-source applications that help solve one of a number of provided problem areas.

CO-CREATING

In New York City, the [Center for Urban Science and Progress \(CUSP\)](#) is experimenting with the concept of “Quantified Communities.” A Quantified Community is an initiative aimed at working with local actors to focus “diverse, intensive, and persistent real-time data collection and analysis” at the neighborhood level both to identify areas of opportunity for public improvements, and to test the impacts of new technologies, policies, and other interventions. An experiment in the Red Hook section of Brooklyn, for example, is working with community groups at the neighborhood level to implement sensors and computing infrastructure to gain access to the types of baseline data and information that can inform more targeted problem identification and definition, as well as more localized and evidence-based consideration of solutions to those community problems.

STEP 6

Idea Prioritization

People-Led Idea Prioritization

Comparing and prioritizing options to address specific problems with diverse people or stakeholder groups can illuminate unknown constraints, likely follow-on impacts, and lessons learned from past experiences.

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

How can citizens be engaged to provide initial feedback on the quality of different submissions informed by their experience with the problems on the ground, and the effectiveness of previously attempted solutions?

Are there private sector or NGO actors with practice-based insight into the feasibility of effectively mobilizing different solutions, particularly as they relate to resources required?

Do any community groups or other actors have an understanding of the likely impact (positive or negative) of different solutions?

Should more than one solution be implemented, and if so, how should they be sequenced?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED IDEA PRIORITIZATION

COMMENTING

In 2015, Statistics New Zealand used an online crowdsourcing and discussion platform called Loomio to conduct a six-week consultation on the [future of the New Zealand census](#). Participants could discuss benefits or consequences of various topic changes, and prioritize the ideas that were most important to them.

CO-CREATING/COMMENTING

On Madrid's open government platform, [DecideMadrid](#), developed by [Medialab-Prado](#), citizens are encouraged to submit proposals to improve the city. If 1% of other site visitors (currently 27,064 people over the age of 16) are interested in the idea, then the idea progresses to a voting phase. After the preliminary February 2017 vote, two proposals were enacted by the city council.

CO-CREATING

The Victorian Health Promotion Foundation (VicHealth) in Victoria, Australia engaged 117 Victorians during the 2015 [Citizen's Jury on Obesity](#). Framed around the question, "How can we make it easier to eat better?," participants were asked to come up with their own solutions, then deliberate in online groups over the course of six weeks before convening in person at a weekend deliberating forum. Their steering committee was chaired by representatives from AMA Victoria, Australian Beverages Council, Australian Food & Grocery Council, CHOICE, City of Melbourne, Centre for Physical Activity and Nutrition Research at Deakin University, Coles, Foodbank Victoria, Obesity Policy Coalition, Tennis Australia, and the Victorian Government Department of Premier and Cabinet, who responded to the prioritized asks of the citizen jury.

CO-CREATING

In 2011, in Porto Alegre, Brazil, Governor Tarso Genro launched [Governador Pergunta](#) ([The Governor Asks](#)), a citizen engagement platform aimed at getting citizens' input into idea prioritization. To start the engagement process, citizens provided over a thousand ideas to improve healthcare in the region. Once collected, the Governor's office initiated a multi-pronged outreach and communications campaign aimed at engaging citizens to provide input on the ideas collected. While the prioritization process occurred online, the Governor's office used public events and an internet-connected "voting van" to connect with people in-person around the initiative. The proposals gained 120,000 votes in thirty days. Ten ideas in each of the five categories were chosen, and those who proposed the ideas were given a meeting with the governor to further develop their ideas.

CO-CREATING

[MobilityHouston](#) collaborated with Rice University to host a [policy competition](#) for Rice students to tackle mobility issue in Houston. Student participants worked in teams of two to four to generate ideas and get individualized feedbacks from Houston mobility stakeholders. This competition generated conversation and introduced innovations to solve mobility issue in their community.

FURTHER READING

UK Cabinet Office, "[Open Policy Making Toolkit](#)," February 29, 2016.

Francis Gouillart and Tina Hallett, "[Co-Creation in Government](#)," *Stanford Social Innovation Review*, Spring 2015.

Julie Simon, Theo Bass, Victoria Boelman, and Geoff Mulgan, "[Digital Democracy: The Tools Transforming Political Engagement](#)," Nesta, February 23, 2017.

Stefaan Verhulst and Andrew Young, "[The Potential of Social Media Intelligence to Improve People's Lives: Social Media Data for Good](#)," *The GovLab*, September 2017.

The GovLab, "[Smarter State Case Studies](#)," February 2016.

PHASE 3

EXPERIMENT



- AGILE DEVELOPMENT
- USER TESTING
- IMPACT EVALUATION

STEP 7

Agile Development

People-Led Agile Development

First applied in software development, the term agile development refers to a variety of processes and methods that are united by a few main tenets: 1) stakeholder collaboration is valued over specific processes or tools; 2) responding to change is more important than adhering to a single methodology, and 3) a real, working outcome is held in greater esteem than extensive documentation. Undertaking a more people-led approach to agile development in the realm of urban problem-solving can lead to greater (and earlier) insight into the impacts of new solutions on the communities they are intended to benefit. Engaging residents in an agile manner can lead to rapid improvements and strategic iteration on solutions before they are implemented with a wider audience (avoiding greater costs as a result).

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

What is the intended audience of the solution being developed and how can they be engaged?

Would accessing outside data science or other technical expertise aid in the design, testing, implementation, or iteration process?

Are there any cultural or political constraints on taking an agile, iterative, “fail fast” approach to addressing the problem at hand?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED AGILE DEVELOPMENT

COMMENTING

After extensive interviews and creating journey maps with benefit applicants, the U.S. Digital Service rapidly developed a [multi-benefit application prototype](#), which they are further testing with stakeholders. Their full methodology and findings can be seen [here](#).

CO-CREATING

The GovLab developed a [coaching program](#) that offers mentoring to those inside and outside of government who wish to take public interest projects from idea to implementation. This format affords the opportunity to work with stakeholders to implement multiple solutions to a single problem definition simultaneously.

CO-CREATING

[Code4Green UB](#) – a 2015 competition implemented and supported by World Bank’s Transport and ICT Global Practice, Startup Mongolia, Internews, and the Korean Green Growth Trust Fund – offers a space for students, sector specialists, developers, and government representatives to exchange ideas and build tools to combat pollution in Ulaanbaatar, Mongolia. From over 30 ideas developed over the course of three days, six teams advanced to a six-week startup pre-acceleration and mentorship program, where they built their projects and honed their entrepreneurial skills.

CO-CREATING

Since 2014, DesignGov entered into a project with the Secretaries Board of the Australian Public to reduce government response times to small business needs. One solution to that problem was “[Small-Business fix-it squads](#),” which are rapid-design projects where small business owner, tax professionals, federal, state and local government agencies and intermediaries collaborate to examine a problem facing small business owners. Three squads are run each year with an implementation time of six months.

STEP 8

User Testing

People-Led User Testing

User testing is an evaluation process that, by definition, is people-led. Driven by experimentation with intended users, the user testing process allows developers and problem-solvers to observe and capture useful feedback from people outside the development process. User feedback at an early stage in the development process can also help to develop more robust prototypes and expose weaknesses before they become entrenched.

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

What are the categories of users that represent the target audience of the intervention?

Are the users being engaged representative of all potential beneficiaries, especially when taking into account more vulnerable populations that could be more challenging to engage?

What types of input would be most useful, and what strategies are in place for absorbing and acting upon that input?

What is the strategy for reporting back to users how their input was acted upon, or why it was not?

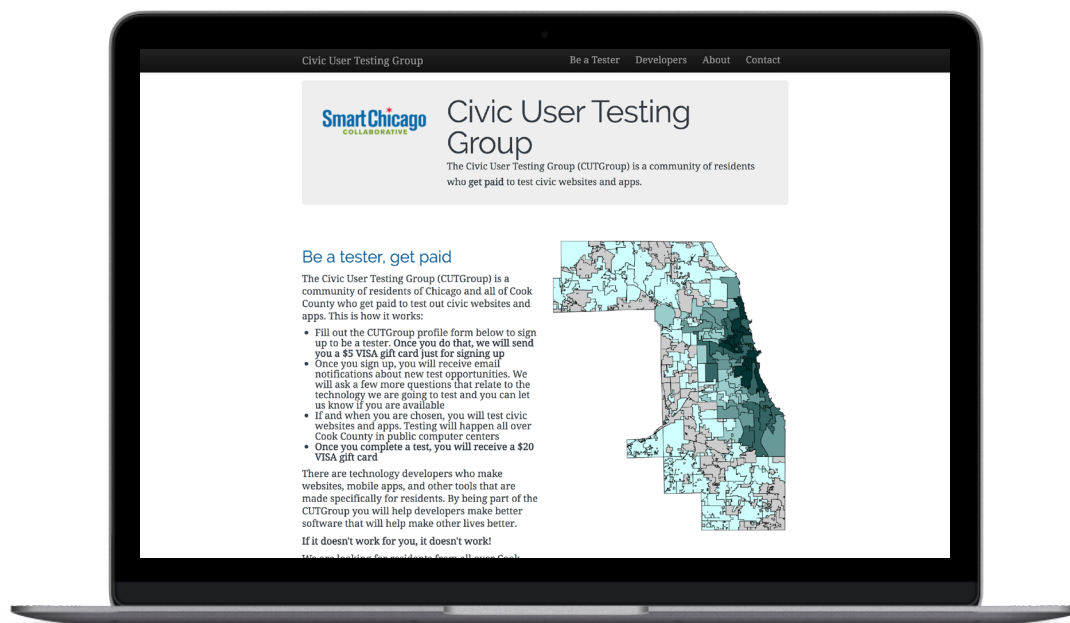
INSPIRATIONAL EXAMPLES OF PEOPLE-LED USER TESTING

REVIEWING

Chicago's [Civic User Testing Group](#) (CUTGroup), a project of the [Smart Chicago Collaborative](#), is a group of nearly 1,500 Chicago and Cook County residents who receive a small stipend to test out civic websites and apps, including the city's newly launched OpenGrid for map-based open data.

REVIEWING

In collaboration with Code for America, the city of Oakland, California has released a beta version of their "[Digital Front Door](#)" for city services, such as business tax certificate requirements and bikeshare information. The website includes a clearly defined redesign process, and user testing with residents. After user testing, the beta site content will be given back to the city of Oakland with recommendations, and the site has been designed to receive continual use feedback.



STEP 9

Impact Evaluation

People-Led Impact Evaluation

Establishing metrics is an essential step towards tracking the effectiveness of an initiative, and to capture data that enables future decision-making. Since success might look different to each stakeholder or collaboration group, engaging a diverse group of people in the assessment and evaluation process can help to ensure that solutions are having all of their intended positive impacts.

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

How can residents and other stakeholder groups provide insight into the primary metric of success against which to determine impact?

What is the baseline against which to measure success? Do outside stakeholder groups have data relevant to that baseline?

Which actors could provide insight into secondary metrics of success that should also be in consideration when evaluating the effectiveness of solutions?

Are there commonly agreed upon metrics of success being used in the NGO, academic, industry, or other communities from which to learn?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED IMPACT EVALUATION

COMMENTING

The [California Report Card](#) (CRC) is an online platform that was developed by the CITRIS Data and Democracy Initiative at University of California Berkeley and Lt. Governor Gavin Newsom launched in 2014. The CRC is a mobile-optimized web application that allows residents to assign grades to the State of California and suggest pressing policy issues, such as Healthcare, Education, Marijuana Decriminalization, and Immigrant Rights. Within four months of its launch in 2014, over 7,000 people from nearly every county in the state had assigned over 20,000 grades and suggested issues for the next report card.

REVIEWING

The city of Lewisville, Texas developed a [public dashboard](#) that allows users to track the daily metrics of various departments' performances on a number of indicators, such as police response time to priority calls or the percent of restaurants passing food inspections. These metrics are visualized next to the city or department's performance goals, and all data is available for download and further analysis by citizens or other interested groups.

REVIEWING

In response to a need for a spending reduction and transparency in public spending, Warsaw, Poland established a [Culture of Transparency and Cost Diligence Initiative](#). Information regarding budget spending items and changes in spending are publicly available. Its success has been measured according to predetermined metrics since the initial 2009 pilot project, as well as by public satisfaction surveys.

REPORTING

As part of the solutions developed by the Transatlantic Policy Lab, workforce need and talent assessments are to be conducted in the Boston neighborhood of Roxbury, and a city metric tool is to be developed to assess the present impact of anchor-institutions in alignment with existing city strategies. Once a targeted initiative is in place, the Transatlantic Policy Team calls for impact assessment focusing on metrics like the number of jobs at an anchor-institution held by those who were raised or educated in Roxbury and the percentage of the Roxbury workforce with new applied skills and new jobs/career paths resulting from anchor-institution investment.

FURTHER READING

Agile Government Leadership, "[Agile Government Handbook](#)," 2016.

Reboot, "[Implementing Innovation: A User's Manual for Open Government Programs](#)," 2015.

Jarmo Eskelinen, Ana Garcia Robles, Illari Lindy, Jesse Marsh, Arturo Muentekunigami, "[Citizen-Driven Innovation: A Guidebook for City Mayors and Public Administrators](#)," The World Bank Group, May 27, 2015.

IDEO, "[The Field Guide to Human-Centered Design](#)," 2015.

Aleise Barnett, David Dembo and Stefaan G. Verhulst, "[Toward Metrics for Re\(imagining\) Governance: The Promise and Challenge of Evaluating Innovations in How We Govern](#)," The GovLab, April 18, 2013.

PHASE 4

EXPAND



- COURSE CORRECTION
- TRANSFER (AND INTEGRATE) LEARNING
- REPLICATE RESULTS

STEP 10

Course Correction

People-Led Course Correction

Even after following the steps outlined above, approaches developed to address important public problems are rarely perfect from the start. Revision and iteration of a solution's implementation, informed by feedback from practitioners, participants and stakeholders, as well as lessons learned from the Impact Evaluation step can help to improve on the implemented approach and mobilize lessons learned throughout the process.

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

Are any user groups likely to take an especially critical eye toward implemented solutions that could yield useful insight into course correction?

What feedback mechanisms are or should be in place to allow for course corrections – whether through direct solicitation or indirect sentiment analysis of public tweets?

Is there a procedure or designated person analyze and address the received feedback?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED COURSE CORRECTION

COMMENTING

[Sport England](#) is a government funded agency that looks to engage citizens in an active life-style through national and local opportunities to participate in sports. In 2014, the agency identified a gender gap in in sport participation between men and women. Using ForSight, a “social listening tool,” they identified why women do and do not participate in sporting activities. Through engagement with women influencers on social media channels, they developed the [#ThisGirlCan](#) social media and television advertisement campaign. As a result of their efforts, 1.6 million women started exercising, and the number of women playing sport and exercising is increasing faster than that of men. Furthermore, the gender gap in participation has begun to narrow (from 1.78 million to 1.73 million).

REVIEWING

[OpenGrid](#), a map-based open data tool for the City of Chicago, is also open source, with code on the collaborative development platform GitHub. The city is encouraging residents with coding experience to offer their revisions, report bugs, and add new features as they continue to update the site and available data.

REPORTING

In response to a desire to move towards more evidence-based policymaking, the United Kingdom’s House of Commons Science and Technology Committee began an [Evidence Check](#) program in 2009. A government branch that covers a specific policy is asked to explain the policy, then present the premises and evidence on which it is based. This information is published online, where public comments and fact-checks are invited. In-person evidence sessions are held in addition to online commenting. A statistical correction made and corroborated by a number of citizens led to a change in position towards homophobic, transphobic, and biphobic bullying in the Department for Education.

STEP 11

Transfer (and Integrate) Learning

People-Led Learning Transfer

Creating channels to inform stakeholders and the public at large of an initiative's progress can amplify impacts and uptake of developed solutions. Beyond simple knowledge transfer, the government creators of solutions can consider developing methods to educate and redistribute responsibility for further implementation to stakeholders outside government to spur scaling and ensure longer lifespans. Involving participants from earlier stages of the problem-solving process can build buy-in from those who did not collaborate during earlier phases.

DESIGN AND IMPLEMENTATION QUESTIONS TO CONSIDER

To which audiences do solutions and lessons learned need to be communicated for the solution to create its intended impact?

Do any NGOs or CBOs have existing education structures or outreach platforms that could be leveraged?

Which people could be amplifiers of the lessons learned?

What channels are more appropriate for what audiences and messages?

INSPIRATIONAL EXAMPLES OF PEOPLE-LED LEARNING TRANSFER

COMMENTING

Researchers at Arizona State University (ASU) developed a [game](#) to help members of the Citizens Committee on the Future of Phoenix Transportation (CCFPT) articulate and explain their perspectives to the Public Transit and Street Transportation Departments while collaborating on drafting a \$31.5 billion proposal that would fund the next 35 years of transportation in Phoenix. The game was prototyped and refined in two ASU graduate classes, and was designed to create an “information-rich decision environment” for stakeholders.

CO-CREATING

New York’s Center for Urban Pedagogy has developed [Urban Investigations](#), where high school students ask questions about the city, then interview various stakeholders and decisionmakers to answer their questions. Students then work with a teaching artist to develop tools to educate their communities about their findings. Past projects have included a booklet and presentation about displacement in Bushwick, Brooklyn and a poster detailing the challenges that face small businesses, as well as the people and policies that can protect them.

CO-CREATING

As a successful offshoot of Brazil’s [e-Democracia](#) platform, a 2013 hackathon was organized to bring together designers, developers, members of parliament, and active citizens. The success of the event led to the establishment of a permanent space, “[LabHacker](#),” that provides a space for innovation, workshops and the revision and improvement of the e-Democracia platform.

REVIEWING

Denver, Colorado’s [Mayor Michael Hancock](#) uses his Twitter and Facebook accounts to promote new initiatives, report progress, and gather new ideas, like bond project proposals. His posts are typically linked to project pages, surveys, or event invitations.

STEP 12

Replicate Results

People-Led Results Replication

Many innovations – particularly those developed in an agile manner – are implemented as part of a pilot project or with the aim of creating an initial proof of concept. Working with community members during the replication process can increase a program’s integration into an area, and potentially create local stewardship of an initiative.

QUESTIONS TO CONSIDER

.....
Do any anchor institutions or resource partners possess specific know-how and/or re-sources to enable the successful scaling up of solutions?
.....

Are there additional outside practitioners to target as collaborators during the next phase of solution implementation?
.....

Are there any particular beneficiaries to target during the replication phase, and if so, how can they be identified and engaged?
.....

INSPIRATIONAL EXAMPLES OF PEOPLE-LED RESULTS REPLICATION

COMMENTING

[Cityblock](#) is a new healthcare system that was built from knowledge gained through urban health projects at Sidewalk Labs. The new company is bringing care to qualifying Medicare and Medicaid members who live in traditionally underrepresented communities, and one of their greatest assets to scaling efforts is through Community Health Partners – ambassadors and care coordinators who are from the neighborhoods in which they are working.

CO-CREATING

In 2014, a service design team in the Philippine Senate co-designed “[Negosyo Centers](#)” for small and medium business development with academic and research bodies, the Philippine Chamber of Commerce and Industry, the Philippine Center for Entrepreneurship, the Microfinance Council of the Philippines, the Department of Trade and Industry, local schools, business clubs, local government offices, and start-up entrepreneurs. After demonstrating their value through a series of workshops and a successful pilot program, the Go Negosyo Law mandated the scaling up of Negosyo Centers across the country. Over 250 centers have been established in the Philippines, largely due to an initial proof of concept, championing by top officials, and stakeholder buy-in.

REVIEWING

In collaboration with UNDP, the government of Pakistan has established an [Innovation Fund and Prime Minister Innovation Awards Program](#) which aims to map existing public sector innovations to identify challenges and understand popular types of innovation. The program also awards the most promising innovations with the funds and advisory resources necessary to scale efforts throughout the country.

FURTHER READING

Martin J. Williams, “[External validity and policy adaptation: From impact evaluation to policy design](#)”, University of Oxford Blavatnik School of Government Working Paper Series, July 2017.

World Bank Digital Engagement Evaluation Team, “[Evaluating Digital Citizen Engagement: A Practical Guide](#),” February 2016.

Management Systems International, “[Scaling Up: From Vision to Large-Scale Change](#),” A Management Framework for Practitioners,” 2016.

Deborah Sills, Kevin Tunks, John O’Leary, “[Scaling Agile for government: Using Agile in large, complex projects in government](#),” Deloitte, June 12, 2017

Photo by Andy Kelly on Unsplash





Photo by Brevitey on Unsplash

A FINAL WORD WALKING THE TALK

Our Methodology for People-Led Innovation provides public entrepreneurs in cities with a set of steps that enable them to tap into their potentially most important – but underutilized – asset: people. With localities around the world increasingly seizing the initiative to develop bold solutions, including people at all stages of the policy development process is critical to obtaining the best outcomes for the greatest number of people possible. When used correctly, our methodology also helps political leaders telegraph their efforts at being people-led to their constituents – thereby boosting their legitimacy and allowing them to secure the financial resources necessary to implement their visions.

While our people-led methodology builds on existing – and ongoing – experiments in Boston, Athens, Monterrey, and elsewhere, the GovLab and the Bertelsmann Foundation openly acknowledge the constraints of such a methodology.

Some of these limits were expressed by Chief Resilience Officers during the 100 Resilient Cities “Peer and Partner” session led by the Governance Lab and the Bertelsmann Foundation in July 2017. For example, participants voiced widespread disagreement about which “people” (stakeholder groups) to include at different steps in the process. In response to these suggestions, we developed the Matrix of People Engagement [see Figure 2 and Appendix II] to aid policymakers in charting who to include at each step.

More generally, given the finite capacity and human resources of local governments worldwide, policymakers may find it challenging to follow through on each of the steps in a methodical manner. The next best approach in realizing the potential of this methodology may be to provide training to policymakers so they can apply it to the diverse challenges facing their cities.

In the same vein, both organizations recognize the importance of communicating the methodology in a way that maximizes its utility – and ease of use – for hurried local officials. For example, the four distinct stages “Define, Ideate, Experiment, and Expand” could eventually be transformed into an app or decision tree that policymakers could follow as they go about developing policy in a people-led manner. The methodology also demands that policymakers evaluate and reevaluate at each step, a process that may not be possible given financial, human, political constraints facing local officials. Finally, depending on local circumstances, there may be a number of nonlinear ways of reinterpreting and applying this methodology. Therefore, we suggest that policymakers view this methodology not as a fixed set of steps, but a blueprint that can be iterated upon over the coming years. We are eager to “walk the talk” toward agile and iterative approaches we suggested above.

Therefore, we warmly welcome any and all feedback from public officials, policymakers, and the public as they analyze and deploy the steps contained within this document. In addition, we remain willing to help politicians, policymakers, and people interpret and apply this methodology to the challenges facing their local communities:

Jeffrey Brown

Project Manager,
International Relations
Bertelsmann Foundation

1275 Pennsylvania Ave. NW
Suite 601
Washington, DC 20004
jeffrey.brown@bfna.org

Stefaan Verhulst

Co-founder and Chief Research
and Development Officer
The Governance Lab,
New York University

2 Metrotech Center, 9th Floor
Brooklyn, NY 11201
stefaan@thegovlab.org



Photo by Antony Delanoix on Unsplash

APPENDIX I

People-Led Innovation at the GovLab and Bertelsmann Foundation

PEOPLE-LED PROBLEM-SOLVING IN MONTERREY, MEXICO

THE PROBLEM

In San Pedro Garza García, a suburb of Monterrey, Mexico, the municipality identified a desire to solve problems and to obtain evidence that demonstrated if, when, and how decentralized, collaborative, and open practices of solving public problems resulted in creative new data-driven, cost-effective and citizen-centric policies and services. In particular, the municipality sought new approaches to create positive impacts in sectors like mobility, environment, and government efficiency.

PEOPLE-LED APPROACH

The GovLab worked closely with the municipal government to pilot and evaluate a replicable process for Latin American cities to tap into the skills, talents and abilities of diverse citizens to solve social problems more quickly and effectively. Rather than relying on a single approach, such as prize-backed challenges, the design of the project brought to bear a diversity of open innovation processes to source a wide array of ideas. To ensure that good ideas could be put into practice, the GovLab also mobilized ICT-enabled training mechanisms to help government officials shape those ideas into implementable new policies and services.

Over the course of 2016, the GovLab, in collaboration with the Mayor's Office of the Municipality of San Pedro Garza García (SPGG) in Mexico ran their pilot in four phases:

- ▶ **DESIGN:** We developed and launched five open innovation challenges designed to solicit good ideas (from the public and civil servants) to solve hard problems facing the municipality.
- ▶ **TRAIN:** We trained 50 challenge winners to further develop their proposals into actionable and implementable policies, resulting in 10 developed projects.
- ▶ **CONNECT:** We supported the desire for peer-to-peer learning by building an expert network of global and local experts to support the problem definition efforts done by the Municipality and, later, the project development efforts done by the selected participants of each challenge.
- ▶ **LEARN:** We evaluated the lessons learned from running this pilot to the end of articulating a replicable method for Latin American cities.

Photo by Valdezlopez at Wikipedia



THE IMPACT

The SPGG pilot created the first opportunity in Monterrey for the community to participate by contributing their skills, talent and expertise (open innovation) to design and co-create solutions to the public problems they care about most. As a result, the Municipality officials deemed the experience so enriching that they are currently in the process of passing a new citizen engagement law that institutionalizes open innovation as a participation mechanism. The pilot project also led to the approach being replicated in other Latin American cities.

In Monterrey, early project impacts are results are beginning to take shape. The One Mobility Challenge project, for example, led to the implementation of a car-pooling pilot at nine educational centers in the municipality to reduce traffic congestion and improve air quality. Several reports highlighting initial results and lessons learned have been published on the [project website](#).



Photos by Bertelsmann Foundation

TRANSATLANTIC POLICY LAB: BOSTON & ATHENS

The Problem

Across the United States and Europe, cities face rising inequality that is neither sustainable nor inclusive. New urban growth and investment spurred by globalization is reshaping cities, causing spikes in gentrification and polarization. Such shifts are widening the gulf between stakeholders and their elected officials, with government struggling to meet new challenges and demands from their citizens. With stakeholders at the local level increasingly disconnected from the decision making process, there is a demand among policymakers for targeted, place specific policy solutions that are above all generated in an inclusive and people-led manner.

The People-Led Approach

FUSING TRANSATLANTIC EXPERTISE WITH LOCAL CHALLENGES AND STAKEHOLDERS

In partnership with the municipalities of Boston, Massachusetts and Athens, Greece, the Transatlantic Policy Lab convened lab experts from Europe and the United States to work collaboratively with local stakeholders to develop original, place-based recommendations targeting distressed neighborhoods. In carrying out two intensive weeklong labs, the Transatlantic Policy Lab sought to first gain an appreciation for the challenges facing citizens and stakeholders in each neighborhood. By bringing to bear its innovative combination of outside expertise and its approach to stakeholder engagement, the Lab placed people at the center of the decision making process, resulting in a number of innovative recommendations. A summary of the Lab's people-led elements include:

- ▶ **DESIGN:** In close cooperation with Chief Resilience Officers and elected officials in each city, the Lab commissioned data-driven research to narrow the geographic and topical focus of the Lab's efforts. This process allowed the Lab to uncover the city's most pressing challenges – and potential for the greatest impact.
- ▶ **CONNECT:** Next, the Lab convened intensive, weeklong labs in each city, in which lab experts worked closely with city leaders, local stakeholders and citizens to identify and isolate the problems facing target neighborhoods. Much of this interaction occurred during site visits and stakeholder dialogues held in some of the city's most distressed neighborhoods.

Photo by Tilemahos Efthimiadis at wikipedia





Photo by Oleksii Khodakivskiy on Unsplash

- ▶ **LEARN:** Given the amount of time spent interacting with citizens and city leaders, Lab experts learned to apply their expertise to the local (and often neighborhood-specific) challenges at hand. Similarly, through engagement with the Lab cohort, citizens gained an understanding of models and approaches used in cities on either side of the Atlantic.
- ▶ **ITERATE:** After the conclusion of each Lab, members of the cohort partnered with local stakeholders to develop their approaches and recommendations for further action.
- ▶ **THE IMPACT:** The Transatlantic Policy Lab's two pilot projects resulted in a number of innovative and people-led recommendations which were incorporated into the resilience strategies produced by [Boston](#) and [Athens](#). These strategies are meant to guide policy generation and implementation until 2030. Meanwhile, the Lab served as a valuable experiment for how leaders on both sides of the Atlantic can develop policy in a more people-led manner. At the same time, the Lab showed just how time and resource intensive generating people-led policy can be. Therefore, the Transatlantic Policy Lab partnered with GovLab as a way of transmitting its people-led lessons to cities and stakeholders around the world. More information can be obtained through the [project page](#), or through the Lab's individual reports for [Athens](#) and [Boston](#).



Photo by Ryan Young on Unsplash

Throughout the People-Led Innovation Methodology, we make an effort to tap into the distributed expertise of people. Context varies between cities, the nature of a problem, and the people themselves. Determining who to collaborate with, and at which stage, can be difficult, especially since plans for engagement need to be fixed early in the process. Moreover, while our People-Led Innovation Methodology is designed to engage with individuals at every stage of the innovation cycle, it is equally important to include different groups – whether formal or informally organized – of people that may have different needs, expertise and capacity. Toward that end, we have developed the below “Matrix” that enables public entrepreneurs within cities and elsewhere to identify who to engage at what stage and for what purpose.



Bertelsmann
FOUNDATION

SEGMENTATION OF PEOPLE AND THEIR GROUPS

While non-exhaustive, the vertical axis reflects the diversity of different types and groups of people outside of government that can play different roles across the innovation lifecycle. It allows public entrepreneurs in cities to determine who to include, at what stage and for what purpose – including, for instance:

Residents – the inhabitants of the neighborhoods or cities who are or will be affected.

- ▶ *How they can provide value:* The experience of residents is particularly important for defining and prioritizing problems that will have the greatest impact on the community. Residents are also crucial to the effective implementation of any plan developed, and their buy-in can help to ensure that solutions will have maximum impact.
- ▶ *Possible segmentation criteria:* Long-term (>10 years), New Domestic (<5 years), New Foreign (<5 years), Transient, and Part-time/Seasonal.

Domain Experts – including researchers, consultants, and other specialists.

- ▶ *How they can provide value:* Tapping into domain experts' knowledge can enhance the ideation process and expand the scope of possible solutions. Across sectors, municipalities are likely home to individuals with in-depth knowledge that could be brought to bear for problem-solving.
- ▶ *Possible segmentation criteria:* Technologists, Social and Political Scientists, Practitioners, Economist, Architects, Urban Planners, Consultants, and Former Elected or Appointment Officials.

Non-Governmental Organizations – not-for-profit organizations that are independent of the government.¹

- ▶ *How they can provide value:* NGOs bring extensive knowledge of and experience with a given problem area that would require years to piece together individually. Some organizations may be working directly in the problem area; partnering with them can result with them can result in robust solutions with built-in tiers of support.
- ▶ *Possible segmentation criteria:* Economic Development, Legal, Workforce Training, Research/Academia, Environmental, Health, Human Rights, State, City, Charitable and Faith-Based.

¹ In the context of this methodology, NGOs are international and/or domestic groups that may or may not have an existing relationship with a neighborhood

Community-Based Organizations – not-for-profit organizations that are bound to the places where they are located. They serve their communities, and are often organized by residents.

- ▶ **How they can provide value:** Community-based organizations, like non-governmental organizations, have extensive knowledge of a problem area, but their expertise is focused on the needs of smaller geographic areas. Members of community-based organizations provide a unique perspective of the problem area, they also have ties to other stakeholder groups that may typically be difficult to access (e.g., transient residents).
- ▶ **Possible segmentation criteria:** Educational, Economic (Commerce), Economic Equality, Environmental, Human Rights, Health, Faith-Based.

Neighborhood/Area Business Owners – small, medium, and large companies that are either rooted within a community (e.g. mom and pop shops, family restaurants), or exert great influence over the economic health of an area (e.g. tech companies like Amazon).

- ▶ **How they can provide value:** Local businesses obviously have a vested interest in the well-being of the communities in which they are located. A clean, vibrant, and safe neighborhood is good for business, and workforce development can provide a larger pool for local hiring. Businesses serve different community needs, and their involvement in the problem-solving process can encourage them to collaborate toward mutually beneficial outcomes in line with public goals.
- ▶ **Possible segmentation criteria:** Retail, Real Estate, Service (Restaurants, Bars, Cafes), White Collar, Blue Collar, Specialized Healthcare (Optometry, Chiropractic, Dental), Fitness, Manufacturing, Grocery.

Anchor Institutions – place-based non-profit entities that often play an important role in their local economy.

- ▶ **How they can provide value:** As anchor institutions are often the largest hiring entities in a municipality, and can play a significant role in workforce development and job growth. Workplace policies deeply impact these institutions, and working with them to craft and implement initiatives can ensure the success of a policy. Anchor institutions, especially universities, also attract experts with potentially useful insights and experience.
- ▶ **Possible segmentation criteria :** Universities, Libraries, Museums, Art Institutions.

Municipal Government Administration – including elected government officials and their staff, as well as career civil servants.

- ▶ **How they can provide value:** Not only are government administrators immediately concerned with improving their represented communities, but they have the power to ensure the integration and continued success of urban innovations. Their expertise differs from community groups, as they have practice determining feasible and impactful projects that can be written into policy.
- ▶ **Possible segmentation criteria:** Mayor's Office, City Planning, Parks Department, Housing Authority, Public Health, Transportation Authority and City Council Members.

Resource Partners – domestic or international firms or organizations that have a specific interest in supporting and funding innovative initiatives.

- ▶ **How they can provide value:** These organizations can provide additional resources and may be willing to be more experimental. In addition, some of these organizations fund programs with other partner cities and bring comparative insights.
- ▶ **Possible segmentation criteria:** Foundations/Philanthropies, Corporate social responsibility officers from the private sector, and other industry leaders.

ENGAGEMENT ROLES

To surface useful input during the innovation process, urban officials need to determine the role people can play and how their input will be solicited, integrated and acted upon. The more targeted and well-defined the engagement process, the greater the likelihood of actionable input from people and stakeholder groups. In the below we briefly describe four engagement roles to help public entrepreneurs in cities consider how best to tap into the diverse expertise distributed among people outside of government.

Commenting: Individuals and/or groups are given opportunities to share their opinions, priorities and preferences.

For example, using a discussion platform to solicit complaints or experiences among residents to help prioritize problem areas.

Co-creating: Individuals and/or groups are asked to apply their skills and creativity to the different phases of the innovation cycle with the problem-solving team.

For example, a sector-specific hackathon wherein people seek to leverage datasets to create new solutions to public problems.

Reviewing: Individuals and/or groups are asked to review approaches or initiatives in a more targeted manner – including assessing and evaluating proposals and/or interventions.

For example, online or offline engagements allowing people to “upvote” or “downvote” specific proposals or ideas, or using annotation platforms to leave suggestions.

Reporting: In the Reporting role, individuals and/or groups are asked to contribute data and facts to inform problem definitions, solution plans, and evaluations.

For example, a crowdsourcing platform for citizens to collect incidences of local issues like graffiti or potholes for government officials to address.

MATRIX OF PEOPLE ENGAGEMENT

Worksheet - 1/4

COLLABORATION TYPES

CO-CREATE

REVIEW

COMMENT

REPORT

	DEFINE		
	Problem Identification	Problem Definition	Problem Prioritization
Residents			
Domain Experts			
Non-Governmental Organizations			
Community-Based Organizations			
Area Business Owners			
Anchor Institutions			
Municipal Government Administration			
Resource Partners			

MATRIX OF PEOPLE ENGAGEMENT

Worksheet - 2/4

	COLLABORATION TYPES			COMMENT	REPORT
	EXPLORE	CO-CREATE	REVIEW		
	IDEATE			COMMENT	REPORT
	Expertise Mapping	Data-Driven Insights	Idea Prioritization		
Residents					
Domain Experts					
Non-Governmental Organizations					
Community-Based Organizations					
Area Business Owners					
Anchor Institutions					
Municipal Government Administration					
Resource Partners					

MATRIX OF PEOPLE ENGAGEMENT

Worksheet - 3/4

	COLLABORATION TYPES			COMMENT	REPORT
	Agile Development	User Testing	Impact Evaluation		
Residents					
Domain Experts					
Non-Governmental Organizations					
Community-Based Organizations					
Area Business Owners					
Anchor Institutions					
Municipal Government Administration					
Resource Partners					

MATRIX OF PEOPLE ENGAGEMENT

Worksheet - 4/4

	COLLABORATION TYPES				REPORT
	CO-CREATE	REVIEW	COMMENT		
	EXPAND			Replicate Results	
	Course Correction	Transfer Learning			
Residents					
Domain Experts					
Non-Governmental Organizations					
Community-Based Organizations					
Area Business Owners					
Anchor Institutions					
Municipal Government Administration					
Resource Partners					

PEOPLE-LED INNOVATION

MATRIX OF PEOPLE ENGAGEMENT

COLLABORATION TYPES	DEFINE			IDEATE			EXPERIMENT			EXPAND		
	Problem Identification	Problem Definition	Problem Prioritization	Expertise Mapping	Data-Driven Insights	Idea Prioritization	Agile Development	User Testing	Impact Evaluation	Course Correction	Transfer Learning	Replicate Results

PEOPLE LED INNOVATION

Toward a Methodology for Solving Urban Problems
in the 21st Century



Bertelsmann
FOUNDATION

thegovlab.org/people-led-innovation