

CO-CREATION CONNECTIVITY: ADDRESSING THE CITIZEN ENGAGEMENT CHALLENGE



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Lessons from Leading Cities

LEADING CITIES

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LETTER FROM THE PRESIDENT



Cities around the world continue to grow and with this growth also comes opportunities and challenges alike. With city dwellers representing more than half of the world's population, urban centers are required to provide services to that growing population, transportation

systems are at or beyond capacity and housing stocks have quickly depleted. Now with projections suggesting two-thirds of all Earth's inhabitants will be living in an urban center by 2050, city leaders globally need to seek innovative solutions and better tap a previously underutilized resource —their residents.

Our neighbors, family and friends all possess skills and talents, perspectives and ideas. Until recently, there has been limited opportunity to easily offer these assets to the public sector. This missed opportunity has not only delayed the identification and implementation of effective solutions, but has prolonged challenges that cost the city and its residents.

Recognizing the potential of this mostly untapped resource, Leading Cities has analyzed citizen engagement programs, collaboration techniques and other models from around the world. It has been our goal, as you will see in this report, to identify opportunities for public sector leaders to leverage their greatest asset — the people they serve.

From its inception, Leading Cities has followed a collaborative approach locally and internationally. As a network of cities we engage what we call the Q-helix or quintuple helix — the five sectors of any city. These five sectors are public, private, academia, non-profit and the citizenry. As this has been the foundation of our design, it was not surprising to the Leading Cities

team of collaborators that collaboration was a key to future success for cities.

The co-creation model, originally designed and applied to the private sector, became a major focus of our research. This model seeks to engage stakeholders from problem identification straight through to solution implementation and everything in between. The question we explored is whether this highly collaborative, empowering model can effectively be applied to the public sector.

As you will see, the co-creation process is not easily implemented, it is not appropriate for all situations nor is it the one and only solution, however, we have found this model to have great promise. Co-creation can provide city leaders with the tools they need to work with their citizens and other stakeholders, empowering them to have a critical role in addressing the challenges cities face in the 21st century.

Leading Cities has already realized tremendous success. Our mission and efforts have fostered new relations between universities and municipal governments and brought participatory budgeting from Lisbon to Boston and Cambridge, Massachusetts. We have not just researched this opportunity of stakeholder engagement, we have applied it with great positive outcomes and impact. It is our intention to share our experiences, research and learning with cities everywhere, so they too can benefit from more effective, more valuable collaboration.

Respectfully,

A handwritten signature in blue ink that reads "Michael Lake".

Michael Lake
President & CEO
Leading Cities



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Thank You

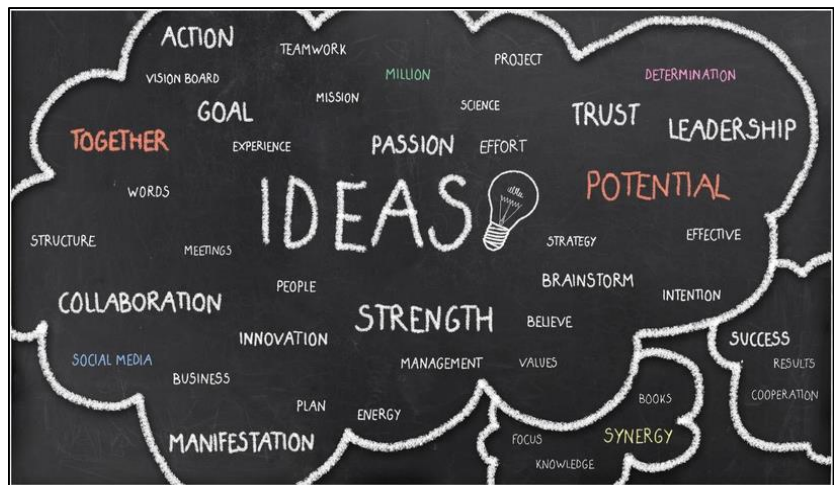
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EXECUTIVE SUMMARY

This report explores how local government can improve decision-making by actively engaging citizens, business, academia and non-profits in a process called 'co-creation'. We define co-creation as an inclusive and dynamic process where members of these five sectors – also known as the quintuple-helix or Q-helix - actively collaborate throughout the problem identification, design, implementation, decision-making and evaluation of projects and/or urban policies.

The report examines why and how citizen engagement processes have evolved from top-down autocratic approaches to ones that are increasingly participatory, democratic and, more recently, co-creative. It examines case studies from a small cross-section of medium-sized cities in Europe and North America and offers insights into how co-creation and technology can be used to enhance and create more inclusive decision-making processes. The limitations of technology and of co-creation are also discussed. The report ends with lessons learned and recommendations on how to improve a city's capacity for complex problem solving and evidence-based policy decisions by involving a diverse set of stakeholders at each step of the process.



Credit: T.L. Furrer Fotolia Image

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INTRODUCTION TO LEADING CITIES

Cities all over the world face a growing number of complex economic, social and environmental challenges. To address these challenges and take advantage of emerging opportunities, city governments are developing new forms of collaboration. For example, the public service is learning valuable lessons from business and non-profit leaders around fostering innovation and engagement. Cities are partnering with local universities to provide students with an opportunity to tackle real-life urban policy challenges, which conversely provides cities with the high-quality, cost-effective research needed to build effective solutions. Most of all, citizens are increasingly taking a more active role and interest in the urban policy issues that affect them, leading to more engagement with local governments and better outcomes. Leading Cities is an international network of mid-sized

cities (Barcelona, Boston, Dublin, Hamburg, Lisbon, Lyon, Vancouver, Zapopan) engaged in fostering collaborative partnerships and innovative approaches to urban policy issues such as co-creation.

Our applied research approach:

- Convenes meetings of policy innovators from private, public and non-profit sectors;
- Compares the strategies and policies that these cities have developed to address similar urban challenges;
- Identifies best practices in city-university-business research partnerships and in Q-helix urban strategies; and,
- Encourages social change through the principles of sustainability and social responsibility.



Leading Cities Members around the World | Credit: Leading Cities

2.1 The Citizen Engagement Challenge

More than half of the world's population now lives in cities. As a result, city governments increasingly find themselves on the front lines of the “wicked challenges”ⁱ of our day. Designing sustainable approaches to housing and transportation in the context of climate change, socio-economic inequalities in high-density areas, sustaining services for a rapidly aging population with diminishing tax revenues – are examples of challenges that disproportionately affect cities.

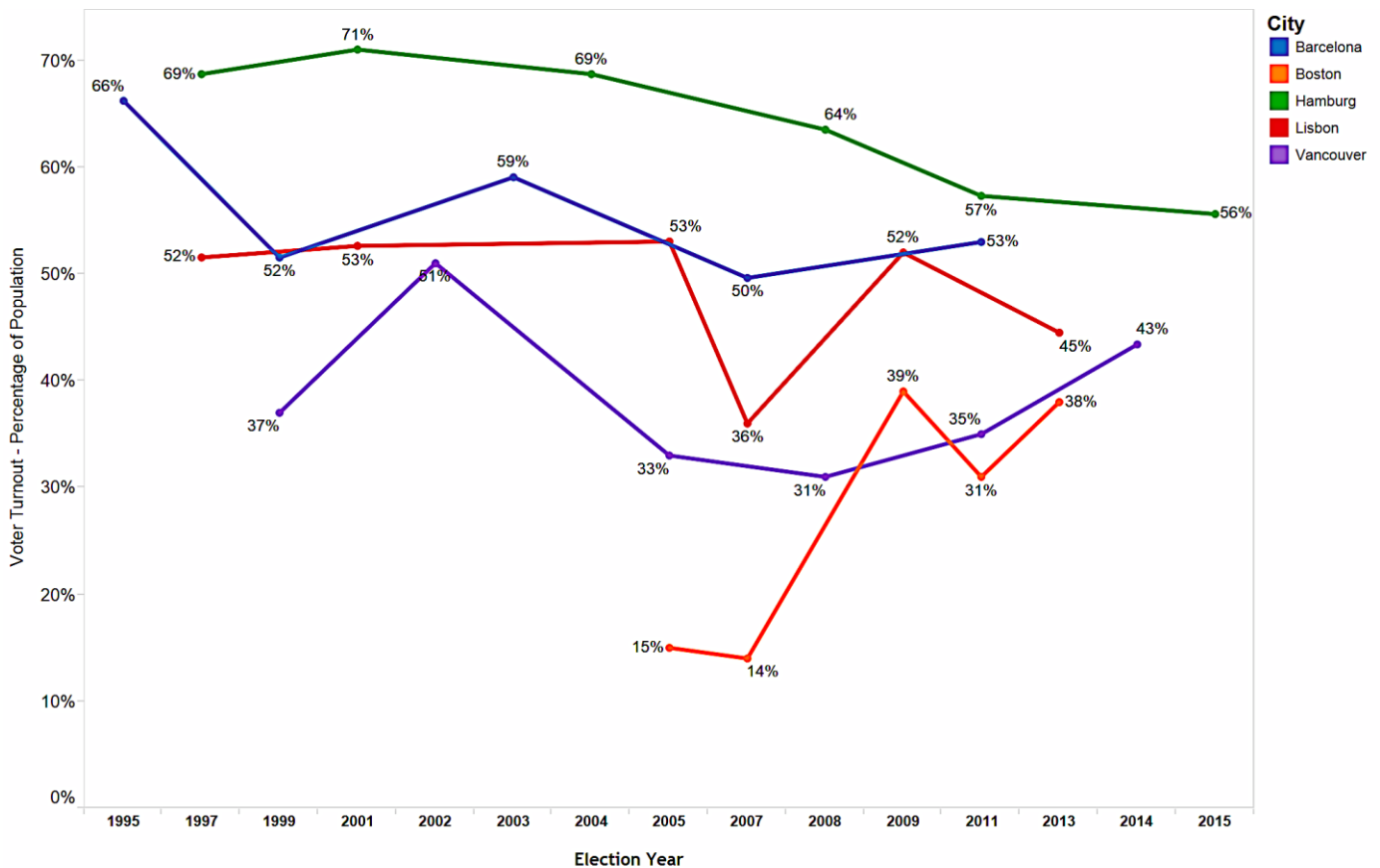
Cities are working to find sustainable solutions but face significant challenges in doing so. Cities are home to increasingly heterogeneous populations, with different languages, cultures and ways of living and working. Citizens are increasingly finding that top-down approaches fail to take their needs into account and communities are pushing to have a greater voice and representation in decision-making. Cities have to be more creative and resourceful in engaging citizens, whether through incorporating the use of more languages or pioneering different approaches that are each tailored to the diverse communities within a city.ⁱⁱ Ultimately, cities are finding that a one-size-fits-all approach and traditional methods of engagement are no longer sufficient when it comes to meeting the complex needs of an urban population.

Governments are also subject to greater public scrutiny than ever before. Their residents are the most informed, connected and technologically savvy the world has ever seen. In the wake of major events like the 2008 financial crisis, people have become more skeptical towards government and demand more participation and more transparency in decision-making processes.

Despite having access to more data and information than ever before, many citizens lack the time and/or the inclination to make sense of it all. Many call for change but few take the time to engage with government, especially around the discussion of wicked problems that have no clear solution. We live in the “age of impatience” where people want everything to happen fast – even though effective engagement and building solutions takes time and effort. At the same time, many would like to be more involved but feel powerless to be able to make real change happen or have their voices heard.

Given the above factors, it is no surprise that despite calls for more transparency and citizen involvement in decision-making, there is clear evidence that citizen engagement and satisfaction rates are declining. Our research provides two types of evidence of this: voting rates and related studies conducted by Leading Cities.

Figure 1 - Voter Turnout in Five Leading Cities: 1995-2015



Numerous studies have shown that rates of voter turnout are declining and that cynicism and dissatisfaction with government is on the riseⁱⁱⁱ. As shown in *Figure 1: Voter Turnout in Five Leading Cities: 1995-2015*, many cities are seeing a trend of declining or low voter turnout rates overall. Boston is the main exception with a moderately positive trend, though it still has the lowest percentage of voter turnout compared to other member cities.

Studies from Germany and Vancouver provide further perspective on declining citizen participation. In Hamburg, a 2013 study by Bertelmanns-Stiftung indicated overall satisfaction with democracy as a

political system but lower interest in politics among the youngest and most socially disadvantaged people, which increases the risk of a "split democracy"^{iv}. Another study by Herbert Quandt Stiftung indicates that while the public has confidence in democracy as a concept, many do not trust government and the way democracy is currently being implemented. This study shows that people desire alternative and more diversified ways to express themselves: two-thirds of Germans wish for more forms of direct democracy.^v

The City of Vancouver created a multi-sector task force in 2014 to consider deficiencies in citizen engagement and possible remedies.

The task force reported:

"In our consultations we learned that while there are hundreds of formal and informal engagement initiatives in Vancouver, it can be difficult for people to learn about them or to feel that they have the information needed to participate. These challenges are particularly important to consider in a city that has as diverse a population, as we do in Vancouver, where linguistic and cultural barriers can prevent large groups from accessing engagement opportunities."^{vi}

The task force identified 19 priority actions for the City to take and six ideas for communities within the city to consider, all within four central themes:

- building knowledge in the community;
- building the capacity of the community to engage with the City;
- building trust between the City and the community, as well as among different stakeholders within the community; and,
- building the power of the community to effectively advocate for the changes it seeks.

In summary, there is a strong and growing demand for more diverse and effective forms of citizen engagement to increase levels of trust and engage an increasingly diverse, busy and complex urban population.

2.2 Voting as a Means of Citizen Engagement

Most cities practice representative democracy, where citizens typically provide input into local government decisions by voting for politicians that represent their interests in elections. Once elected, citizens turn over responsibility for decisions to their elected politicians and the public service.

Electing representatives to make decisions has the advantage - especially for voters who feel pressed for time – of limiting citizen involvement to short election periods. It also relatively lowers costs compared to engaging the population in every major decision made by government. But representative democracy also has disadvantages:

- Elected candidates may not represent the views of all citizens, even the ones who voted for them;
- Voters may lack enough relevant facts to make a well-informed choice;
- There is typically no mechanism, until the next election, to ensure that elected officials make decisions consistent with their election promises or to otherwise hold politicians accountable;
- The interests of minority groups may not be represented; and,
- Lack of direct connection between elected officials and citizens can breed distrust and cynicism.



Lisbon Participatory Budgeting | Credit: Câmara Municipal de Lisboa

Because of the perceived inadequacies of representative democracy, there is a growing trend toward allowing citizens to vote directly on specific issues or decisions. Two developments in particular are worthy of note:

- 1. Referenda on single issues** – This allows citizens to vote on highly contentious issues, especially where a decision made by elected representatives may be deeply unpopular or divisive. Because it is expensive and time-consuming, referenda is used in some cities and not in others:
 - In Boston, a neighborhood was granted the ability to vote on whether to allow the construction of a casino via a referendum.
 - In Hamburg, voters decided in favor of the city purchasing the energy network instead of keeping it private via referendum in 2013.
 - In Portugal, referenda can be called on a national level around a specific theme.
 - The Vancouver region is currently conducting a referendum on whether there should be a sales tax increase to fund additional transportation and transit services.
 - Barcelona provides an exception to the growing use of referenda: the Constitutional Court has prohibited the organization of municipal referenda and has also limited public consultation processes.
- 2. Participatory budgeting** - This allows voters to decide how a designated portion of the annual city budget should be spent. This approach is generally popular with citizens, even though it can be expensive and time-consuming.
 - Inspired by the work of Leading Cities, the cities of Boston and Cambridge, Massachusetts have both established participatory budgeting systems. In Boston, the Mayor has initiated a \$1 million Youth Budget to be appropriated by the city's young people. Also, a district city councilor has proposed the use of separate participatory budgets for each of Boston's nine districts.
 - In Lisbon, the number of citizens involved in the participatory budgeting initiative has grown each year since it was first implemented. It is seen as an opportunity to present ideas and empower the community in setting priorities for projects.
 - Vancouver does not conform to the trend toward participatory budgeting; a consultation indicated that there was little interest amongst voters because they felt that the effort required to understand the intricacies of budgeting was too great.

There is likely to be more use of these mechanisms in future years, particularly if the cost and other disadvantages of administering

voting procedures can be alleviated through expanded use of online voting. There is also tremendous interest in direct democracy, particularly in Germany where more issues are decided by citizens' votes rather than by elected representatives.

But expanding the number of issues decided by voting will not address many of the wicked

issues faced by cities because it is extremely difficult to reduce these issues to one or more simple questions on a ballot. Citizens may also have no way to influence what questions get asked and how changes are implemented once decided upon. As cities experiment with other models of engagement, they are finding that voting mechanisms only go so far.

2.3 Other Citizen Engagement Mechanisms

All cities have citizen engagement processes that go beyond the ballot box. The International Association for Public Participation (IAP2)^{vii} has categorized them into five groups, which represent a spectrum based on the purpose of engagement:

- **Providing information** - The purpose of these engagements is for cities to provide information to the public, or for members of the public to provide information to the city.
- **Consulting** - In these engagements, cities seek information from citizens and provide some feedback to the public on the information they have received
- **Involving** - These engagements seek both information from the public and discussion with the public on the issues at hand.
- **Collaborating** - In these engagements, cities seek information from the public, and public discussion, with the intent to incorporate the ideas coming out of the discussion in their future decision-making.
- **Empowering** - In these engagements, cities seek information and discussion with the public with an explicit promise that their future decisions on the topic under consideration will be based on the input received from citizens.

As citizen dissatisfaction has increased and issues have become more complex, cities are increasing the use of public participation activities in each part of the spectrum. This report explores four broad types of citizen engagement:

- Improved information flows;
- Informal ad hoc consultation and surveying;
- Advisory bodies; and,
- Customized engagement processes.

2.3.1 Improved information flows

The increasing complexity of city administration and decision-making, along with increasing citizen dissatisfaction with their engagement in key issues, has led to a variety of legislative and administrative changes aimed at providing citizens with more information about their cities and the choices that are made on their behalf. Three types of initiatives in particular deserve mention:

- **Laws that guarantee citizens the right to information** - Most cities are subject to national laws regarding the right of citizens to access information about the administration of cities and decisions made by cities. These laws started to emerge in the 1980s and have generally expanded since then.
 - In Boston, the city currently adheres to the requirements set forth by the Federal Freedom of Information Act.
 - In Hamburg, a 2012 “transparency law” gave citizens access to all administration dossiers.
 - In Vancouver, the City is subject to the British Columbia Freedom of Information Act.
 - In Portugal, national laws give citizens the right of access to information and courts decide how these laws are implemented. Local public governments are subject to this legislation.
- **Centralization of all communications between the city and its citizens** - Cities are increasingly recognizing that they can better understand their communities and respond to citizen needs by consolidating, tracking and analyzing all contacts made with the city, whether in person or by mail, email or phone. In North America, this consolidation process is often referred to as “311”, which is the phone number (or application) that citizens can use to get information about or request city services. By analyzing all inquiries through a central database, cities are able to respond faster to emergencies and improve their priority setting. The metadata generated by “311” and similar systems — which can be reported back to the public — provides a much better picture of the state of the city and of the concerns of citizens than has previously been available.
 - The City of Vancouver has implemented a 311 contact center that citizens can use to inquire about and access city services like garbage pickup, graffiti removal, traffic signal repair, license renewal and more.
 - The former Mayor of Boston rejected the implementation of a 311 system in preference for his already established “Mayor’s hotline.” This decision has limited citizens’ access to municipal government — a fact proven by the drastically lower volume of calls received compared to the 311 service in San Francisco, which averages four times higher call rates from their residents.^{viii}

The Experiments

Boston Urban Mechanics Digital Application Experiments | Credit: City of Boston



- **Open data** - Cities are using technology to expand their digital presence and communicate with citizens more quickly. Websites are growing in scope and elected officials and public servants alike use social media to communicate with communities in real time. Over and above these efforts, many cities have implemented “open data” programs, which represent a commitment by the city to declassify and make as much data about city operations available as possible. Governments are also creating business opportunities for local entrepreneurs by allowing interested parties to develop programs (“apps”) and make data more user-friendly (e.g. traffic or bus schedules, street parking locations, business listings, park locations).
 - The City of Lisbon participates in a European Union co-funded open data project called CitySDK, which encourages cities throughout Europe to release their data in a standardized format that developers can re-use easily. The “Open Data Lx” is another Lisbon Municipality project developed in partnership with the Agência para a Modernização Administrativa to provide data about the city of Lisbon that can be used for research or digital application development.
 - In Boston, a city councilor has filed an Open Data Ordinance to bring greater transparency and consistency around access to city data.^{ix}
 - Since the adoption of the transparency law in Hamburg, the state of open data has considerably improved. Previously existing open data portals (haves been replaced by a transparency portal, which enables access to all the data published by authorities and public companies.
 - The City of Vancouver is working to expand its open data program, which was initiated in 2009. Since then over 140 open data sets have been published. One “quick start” initiative is to adopt a formal standard and process for requesting data sets.^x

The above mechanisms, as well as more traditional information flows (e.g. media relations, fact sheets, open houses, etc.) operate primarily at the informing end of the engagement spectrum, with some elements of consulting. The flow of information from citizens to cities is as important as the flow from cities to citizens. Technology-driven changes in this area are elaborated upon in section 2.4 below.

2.3.2 Ad hoc consultation and surveying

Ad hoc consultation and surveys — formal and informal; public and private; and with individuals and groups — have always been an essential tool on the informing/consulting end of the engagement spectrum. Consultations with citizens and subject matter experts help politicians understand the complexity of issues and the general sentiments of the community. But ad hoc consultations typically involve a very small fraction of the community. As a result, citizens often fear that these consultations give unfair advantages to single issue advocates and those with power, money or personal connections to elected officials.

The use of polls and surveys to assess the public's mood or the opinions of various voter demographics is also an essential part of the politician's toolbox, especially due to advancements in telecommunications and lower-cost technology. Polls are quick but can be expensive if accuracy is a priority; they are best used when looking for answers to simple, clear-cut questions. Results can be questionable as answers given off the cuff

often differ from those given when respondents have more time for deliberation. More recently, the ubiquity of cell phones, which cannot be accessed as easily by pollsters as landlines, further limits the accuracy of poll results.

Polls conducted by independent third parties are generally regarded as more credible than polls commissioned by politicians or cities themselves. Even the most objective survey can contain bias in the choice of questions posed or the survey design.

A recent innovation is the use of panels where deliberately chosen representatives of diverse populations are consulted about a number of issues over a period of time. These processes allow respondents to develop expertise and engage in discussions, thereby providing more accuracy, albeit at increased time and cost. This approach is similar to that of focus groups, in that it provides for an element of discussion around complex issues, but involves only a few participants.



Perspektiven Hamburg Planning Process for the Elbe Islands
Credit: Annabel Trautwein – www.wilhelmsburgonline.de

2.3.3 Advisory Bodies

Where cities see a need for advice on complex subjects, they frequently appoint advisory councils. Similarly, if there is a perceived need to seek ongoing advice on issues in a specific community, neighborhood advisory councils are established. Advisory councils typically seek public input, deliberate and report their findings to city decision-makers. All cities make use of advisory councils, which may have time-limited or ongoing mandates; they may be composed of ordinary citizens, subject experts or a combination of the two. Leading Cities examples include:

- In Boston, there are various advisory bodies for different demographics. For example, ONEin3 was launched to connect Boston's young adult population with the city government and resources related to housing, professional development, financial health,

entrepreneurship and civic engagement.^{xi}

- In Lisbon, advisory bodies called "Conselhos Municipais" have consultation mandates in Youth, Intercultural and Citizenship, Sport, Education, Housing and People with Disabilities.
- In Hamburg, each district can create one or more "renovation councils" (*Sanierungsbeirat*) or "neighbourhood councils" (*Stadtteilbeirat*) within a determined area for a specified or unspecified duration. Inhabitants can thus take part in the decisions that determine the future of the territory.

Voluntary advisory bodies are selected and appointed by cities, but there is a limited number of citizens that have the opportunity (or the interest) to participate. While mostly used as means for governments to gather insights from citizens, there is an expectation

that the city will act on at least some of their recommendations. This kind of engagement, therefore, falls between the 'involving' and 'collaborating' parts of the citizen engagement spectrum.

The work of advisory bodies can improve city decision-making, but, because the bulk of the population does not participate in their work, they have a limited role in enhancing overall citizen engagement.

2.4 Impact of technology on citizen engagement

The internet, mobile technology and social media have dramatically increased the volume and quality of communication and feedback between cities and their citizens. Other organizations, not-for-profit and businesses have also created websites and online dialogue platforms to share information, engage policymakers and stimulate discussion about city issues.

- In Hamburg, *Stadtwerkstatt* is an online dialogue platform that was launched in 2012 in order to foster citizen engagement on urban development projects. Specific events such as workshops and presentations are organized several times each year. *Stadtwerkstatt* constitutes an umbrella under which diverse forms of participation may be organized. With the exception of specific programs, all participation processes supervised by the authority for urban development and environment (city and state scale) are automatically put under this umbrella. In other cases, it depends on the willingness of the respective district(s) to organize a participation process with or without the help of the *Stadtwerkstatt*.
- In Lisbon, web platforms can be accessed by citizens: Portal of Participation, Portal of the City, Lisbon Business Connections site.^{xii}
- In the City of Vancouver, social media has played an important role in initiating and sustaining the Greenest City Action Plan. For example, the "Talk Green to Us" provided important input in the plan itself and its implementation.^{xiii}

As important as technology has been in enabling the distribution of information about the city, it has been equally instrumental for gathering information and feedback about issues and services from citizens. Beyond using it as a way for citizens to voice concerns and complaints, ubiquitous use of mobile technology allows each citizen to act as the eyes and ears of city officials. This could be as simple as reporting potholes to reporting crimes that are in progress. This has been seen most dramatically in the US recently, where the questionable actions of police officials were captured and shared using smart phones. There are many other examples of cities receiving real time information from citizens about issues that need rapid attention.

- In Boston, the Mayor's Office of New Urban Mechanics (MONUM^{xiv}) is a City agency that was formed in 2010 that partners with constituents, academics, entrepreneurs, non-profits and City staff to design, implement and evaluate civic innovation & service improvement projects. Street Bump is an example of a mobile app that was designed to collect real-time data about the smoothness of the streets as users drive. The City uses this data to prioritize problems that need to be fixed and plan long-term investments.^{xv}
- In Lisbon, citizens can use technology to inform the city about traffic lights that are not working well or public spaces that need repair ("Na minha Rua").

New technology and applications that allow city administrations to communicate with citizens are emerging daily, but their impact on citizen engagement is mainly limited to the informing/consulting end of the engagement spectrum. There remains a fear that online consultations are not truly inclusive or representative. First, those who have the computer literacy, time and interest to repeatedly express their views can tend to dominate dialogues, even to the point of causing more moderate participants to discontinue participation. Second, many people, particularly older citizens, the less educated and the less well-off, do not have access to or use the internet or smart phones regularly and are therefore excluded from online dialogues.

Because of these potential shortcomings, it is important that cities not base any decisions solely on the results of online dialogues; citizens may fear that such dialogues can be hijacked by vested interests, undermining rather than building their trust in the city. Online dialogues remain important but should complement other forms of face-to-face citizen engagement.

Until means are established to provide more certainty that technology-based engagement are no more biased than more traditional forms of citizen engagement, it may be challenging for technology to play a major role in citizen engagement at the collaborating/empowering end of the engagement spectrum.



The Mayor's Office of New Urban Mechanics in Boston experiments with new technologies to encourage dialogue between city government and residents. Credit: City of Boston

2.5 Summary

The escalating need for more and better forms of citizen engagement in cities has resulted in substantial changes over the last few decades.

Use of voting has expanded to include issue-based referenda and participatory budgeting. There is pressure in some cities to adopt more forms of direct democracy, which would allow citizens to vote on major decisions or policy changes as opposed to merely relying on politicians to represent their interests. But major changes in this direction will have to address both the increased cost of repeated elections and the challenge of reversing the trend of declining voter turnout.

There has been a massive increase in knowledge sharing between citizens and cities, thanks to a variety of changes, including use of technology, more robust transparency laws and open data initiatives.

Notwithstanding all this change, there has been relatively little progress in the way cities engage with citizens around the growing number of wicked problems. These problems are not readily addressed through voting or through online dialogue; cities have to address them through custom-designed engagement processes. It is in this area of citizen engagement that co-creative processes can lead to better decision-making and increased citizen satisfaction.

3.1 Characteristics of well-developed citizen engagement

Well-crafted and well-implemented citizen engagement processes share a number of common characteristics that have been documented in research over the past several decades.^{xvi} The International Association for Public Participation (IAP2)^{xvii} seeks to promote and improve engagement between individuals, governments, institutions and other entities that affect the public interest around the world. IAP2 Canada^{xviii}, one of several country members of the federation, offers these core values:

1. Public participation is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process and that they may provide the best solutions.
2. Public participation includes the promise that the public's contribution will influence the decision.
3. Public participation promotes sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision-makers.
4. Public participation seeks out and facilitates the involvement of those potentially affected by or interested in a decision.
5. Public participation seeks input from participants in designing how they participate.
6. Public participation provides participants with the information they need to participate in a meaningful way.
7. Public participation communicates to participants how their input affected the decision.^{xix}

The European Union itself has a similar set of criteria, with an additional focus on evaluation.^{xx}

The International Observatory on Participatory Democracy (OIDP), an international network of over 500 towns and cities, associations, organizations and research centers focuses on analyzing, discussing and applying participatory democracy experiments at a local scale, for the purpose of extending democratic practices in municipal governments. The network was created in 2001 by the European Union's URB-AL Programme. The OIDP Technical Secretariat, currently under the auspices of the Barcelona City Council, is an internationally recognized expert in participatory democracy that promotes cooperation between local governments throughout the world.^{xxi} The best practices and lessons learned gained from these organizations provide the foundation for the development of co-creative practices and experimentation.

3.2 Added Value of Co-Creation

3.2.1 Introduction

The modern concept of co-creation emerged from the business sector in the 1990's as a new form of engagement with customers. Instead of seeing customers as passive consumers, companies started inviting them to provide feedback, generate new ideas and actively participate in the development of products and solutions. All participants gained a greater sense of meaning and value from this process — customers felt more empowered and connected to products; businesses were better able to refine and test products and tap into new markets.

Reaching out to groups that may not have expert knowledge on highly complex issues and including them in decision-making processes regardless is similar to recent approaches to scientific understanding, such

as the post-normal science approach of Silvio Funtcowicz and Jerome Ravetz.^{xxii}

In a city context, co-creation is a form of citizen engagement, but fundamentally differs from public consultation in a variety of ways. Rather than asking citizens to simply comment on predetermined initiatives, outcomes or campaigns, co-creative techniques view citizens as proactive agents, giving communities and individuals more direct involvement in defining their needs and priorities, collaboratively finding solutions, influencing decisions and achieving better outcomes. This hierarchy-flattening process involves a significant degree of trust and transparency between citizens and government officials.

3.2.2 Leading Cities' previous work on citizen engagement

The Leading Cities model aligns strongly with the International Association for Public Participation and goes further to emphasize that good citizen engagement processes should actively reach out to disparate parts of a community, using different languages, different methodologies, and different kinds of engagement.

There should be opportunities to influence outcomes, as opposed to just expressing opinions. Engagement allows for knowledge mobilization and the development of useful and relevant data while taking advantage of the internet and social media for information dissemination and discussion. Transparency of process,

accountability and consistent communications are critical.

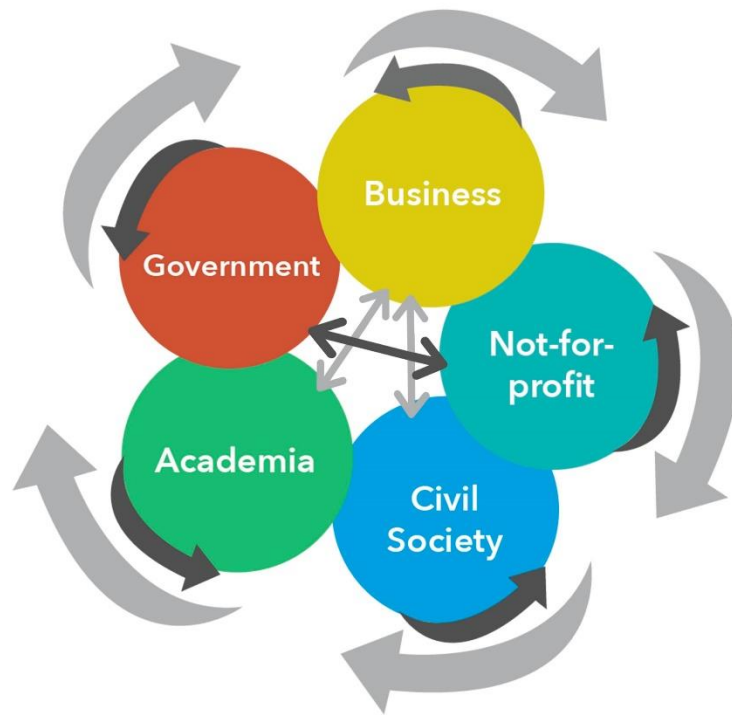
In 2013, Leading Cities published a 12-page white paper called *Co-Creating Cities: Defining Co-Creation as a Means of Citizen Engagement*. While there are slight differences in what people mean by *co-creation*, among cities, among different professions that provide citizen engagement services, the white paper defined "co-creation" as:

"...the active flow of information and ideas among five sectors of society: government, academia, business, non-profits and citizens - the Quintuple Helix - which allows for participation, engagement, and

empowerment in, developing policy, creating programs, improving services, and tackling systemic change with each dimension of society represented from the beginning.”^{xiii}

Leading Cities’ work since has involved exploring the topic of citizen engagement more deeply and introducing co-creative methods as part of the citizen engagement toolkit. It is evident through our explorations, that pure co-creation — in

other words designing and implementing processes that demonstrate all of the characteristics and criteria that support co-creation in the local government context — is extremely difficult. But it is nevertheless possible to work towards designing and implementing engagement processes that have a higher co-creation” quotient, which ultimately leads to broader citizen engagement, better decision-making and more relevant policy development.



Q-Helix Actors Relationship Diagram | Credit: Karel Rodriguez

3.2.3 Advantages of Co-creation

Most cities are risk-averse; adopting some co-creative practices can cultivate and speed up innovation, while reducing risk. Tapping into the creative and intellectual skills of different stakeholder groups generates more ideas quickly and allows for the assessment and validation of ideas from a variety of perspectives. This can make cities far more nimble when it comes to addressing citizen needs in a cost-effective manner. The time invested in implementing co-creation processes can improve the quality of the results, reduce negative impacts of a project and prevent future conflicts by sharing responsibility around decisions and outcomes.

Co-creation also has the ability to create more equitable and inclusive decision-making processes, which build a stronger sense of consensus and ownership of outcomes across

the community. Diversified engagement can help to balance any inequities that exist between races, classes and other groups. In this way, co-creation can help change institutions where some groups have disproportionate influence over decision-making.

For communities and citizen organizations, co-creation can offer greater opportunities for citizen empowerment, allowing more opportunities for people to be heard, exercise political rights and influence policy decisions. It may also empower citizens to organize themselves or seek new partnerships to solve everyday problems, breaking cycles of dependence. In this way, citizens can become more aware of and satisfied with the functioning of their local governments.



Mayor Martin J. Walsh of Boston meeting with startups. | Credit: City of Boston

Co-creative processes lead to increased social capital and collaboration between various stakeholders, allowing communities to foster consensus based on local knowledge and capacity. Fostering interdependence between community stakeholders improves the quality of social institutions and helps communities function more effectively.

Digital co-creation tools can potentially lead to more robust data collection and analysis, quantitatively improving city government's ability to facilitate real-time data collection and analysis, categorization, and redistribution of information. Co-created digital and non-digital tools already allow cities to tap into previously under-utilized resources such as citizens themselves moving about the streets with smart phones.

3.2.4 Challenges of Implementing Effective Co-Creation

Co-creation poses significant challenges in terms of the increased time and costs required to effectively engage stakeholder groups and integrate expert and informal knowledge.

Time and Cost

Co-creation takes more time than typical citizen engagement processes, which can be challenging in the 'age of impatience'. A considerable amount of time and resources must be invested in designing a process that effectively engages multiple players and communicates consistently with them throughout the process. Each meeting or online engagement also requires people to make the time to participate in their busy lives; successful co-creation is highly dependent on the willingness of institutions and citizens to invest the time to be involved.

It is sometimes a challenge to build engagement processes that involve a diverse group of people (academics, business people, non-profits, public servants, citizens) with different expectations regarding pace and style of work and timelines. A dialogue to set common expectations needs to occur at the

beginning and some of the participants will have to adjust. For example, different industry cycles can affect the process i.e. a university might predominantly be involved during the typical school-year cycle while non-profits may be involved only when funding/operational budgets allow.

Not all stakeholders or participants will come with built-in co-creation literacy. Time often needs to be invested in developing process literacy, a shared language and a co-designed process. Projects may also have various degrees of success in finding people who are skilled at collaborating, comfort with ambiguity and willingness to take risks.

Lastly, co-creative processes are often more iterative in nature — this means that projects may start out with one set of goals but may have to pivot or shift as new information or circumstances occur. It might also mean starting with a core team and then adding participants as gaps are identified. These aspects can potentially add more time and cost to projects if not managed for and planned in advance.



Balancing and Integrating Expert Knowledge and Informal Knowledge

Co-creation is grounded in a collaborative mindset, not a consultant one. In the consultant mind-set, a paid consultant brings expertise to the table and generally “runs the process”. While facilitators are often involved in co-creation processes, there is typically shared responsibility across the team to move the project ahead. The expertise comes from all players, not just from the consultant. It generates an extended peer community, where ‘solutions are created with people, rather than for them’ which reduces some problems such as infocination.^{xxiv} It requires also a major change of mentality, since the legitimacy of traditional experts or elected officials can be challenged by citizen initiatives.

Some parties may be hesitant around inviting diverse stakeholders to participate out of fear that they may hijack the co-creative process to their own (unfair) advantage. So clear rules of engagement must be established at the outset. Other parties may try to exert influence during the co-creation process with their single-mindedness around a specific

issue. In order to establish a collaborative process, assumptions should be put out on the table early and efforts to understand and integrate diverse points of view should be established and seen as a benefit of the process.

Further challenges arise around erosion of borders between the experts and the general citizenry — between scholarly knowledge and informal knowledge. In co-creation processes, everyone is allowed to take part, which generates new approaches to problems that sometimes are totally out of the box. This process can, especially initially, create conflicts amongst the stakeholders, destabilize existing power dynamics and undermine the perceived legitimacy of the process. Embracing innovation and non-traditional approaches may be a stretch for some of those involved, which means that facilitators must be prepared to help participants navigate that uncertainty and weigh the risks and opportunities; the benefits with the costs.

3.3 Implementing Co-Creation

Not all citizen engagement projects can be run completely on co-creation principles but all projects will benefit from incorporating co-creation elements in some way. The four criteria used by Leading Cities for determining whether a project is suitable for a co-creation approach are as follows:

1. Can the issue under consideration potentially be addressed by multiple approaches or innovative solutions?
2. Are there strong possibilities for using the project to build social capital, partnerships among groups, neighborhood/community solidarity and citizen empowerment?
3. Is there a reasonable amount of time available before a decision is required?
4. Can the issue sufficiently be limited in scope, geography, subject matter and numbers of major stakeholder groups potentially involved so that co-creation processes are readily manageable?

For projects that lend themselves well to a co-creation framework, it is important to:

- Create a Q-helix^{xxv} group of representatives early in the process to discuss:
 - Definition of the issue(s) to be addressed; and,
 - The process of gathering information, brainstorming potential solutions and defining recommendations/next steps.
- Maintain the group, as appropriate, throughout the citizen engagement process to:
 - Identify opportunities for incorporating co-creation principles into the process as it evolves and as sub-projects are created;
 - Report on the progress and effectiveness of applying co-creation principles, during and after completion of the process.

In a citizen engagement project conducted fully on co-creation principles, the Q-helix group created at the beginning of the process would, in addition to the activities outlined above, also manage the entire project through to implementation and evaluation.

It is important to assess the effectiveness of citizen engagement processes, whether co-creative or otherwise. The most accurate way of doing this would be to survey all Q-helix stakeholders at the end of the process, but unfortunately this approach is seldom applied.

One way to measure the effectiveness of a process might be to consider the degree to which the recommended actions emanating from the process are adopted. But this presupposes that legislative bodies are bound to adopt recommendations made to them after effective citizen engagement, which is not always the case. A process seen to be effective can increase the likelihood of its recommendations being adopted, but adoption is seldom guaranteed.

Accordingly, the criteria Leading Cities uses in this report and more broadly for evaluating how effectively a co-creative approach has been used are:

1. Have representatives in each stakeholder group in the Q-helix been engaged in:
 - a. The design of the engagement process?
 - b. The definition of the issue to be addressed?
2. Have there been Q-helix discussions at each stage of the engagement process?
3. Has the Q-helix approach generated data and/or information that would not have been otherwise available to the city?
4. Has there been a Q-helix assessment of the completeness and effectiveness of the engagement process?

These criteria have been used to evaluate the following Leading Cities case studies.

4.1 Barcelona: La casa de les idees (“The House of Ideas”)

Project Description

The aim of Le Casa de Les Idees, a primarily web-based program, was to develop new housing solutions for the city and to experiment with new forms of citizen participation and high-quality dialogue. The specific goal was to generate 10 new, realistic ideas to improve the housing market.

The program ran from March to June 2013; participation was invited from not only all citizens and businesses in the city, but also from interested non-residents. Targeted groups included citizens, housing-related associations of all types, housing experts, universities and professional associations as well as related specialists, including economists, legislators, sociologists, engineers and others.

The project was built around a trilingual (Catalan, Spanish, English) website carefully designed to provide information, generate traffic, provide a forum for discussion, maintain transparency and then give visibility to the winning ideas. An enormous amount of housing-related material was built into the site. The project was heavily promoted through social media as well as through traditional methods — news conferences, brochures, mailing campaigns, etc.

The website attracted 93 proposals and 3,783 unique visitors. Based in part on comments and voting on the website, the panel, made up of experts from four sectors of the Q-helix, oversaw the process of choosing 30 semi-finalists. The semi-finalists were given 17 days to refine their proposals; other participants helped, experts were made available to offer assistance and a workshop was held. The expert panel then chose the 10 winners, based in part on the public support for each proposal. Of the 10 winners, two were based on regroupings of other semi-finalist proposals.

Assessment of suitability for a co-creation project

The project was aimed at finding innovative solutions and was clearly limited in scope and time frame. It was also an experiment in a new form of engagement. There was scope for building partnerships among the semi-finalists. Because the whole project was web-based and there was not a high level of participation, there was very little opportunity for building social capital and neighborhood solidarity. Overall, it was an excellent project for applying a co-creation-based approach.

4.1 Barcelona: La casa de les idees ("The House of Ideas") cont.

Assessment of the use of co-creation techniques

The entire process was overseen, from beginning to end by an independent panel, which had strong representation from each of the four Q-helix groups; only ordinary citizens/neighborhood groups were not represented. The expert group helped design the process and the presentation of the project to the community. There were Q-helix discussions at each stage, though the citizen element was only represented through the very limited non-expert participation on the website. A large amount of valuable information — which otherwise would not be available — was generated. There was no post-project evaluation of the process, but the results of the project were excellent in that the winning projects have been incorporated into the city's housing strategy.

Overall, this is an excellent example of co-creation techniques being applied successfully in a small, clearly defined project. The project could have been strengthened by the inclusion of citizen and neighborhood representatives on the expert panel. A formal assessment of the process by the expert panel would have been useful to guide similar future projects.



Barcelona, la casa que vull
Branding for the House of Ideas (Casa de Idees) | Credit: Ajuntament de Barcelona

4.2 Boston: Economic Development Self-Assessment Tool (EDSAT)

Project Description

In collaboration with a “broad coalition of public and private sector partners from the National Association of Industrial and Office Properties to the National League of Cities and the Association of Chamber of Commerce Executives, The Dukakis Center for Urban and Regional Policy at Northeastern University created a practical set of tools for local governments to better position themselves to attract industry, private investment, a sustainable tax base and high quality good-paying jobs.” The Economic Development Self-Assessment Tool (EDSAT) was initiated with a cross-sector approach bringing together public, private, non-profit and academic partners to identify and then address the challenges municipalities face when trying to attract economic development opportunities for their community.

After focus groups of experts were conducted and a questionnaire was developed, more than 4,000 site selection specialists from around the USA were surveyed to provide invaluable insight into the specific decision criterion they use to choose where to locate or relocate a business. Each criterion was also measured by level of importance to distinguish the most influential criterion. The web-based tool is now available online for city/town officials to engage their local leaders in answering more than 250 questions. The answers are compared to other cities and towns and provide clearer insights into the areas of strengths and weaknesses possessed by a community.

Since the tool’s launch, municipalities around the country have leveraged EDSAT to engage local leaders in the questionnaire answering process and straight through to the analysis of the data, identification of challenges and development of a strategy to become more economically competitive. “We’ve been asking municipalities to assemble a group of not just municipal officials but also Chamber of Commerce and business leaders, job trainers, community college leaders,” said Nancy Lee of the Dukakis Center. “The goal was to get all the components at the table.”

Assessment of suitability for a co-creation project








There was no initial assessment or even goal of using a co-creative process in the development or implementation of EDSAT. However, those initiating its creation believed in collaboration and leveraged that approach to design a more effective tool for municipalities. The implementation of EDSAT also did not begin with a co-creative approach, but eventually recognized the value and impact associated with following co-creation methods. This case study demonstrates that even without the intended assessment or use of a co-creation model, efforts for greater collaboration between the public, private, academic and non-profit sectors can ultimately lead to similar outcomes.







4.2 Boston: Economic Development Self-Assessment Tool cont.

Assessment of the use of co-creative techniques.

The project was designed and initially driven by private sector-academic collaboration, with cities and other stakeholders added later. Initial use of the EDSAT was also limited to a small group of participants; later, as the value of a more co-creational approach became obvious, many more private and public sector stakeholders were included in the process with very positive results. Without the intention to use a co-creation model, efforts for greater collaboration between the public, private, academic and non-profit sectors led to co-creative actions and better results for all stakeholders.

Given the benefits derived once a Q-helix approach was taken in implementing the project, it is reasonable to assume that taken the same approach earlier in the project would have yielded even greater benefits. The project was very successful in generating new actionable data and disseminating it within and among cities. New cross-sector partnerships have been created. There has been no evaluation of the process to date.

 A. Local			
Report of _____ as compared to all jurisdictions			
Question			Comparison Group
1: Does your jurisdiction tax property in industrial or commercial uses at a different rate than residential properties?	yes		yes
2: If yes, what is the tax rate on industrial/commercial property? \$ /\$1,000	18.33		between 19.37 and 19.68
3: If yes, what is the tax rate on residential property? \$ /\$1,000	11.25		between 10.62 and 10.77
4: If no, what is the tax rate on all property?			
5: What % of your tax revenue is derived from: Industrial %	18		5.75
6: What % of your tax revenue is derived from: Commercial %	7		12
7: What % of your tax revenue is derived from : Residential %	75		75

Importance To Market  Very Important  Important  Less Important	Your Performance Relative To Peers  Strong  Average  Weak
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Sample report generated by the Economic Development Self-Assessment Toolkit capturing indicators measures, comparative analysis and level of importance for desired outcome. | Credit: Dukakis Center for Urban and Regional Policy, Northeastern University

4.3 Hamburg: Perspektiven! Miteinander planen für die Elbinsel ("Perspectives! Planning together for the Elbe Islands")

Project Description

This project to help produce a master plan for the Elbe Islands in southern Hamburg ran from September 2013 to April 2014. Importantly, the project grew out of citizen dissatisfaction with a government-run process that had the same objective, which ran from September 2012 to February 2013. The community deemed that process to be too restrictive to generate community participation.

The project was run as a collaboration between a non-profit neighborhood-focused citizen foundation, a public research institute, a district and the city. It was co-funded by the district and the city and to a lesser extent by the research institute, but the project was carried out independently by the citizen foundation.

A key goal of the process was to ensure all parts of the community had the opportunity to provide input. A detailed analysis of the population was carried out, using not just traditional statistical categories but also the concept of "milieu", which categorizes groups of citizens according to criteria like social status and lifestyles. In addition, key neighborhood personalities (from associations, schools, religious bodies, etc.) were engaged to establish existing information networks; these networks were used to ensure effective communications with all parts of the community.

A variety of techniques, traditional and innovative, were used to get community input, including:

- Randomly selecting citizens to come to an inaugural meeting and discuss the scope of the consultation; this led to the establishment of working groups (composed of volunteer participants) on specific issues identified by participants such as transportation or green spaces;
- Outreach to businesses and business associations to participate in relevant working groups;
- Discussions with groups of inhabitants that normally do not participate in public consultations;
- Discussions with each of the identified "milieus";
- A workshop on communications strategy, with the support of a research institute; and,
- 22 neighborhood talks, involving a total of 220 inhabitants, created through talks-on-the-spot at specific institutions, including schools and associations.

A website was created to provide some information, but no other digital tools were used because of a belief that these would not reach out to new populations, but merely provide the same people a different way to register their views. Some additional tools that might attract different populations such as youth were not pursued due to lack of time.

Input from all these activities was sent to the issue-specific working groups. In turn, reports from each working group were brought together to a council with representatives from each working group, as well as others. This Council presented its report to the city and district. The results have been examined and as far as possible integrated in the new framework plan for the territory presented by the Senate in September 2014.

4.3 Hamburg: Perspektiven! Miteinander planen für die Elbinseln (“Perspectives! Planning together for the Elbe Islands”) cont.

Assessment of suitability for a co-creation project

The objective was to collect new information on what the community desired and no limits were set. The process had a clear geographical boundary, however, and was reinforced by the large amount of readily available information that had been created by previous processes. A reasonable amount of time was allowed, though if more time were available, additional techniques to reach certain populations would have been developed. The various different consultation techniques employed provide tremendous opportunities for new partnerships, citizen empowerment and better neighborhood cohesion.

Assessment of the use of co-creation techniques

The project was designed and run by an independent collaboration that involved four of the five Q-helix stakeholder groups; the private sector was contacted later in the process. The differences between the report created and the previous report on the same subject were made evident when comparing how much new information was generated through the Q-helix dialogues. The minimal use of social media suggests that some opportunities for multi-stakeholder dialogue were foregone, but new techniques were deployed to ensure all parts of the community had their say. A first analysis of the composition of the participants showed that the objective of including all social groups in the process was reached.

Having two parallel processes on the same issue, plus a multi-dimensional evaluation of the co-creative process is a unique opportunity to assess both the benefits and the challenges of co-creation. More information will become available once the first concrete measures are implemented.

Based on information to date, co-creation has had a major positive affect on citizen empowerment, building trust between the city and citizens and changing the culture of participation. These are significant achievements that bode well for future citizen engagement in Hamburg. Conversely, the intentionally broad scope of the process prevented it from reaching unanimous recommendations, which caused technical difficulties for the city to address some of the recommendations. It demonstrates the limits of this project and raises challenges that future co-creative processes will have to overcome.

4.4 Lisbon: Lisbon Incubators Network

Project Description

Lisbon has a participatory budget process; during the 2009/2010 voting process, one of the most popular initiatives voted on was the creation of a business incubator in the city. Accordingly, the city launched Startup Lisboa in February 2012, as one part of a new strategy for entrepreneurship, economy and innovation in the city.

Startup Lisboa was a financial partnership between the city, a bank (Montepio Geral) that also provided a building for the incubator and a public institute (IAPMEI) that provides support for small and medium sized enterprises (SMEs). Later, a university (Instituto Superior Técnico) signed a protocol with Startup Lisboa. The incubator is located within an urban regeneration area and has resulted in new entrepreneurs moving into the area and creating a trendy new neighborhood.

Startup Lisboa focuses on technology and in November 2012, it launched a spin-off, Startup Lisboa Commerce, specializing in services, commerce and tourism, in the central business core of the city. This incubator created a number of partnerships, including with universities and not-for-profit entrepreneurship associations. By 2013, the two incubators had built an impressive, diverse range of partnerships, including international partnerships, and had incubated 80 startups, creating 180 jobs.

Based on this success, in 2013, the city launched an incubators network (*Rede de Incubadoras de Lisboa*), which grew organically as specific needs, and potential partners from all sectors, were identified. The network currently includes 14 incubators in all, each of which is semi-autonomous, financially independent from the city and has a range of partners and collaborators from various Q-helix organizations. Collectively, they have been responsible for 260+ startups and 900 jobs. The city maintains a website and Facebook presence for the network and promotes the network nationally and internationally. It also supports the network by sharing best practices and strategic partners.

Assessment of suitability for a co-creation project

The incubator project was identified through participatory budgeting, itself a co-creative process. There were many ways to approach the project and different streams of solutions continue to be generated. The scope of the project was suitably limited for a co-creative approach but in this case, it seems to have inspired the creation of related co-creation initiatives. There was also tremendous potential for building solidarity among groups involved in the subject matter addressed by each incubator. Overall, this was a very suitable project for a co-creative approach.

4.4 Lisbon: Lisbon Incubators Network cont.

Assessment of the use of co-creative techniques

The project has gone through several stages, with increasing numbers of partners at each stage. The first stage (participatory budgeting) involved only the city and citizens; the next stage (creation of the first incubator) involved the city, the private sector and a not-for-profit. From then on, as each new incubator developed and built its own partnerships and associations, the full Q-helix became involved in designing the various incubators and defining the issues they would address.

While the full Q-helix was not involved at the first two stages, it's hard to see how that might have been achieved given the nature of the participatory budgeting process and the need for the city to prove the concept of an incubator before involving many other sectors. The development of the network of semi-independent incubators is clearly a Q-helix approach that has generated a great deal of information that was not previously available. This particular example shows that not only can co-creative projects be successful in and of themselves; they can also lay the foundation for future opportunities and the creation of semi-autonomous networks of collaborators.



Launch of "Lisboa- European Capital of Entrepreneurship" at Lisbon City Hall with startups showcasing their work, including those who participated in StartUp Lisboa.

Credit: Portugal Startups

4.5 Vancouver: Greenest City Action Plan

Project Description

Greenest City 2020 is an ongoing effort to make Vancouver the greenest city in the world by 2020. The project was launched in 2009 with the formation of an advisory committee, the Greenest City Action Team (GCAT), consisting of four City elected and appointed officials, four university professors, three non-profit leaders, one union representative and seven private sector experts. GCAT came up with a list of 75 “green” actions the City could take immediately, and a set of preliminary goals and targets for making Vancouver the greenest city in the world

City Council approved these reports and in 2010 launched a two-stage process to finalize goals and develop an implementation plan. A small team of public servants was created to coordinate activities, and a committee of senior public servants directed the process. The first stage, from June to October 2010 had two outcomes:

- Creation of ten action teams led by city public servants, each of which was charged with developing an external advisory committee, of 10-35 members, representing key stakeholders from the academic, business and industry, non-profit and government sectors. Over 60 public servants and 130 external organizations participated. The action teams, with their external advisory committees, refined and confirmed the preliminary goals and targets set by GCAT. They also drafted a preliminary action plan to achieve the goals, based in part on input from a public involvement campaign.
- Completion of a public involvement campaign using social media - “Talk Green to Us”. This elaborate effort included an advertising campaign, creation and moderation of a website and an online forum, a video and a number of innovative public events, including open houses, a Pecha Kucha event with 2000 attendees and an idea slam. There were also direct mailings to community organizations, and extensive social media activity aimed at driving ideas from the public to the website. There were over 21,000 visits to the website from 123 countries; about 60% were from Vancouver. The website yielded 726 unique ideas; there were 28,000 votes on which ideas were the best.

In January 2011, City Council approved the revised goals and targets and reviewed the work done on draft action plans and quick start actions. The second stage of development of the implementation plan involved more work by the ten teams of public servants and their external advisory committees and a second public engagement campaign, called “Talk Green Vancouver”. This campaign was aimed at collecting feedback on the targets, goals and the preliminary action plan, spreading information and broadening reach into groups not previously involved and building partnerships for implementing the action plan once it was finalized. The campaign included a new on-line forum, continuing social media activity and a series of events and workshops.

The Greenest City Action Plan was approved in July 2011. The City estimates that almost 10,000 people were strongly engaged in the development of the Plan. The Greenest City Action Team has been invited to check-in annually with the Mayor about the process and the progress.

4.5 Vancouver: Greenest City Action Plan cont.

Assessment of suitability for a co-creation project

Developing the Plan was highly suitable for a co-creative approach, because two core elements of the Plan were to find as many new innovative ideas and solutions as possible, and to build partnerships and resident buy-in to a major initiative that was very different from business-as-usual. There was also the possibility of creating social capital among groups involved in, or affected by, the various elements of greening the city.

The scope of this initiative was far greater than that of a typical project that might be considered for a co-creative approach. But the City was prepared to provide the resources necessary to involve as many people as possible in the process; in addition, it was willing to extend the timeline for the project to accommodate the complex process of public consultation it had chosen.

Assessment of use of co-creative techniques

There was extensive use of co-creative techniques, notably in the launching of the initiative, in the use of external stakeholders in developing each of the ten elements in the Plan and in the extensive and innovative public engagement process.

The GCAT committee that started the process included participants from four sectors of the Q-helix. There was no effort to include representatives of the public. The committee could have been used to guide the process they started through to City Council approval, but the City chose instead to direct development of details and implementation of the Plan through a group of senior bureaucrats.

The wide outreach into 130 organizations that participated in External Advisory Committees was consistent with co-creation principles; participants included community-based non-profits, neighborhood business associations, university students, farmers and representatives of First Nations.

The two-stage public outreach program — one stage to get initial input and ideas, and a second stage to get input on a draft proposal — was consistent with co-creation. Considerable resources were invested in traditional techniques, innovative events and heavy use of social media; the outreach effort was the greatest the city had ever made. The City also invested in an assessment of its outreach effort to identify ways of improving its efforts. Unfortunately, this assessment was done by the City alone, at the end of the process rather than by developing outreach goals and assessment metrics at the beginning of the initiative.

The project demonstrated that, if sufficient time is allowed and an appropriate budget is provided, very large and complex projects can be successfully completed on a co-creative basis.

4.6 Zapopan: Reto Zapopan ("Zapopan's Challenge")

Project Description

Like the Lisbon Incubator Network project, this project aims to make its host city more entrepreneurial and innovative by supporting start-up entrepreneurs and companies. Entrepreneurs are invited to compete in a process that offers substantial support to those deemed most likely to succeed.

Reto Zapopan has initiated two calls for interested entrepreneurs, one in 2013 and the second in 2014. The calls were marketed through traditional tools (advertising, flyers, conferences, etc.), as well as through a website and social media. Each call generated over 1000 applications; semi-finalists were chosen and made pitches to a committee, which identified the 110 winning projects each year. Winners are provided with:

- a business center where they can work individually or in groups;
- consulting support, mentorship and training, including diagnosis of business proposals and development of an action plan to accelerate startup;
- funding and capital raising possibilities; and,
- the opportunity for top projects to participate in an entrepreneurship boot camp in Boston, USA: MassChallenge, a leading business accelerator.

The project originated in the Citizen Consultation Forum on economic development. Students, entrepreneurs, businessmen, not-for-profits and citizens participated in the forum events in person and through social media, making requests and offering proposals. The city decided to develop Reto Zapopan by recruiting an Experts Committee, including business leaders, successful entrepreneurs, academia, members of the entrepreneurial ecosystem and presidents of industrial chambers, who helped the city design, implement and, most importantly, help integrate the program into the start-up community ecosystem. A consultancy and training sub-committee — made up of private sector and academic experts provide mentorship and training for the entrepreneurs, while a finance subcommittee made up of government and private sector experts handle credit issues. Some Experts Committee members also participate in the evaluation of entrepreneurs' applications to the program.

The project is fully funded by the municipality through a trust (Master Trust for the Economic Development of Zapopan). The trust's board, including representatives from the three most important industrial chambers in Jalisco (CANACO, CCIJ, CANACO) and city officials, meet regularly to consider funding new initiatives and strengthening the program.

Assessment of suitability for a co-creation project

Similar to the Lisbon model, which had a similar objective, this project was small and defined with a reasonable time frame. It has substantial potential for generating new information and innovation. It has limited potential for advancing neighborhood solidarity and citizen empowerment, but has strong potential for building partnerships among entrepreneurs, consultants and mentors. Overall, this is a good project for a co-creative approach.

4.6 Zapopan: Reto Zapopan ("Zapopan's Challenge") cont.

Assessment of the use of co-creative techniques

The project originated in city-led collaboration among the city, the private sector, not-for-profits and the public. A committee made up of experts in business, academia, not-for-profits and the city guide the design and ongoing implementation of the project. Its funding is provided by the city, acting with the advice of private sector representatives. All these elements point to a strong co-creative approach that has generated a great deal of information that would not have been generated without participation of all the partners involved.

It is noteworthy that the city provides all the funding for an ongoing program; neither the business sector nor other partners provide any form of funding. Over time, this situation could lead to the program becoming less co-creative, with the city making most of the decisions and the roles of the various committees becoming more advisory. This is one issue that might be addressed when the program is sufficiently well established and an assessment of it can be made.



*Mayor Hector Robles of Zapopan photographed with Mike Lake of Leading Cities and Scott Bailey of MassChallenge while signing partnership agreement to launch Reto Zapopan.
Credit: Leading Cities*

5

LESSONS LEARNED AND RECOMMENDATIONS

5.1 Lessons learned from Leading Cities co-creation research

1. *Co-creation is a valuable tool that can help cities cultivate innovation in their public policies and increase opportunities for citizen engagement.*

Our studies have shown that while co-creation can be more time-consuming and sometimes more expensive than other forms of citizen engagement, cities are more able to build strategic partnerships and tap into the knowledge and resources available in academic, non-profit and business communities.

For example, the Hamburg case study compared the results of a traditional citizen engagement process and a co-creation engagement approach. It found that the process that emphasized dialogue among members of the Q-helix brought new information and innovation into the process, therefore resulting in a better foundation for policy decision-making.

2. *The most effective co-creative processes are those that involve all five sectors of the community – government, business, academia, not-for-profits and citizens (the "Q-helix") throughout the engagement process.*

Engaging all five sectors takes the unique needs, expertise and perspectives of the community into account and provides more opportunity for creative solutions. This also reduces the risk of implementing solutions that are not relevant or appropriate for the communities involved. Full involvement of citizen representatives is particularly important, as it is essential to building a sense of credibility and community ownership over outcomes in the process.

For example, in the Vancouver case study, every sector was welcomed into the Greenest City Action Plan engagement process. The inclusion of a diverse range of voices resulted in a more comprehensive set of objectives, targets and actions, which were more fully embraced by the public service and the communities affected by them.

3. *Involving partners as early as possible in the co-creative process can increase credibility and ownership over outcomes.*

Traditional consultation processes often lack credibility because citizens think a decision has been made in advance and engagement is merely a formality. To avoid this reaction, it is critical to engage Q-helix partners in identifying and clarifying the issue to be addressed (problem definition) and in design of the engagement process itself, before any community-wide engagement processes begins. While not always operationally feasible, it is usually preferable to involve representatives from each sector as early as possible and to maintain involvement through to completion. This will help to increase trust among stakeholders and increase transparency around decision-making processes.

None of the Leading City examples involved full Q-helix in engagement design, but the Vancouver and Barcelona examples came close. Their success was due in large part to the broad representation they built in throughout the process.

4. *Evaluation of a co-creative process is an essential element of the process.*

Very few citizen engagement processes, co-creative or not, are formally evaluated. This shortcoming limits the ability of city governments to learn from these processes, improve future projects and build more trust within the community.

Co-creative process evaluations should be overseen by a Q-helix group and should assess the experience and perspectives of each sector. This should also involve members of the group that helped design the process.

The Hamburg project used an excellent evaluation methodology and was able to compare and contrast the results of a co-creation approach with those of a more traditional engagement project on the same topic.

5. *Co-creative approaches are the most beneficial in projects where the city has far less relevant information or expertise compared to other sectors.*

In today's fast moving world, cities relatively lack expertise in many areas, notably when it comes to new technologies, innovative business approaches and best practices from elsewhere in the world. Co-creative processes can be highly efficient in bringing different kinds of knowledge to cities.

Most cities we studied (Barcelona, Zapopan, Lisbon, Vancouver, Boston) used co-creation techniques to learn about subjects where they lacked knowledge, and thereby gained a great deal of important new information.

6. *Co-creation works best by having clearly defined rules of engagement that allow for agile and iterative decision-making processes.*

The more participants there are in a process, the greater the possibility of disagreements. Making the effort to define a clear terms of reference along with common expectations and goals at the beginning of the process can offset these difficulties and provide a framework for resolving disagreements and building consensus.

There will be instances, however, when new information and emerging factors change the playing field and the goals of a project. While co-creation projects should be open to pivoting and iterating in the face of emerging factors, even if a whole new set of outcomes might be necessary. Co-creation allows city governments to experiment with new approaches and share both the benefits and the risks among other partner organizations & citizen groups.

The Hamburg example demonstrates how unstructured processes that fail to come up with actionable recommendations that are agreed upon by the majority of stakeholders can undermine the process and its impact on city decision-making.

7. *Experimenting with different forms of outreach to stakeholder groups can improve project success and social acceptance around outcomes.*

With declining interest in civic affairs among many groups, traditional methods of outreach can fail to meaningfully engage certain citizen groups (often the poor and youth) as well as other stakeholders. Developing innovative ways to engage hard-to-reach stakeholders can be costly in terms of time and funds, however, the extra effort made enhances public acceptance of the results.

The extra effort taken by Vancouver to create novel and entertaining ways of engaging new audiences (Dragon's Den and Pecha Kucha events) gave their engagement activities higher profile in the media and added to the credibility of the outcomes and the engagement process.

8. *Co-creation projects may not involve the same partnerships at every stage, but efforts to engage stakeholders throughout the process are invaluable.*

While it is always beneficial to involve Q-helix representatives as early as possible and at each stage of the process, it may not always be operationally feasible for all partners to participate due to budget restrictions and the time involved in participating fully. Our case studies have shown that introducing new partners, even at a later stage can still produce significant benefits and positive results. Co-creation processes need to stay flexible and adaptable.

Lisbon, Zapopan, and Boston case studies offer examples of how engagement can evolve to encompass new partnerships at different stages in the process. Boston in particular highlights that projects can start off more traditional and incorporate co-creation principles at a later stage to build strategic partnerships and cultivate positive results.

9. *Providing a combination of engagement modes makes co-creation processes more inclusive and accessible.*

Some co-creative processes are predominantly conducted online, while others lean more heavily towards face-to-face discussion. Online dialogues are less costly, quicker and easier to arrange, and can involve a much larger number of stakeholders and citizens. Because certain populations are excluded from these processes due to lack of computer literacy or access to technology, results may be seen as less inclusive compared to those generated through face-to-face discussion. Despite having more credibility, face-to-face discussions are more complex, time-consuming and costly to design and complete. The most effective engagement processes offer people a variety of ways to provide feedback and get involved.

There are also challenges with new online platform, however, such as the difficulty of identifying and ensuring that user profiles are legitimate. This lack of transparency can encourage people to state a more radical position than they might in a face-to-face meeting. It can also allow special interest groups to manipulate public opinion. Likewise, those who lack computer literacy or speak different languages are disadvantaged when it comes to ensuring their voices are heard. In order to manage this bias, multiple forms of engagement should be offered and weighted

accordingly.

Among our examples, Barcelona used relatively low cost, mainly web-based engagement tools. Hamburg used mainly face-to-face methods, at a greater cost. Vancouver had a more substantial budget and utilized a combination of the two approaches.

5.2 Recommendations to encourage co-creation as part of citizen engagement

The following recommendations are intended for mid-sized cities around the globe, built on the experience of the members of the Leading Cities network.

Recommendation 1: Invest in evaluation, education and research around citizen engagement

Cities should build an evaluation process into each of their citizen engagement activities and the results of these evaluations should be made public. Universities can assist by encouraging cities to undertake evaluations, offering to help develop evaluation protocols and participating in evaluation processes. Cities and universities can partner to develop experiential learning courses in evaluation, seminars on evaluation techniques and student internships with city citizen engagement experts. City-university partnerships can also develop citizen engagement research projects and seek grant and other funding for such projects.

Recommendation 2: Explore opportunities to build co-creation techniques into new and ongoing citizen engagement processes

Cities that are familiar with co-creation should consider the degree to which their citizen engagement processes can be improved by more co-creation with Q-helix partners, in particular through engagement with these partners before broader citizen engagement on new initiatives takes place. Cities unfamiliar with co-creation can undertake small pilot projects, such as the Barcelona project outlined in this paper, to gain experience and experiment with Q-helix co-creation.

Recommendation 3: Develop an ongoing cross-sectoral public dialogue about the importance of evaluating citizen engagement initiatives and the advantages of a co-creative approach to citizen engagement

The public needs to be informed about the advantages of co-creation and the necessity of evaluating citizen engagement activities. But before any public awareness programs are launched, there needs to be robust dialogue with representatives of each of the Q-helix sectors to ensure their support. How such a dialogue might best be developed will vary from city to city. Here are some examples:

- Leading Cities Local Advisory Boards can connect Q-helix sectors partners, gather broad input and encourage collaboration around key urban policy issues and citizen engagement initiatives.
- Cities can partner with local institutions to launch cross-sectoral dialogues. Such institutions can be found in any Q-helix sector — for example, university business schools, chambers of commerce, charitable foundations, civic associations and government advisory organizations.
- Organizations involved in advancing open data or other projects aimed at data sharing between cities and stakeholders could become natural partners in leading a discussion on co-creation and citizen engagement.

Once substantial support in each sector for evaluation of citizen engagement activities, and for a co-creative approach to improving the effectiveness of these activities, has been achieved, a broader public dialogue can be launched. Local media can play an important role in launching such a dialogue. In addition, Q-helix partners can build public support through hosting events such as idea jams & design competitions which focus on co-creative approaches to identifying issues, brainstorming potential solutions and creating a foundation for innovation and grassroots initiatives.

Recommendation 4: Foster dialogue and information sharing among mid-size cities on their experience with citizen engagement and co-creative approaches.

Cities in each country have numerous associations for information and experience sharing. In addition, international organizations such IAP2 promote discussions on citizen engagement techniques. Leading Cities will continue their own knowledge exchange around ways to promote more evaluation of citizen engagement processes and more use of Q-helix co-creative techniques.

6

CONCLUSION

The wicked problems facing cities are not going away — they continue to proliferate. Governments everywhere, including cities, face mounting financial challenges. The public is increasingly frustrated by lack of effective participation in the governance of their communities, while having less time available to engage with city decision makers. So cities must find more efficient and more effective ways to engage with their citizens.

Evaluating citizen engagement processes is a prerequisite to better citizen engagement; Q-helix co-creation improves citizen engagement processes and outcomes by bringing to bear the expertise of the entire community.

Ultimately, better performance by cities requires building trust and collaboration among a highly and increasingly diverse range of stakeholders. Involving the people affected by these issues in the decision making process is the most effective and efficient way of building trust. This is an ongoing and cumulative process — each successful citizen engagement process establishes more credibility and builds working relationships that make implementing the next engagement easier. Conversely, each poor or unsuccessful engagement process can potentially destroy trust, or at best be a lost opportunity to build trust.

By making decisions 'with people and not for them', city governments can ensure their efforts are seen as not only effective, but also legitimate. By fostering greater collaboration and social cohesion, cities will become more resilient, more democratic and better prepared to face the wicked challenges of today and tomorrow.

For its part, Leading Cities will continue to explore and cultivate best practices around co-creation as it facilitates capacity building and knowledge sharing within its expanding network of cities across the world.

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