CO-CREATING CITIES

DEFINING CO-CREATION AS A MEANS OF CITIZEN ENGAGEMENT



Leading Cities



ACKNOWLEDGEMENTS

We would like to thank the support and intellectual contributions within each of the following participating cities in Leading Cities: Anna Garcia Hom, Ramon Moles, Joaquin Rodriguez Alvarez, and Carles Agusti in Barcelona; Barry Bluestone, Joan Fitzgerald, lan Sample and Daniel Spiess in Boston; Jamie Cudden and Brendan Williams in Dublin; Joerg Knieling, Claire Duvernet, and Merle Panneke in Hamburg; Paulo Carvalho and Luis Moniz in Lisbon; Vincent Michelot and Hubert Julien Laferriere in Lyon; Moura Quayle and John Tylee in Vancouver; and lan Paul Otero and Slavi Gonzalez in Zapopan.

We also wish to thank the Northeastern University Fall 2012 Master of Urban and Regional Policy Practicum class: John Ferrante, Lindsay Morgia, Nathan Peyton, and Po-Yu for background research and Joshua Hurwitz for additional research assistance.



TABLE OF CONTENTS

	Introduction	1
2	Background	1
3	Understanding Co-Creation	2
4	Co-Creation Defined	-
5	Co-Creation or Public Participation	4
6	The Case for Co-Creation	5
7	Risks of Co-Creation	7
8	Conclusion	7

1

INTRODUCTION

People and their cities are engaging in new ways. In some cities, anyone with a smart phone can report graffiti or a pothole directly to the right city department. Some can now vote via the internet on how a city should spend its money. Others can use their computers to volunteer to shovel snow around fire hydrants. Still others participate in change labs that elicit their engagement from problem definition right through to finding solutions.

All of this activity is part of a process called co-creation. Originally conceived as a business strategy for identifying new forms of customer engagement, city governments now benefit greatly from co-creating - sharing, combining, and maximizing opportunity – at a time when cities are asked to do more with dwindling resources.

This report presents a look at the world of co-creation for policy makers, local officials, citizens, businesses, and other city stakeholders. We have researched the following questions in eight participating cities (Barcelona, Boston, Dublin, Hamburg, Lisbon, Lyon, Vancouver and Zapopan):

- 1. What is the current understanding of co-creation?
- 2. What is the scope of co-creative activities?
- 3. How can co-creative processes be utilized effectively in the public sector?

This report addresses the need to clearly define co-creation. We look at the details, advantages, and challenges of co-creation between city government and citizens, particularly with an eye to creating a more sustainable (economy, equity, and environment) city. We begin with a look at why government leaders should be encouraging more citizen engagement and how co-creation is different from, and potentially more beneficial to, traditional involvement methods. We then create a typology of co-creation methods and examine the wide range of co-creation techniques – some, but not all, involving new technology. The spectrum of techniques looks at smart phone applications, website services providing city governments with feedback from citizens on important issues, and Urban Change Labs which pair citizens, academia, and city government to brainstorm on solving neighborhood issues.



BACKGROUND

The modern concept of co-creation emerged from the business world in the 1990's as a new form of engagement with customers, one where they would *participate* in the production of the very products they would consume and, in turn, co-create value⁷. All participants in the co-creative process ostensibly can derive value from the process. Empowered customers were predicted to be the main source of innovative ideas in the future².

Co-creation, as it began in business, involves active, bilateral (or multi-lateral) relations with the firms which had previously been simply suppliers. Similarly the relationship between government and citizens has historically been that of supplier and consumer. Generally, co-creation in the public sector realm has been conceived as "creating new solutions, with people, not for them"³. Dork and Monteyne (2011) conceptualize citizen engagement in computer science terms; for them open data becomes 'deciphering the urban code' and co-creation becomes 'hacking'. As they explain, "instead of creating a new urban operating system from the ground up, activists create prototypes of change and spread them like computer viruses throughout the city and around the world."⁴

Co-creation moves the balance of power. Government, traditionally in a role of inviting the public in for comments on pre-determined programs, functions in a more iterative decision making process. Part of this hierarchy-flattening involves a significant degree of trust and transparency between citizens and government officials.



UNDERSTANDING CO-CREATION

The concept of co-creation has slowly trickled into the public sector's discourse and the reasons for engaging the public in these new ways vary. Opportunities for co-creation arise fundamentally from the need to change, whether it is service delivery technologies, communications, or even the patterning of service delivery,⁵ but traditionally governments are risk-averse and change-resistant⁶. Co-creation has also evolved because of the nature of the very complex challenges that now face cities – challenges that require an "all hands on deck" approach from problem identification through resolution. Some cities such as Barcelona have historically applied co-creation techniques while others have a long history of functional separation between public administration, academia, the private sector and the pubic. Still others, such as Hamburg see co-creation as an emerging concept of applied policy.

The Catalan tradition of "Associacionisme," for example, greatly informs and influences the role of citizens in the decision making process in Barcelona. Neighborhood associations, one of many types of organizations that emerged from the Associacionisme movement in the 19th century, were traditionally formed by citizens looking for solutions and change and subsequently became one of the most important methods of channeling citizen participation into active involvement in policy decision-making in all phases: diagnostic, design, implementation, and evaluation. However, as neighborhood association memberships have fallen, Barcelona officials and citizens increasingly use co-creation methods to supplement the associations' involvement and integrate more stakeholders and citizens into the policy making process. Co-creation techniques in Barcelona, therefore, are viewed by many as a tool for increasing social capital. For example, the IRIS Projectⁱ (Incidencias, Recalamaciones y Sugerencias), a multi-channel platform of city-related issues management, embodies one the first attempts to improve co-creation in Barcelona. It allows citizens to communicate with the City Council by various means (mostly by telephone), it creates a database of "city problems", fostering citizens' civil actions. From this input, City Hall has developed many projects to foster co-creation thanks to the new technologies like Arreglamicalle, or Pla Buits (see Pla Buits example).

EXAMPLE: PLA BUITS

"Pla buits" or "Empty Space Plan" which offers 20 sites for temporary use, two per district, to non-profit organizations that aim to involve civil society in determining how these vacant sites should be reclaimed by the city. Since the start, almost 30 neighborhood associations, foundations, and non-profit societies sent 32 proposals to manage the empty spaces. The most popular ideas to use the spaces were urban gardens, parks and sport-related or art-related activities. An evaluation of the Pla Buits project is pending.

Some nations and cities have long histories of functional separation between government, the private sector and academia. Particularly in social sciences and public affairs a stigma still exists against direct collaboration with the private sector for either ideological reasons or because of past abuses from what the French call "pantouflage." Pantouflage, what economists describe as a "revolving door," describes the practice of public servants leaving to take a position at a private company within the same field. Generally, when local government needs expertise to implement a project, it turns to its own personnel and/or departments or to consulting firms, which are often satellites of municipal or regional government. It is rare for a municipality or a regional council to turn to an academic institution for an experts' opinion because of an existing prejudice that the academic approach is too theoretical. However, certain co-creation projects at the city level -- in Lyon, for example -- show that this silo mentality may be changing.

In Germany the debate about the role of citizens and new planning structures is ongoing, but is seldom referred to explicitly as "co-creation." The word "Mitgestaltung" for instance (literally co-design or co-creation) is often used in that regard (Heidi, 2008; Jungman, 2012; Albers, 2013). Whether or not specifically labeled as such, the concepts of co-creation are being applied and experimented with in Hamburg today. (See Next Hamburg example)

EXAMPLE: NEXT HAMBURG

Next Hamburg is a community of citizens initiated in 2009 by urban planning and communications professionals, which aims to find innovative and creative ideas for urban development in Hamburg. This platform allows citizens to discuss new ideas and future visions for their city. The dialogue takes place either on-line or during workshops organized twice a year. A book with the top-rated suggestions was published in October 2012. The next step is to select among all the projects which could be completed, and to find a way to finance and implement them, in collaboration with the City of Hamburg.

The various interpretations and applications of co-creation, as evidenced by the examples above, demonstrate that no common understanding of co-creation currently exists. The purpose of the this report is to develop a comprehensive definition of co-creation as it applies to the public sector.



CO-CREATION DEFINED

The term "co-creation" elicits different ideas from different people. Scholars, practitioners, and articles reference the term but with different criteria for what actually constitutes co-creation initiatives and techniques. Some policy makers, for instance, would not consider a technique "co-creative" if it did not meet all of the nine characteristics below; others consider a smart phone app to be co-creative. We look at techniques that embody the spirit of city-citizen engagement in new ways and with promising improvements for the future.

We define 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.

Co-creative processes have the following characteristics. They are:

- **Systemic**: extends across the entire value-chain, "from generation, selection, incubation, and eventually, even to marketing the new product or service".
- Innovative and Productive: intended to generate new products and models of service delivery.
- **Collaborative**: transforms citizens from 'passive audiences' to 'active players.' In this sense, the relationship can be conceived of as a partnership.
- **Diverse**: involves many stakeholders and includes such actors as non-governmental organizations/civil society, business, and academics⁸.
- **Hierarchy-flattening**: the distinction between consumers and producers, users and designers, bureaucrats and citizens is blurred or transcended⁹. Co-creation shares power between government and citizens and other stakeholders rather than traditional structured or pre-determined programs, initiatives, projects, or campaigns into which people are asked to "plug in" and participate¹⁰.
- **Bi- or multi-directional**: Information and ideas flow among stakeholders. The process is neither top-down nor bottom-up. All stakeholders learn and gain value from co-creative processes and outcomes.
- Repeated and intense: The frequency, duration and volume of information exchanged in interactions between stakeholders is greatly increased using co-creative techniques.
- Mutually beneficial: a learning process, in which stakeholders learn from one another and participants assist others in a hope of improving their community in the long-term.
- Trusted and Transparent: Trust is a key component of public participation and co-creation. Trust comprises an important criterion for government a trusted central authority allows open and equal opportunity of participation¹¹.

Co-creation may also be heavily informed by the advent of new technologies. To the extent that co-creation is shaped by technology, five foundational technologies will influence how it plays out in the immediate future: broadband connectivity, public interfaces, smart personal devices, cloud computing, and open data infrastructures (Townsend et al 2012). The purpose of these technology advances in relation to citizen and stakeholder engagement will shape the extent to which they affect co-creation technique.

True co-creation, represented by all of the characteristics above, is not planned, structured, or driven by outside experts, professionals, organizations, or those external to the community, nor does it attempt to inspire, persuade, or manipulate people to adopt a particular view or position on an issue or agenda.



CO-CREATION OR PUBLIC PARTICIPATION

Is co-creation just another name for public participation? Even with the advent of new technologies, does co-creation simply represent public involvement in decisions made by government leaders? Public participation is an essential component of planning and policy making processes. For government leaders, agencies and developers, public participation allows them to collect and provide information about community needs, identify attitudes and opinions, generate new ideas, allow for smoother implementation, and build constituency support. However, for citizens and community organizations, co-creation can offer opportunities to gain representation and be heard, exercise political rights and influence policy decisions.

Co-creation fundamentally differs from public participation in a variety of ways. Co-creation techniques possess the potential for overcoming the limitations of time and geography and may allow a significant leap in the scale and influence of public involvement. While technology has, without doubt, broadened the ability of citizens to co-create, it is not a requirement. A low-tech approach is often missing from the literature on co-creation, which tends to focus on apps and web-based tools. Additionally, co-creative techniques view people as proactive citizens, rather than as consumers of services, focused primarily on culture change, rather than on short term outcomes, issues, or victories; and include a cross-section of entire communities, rather than parts of them¹². Rather than ask people to "plug into" existing pre-determined programs, initiatives, or campaigns, citizen-centered and co-creative approaches help people form and promote their own decisions, create new stakeholder maps, build capacities for self-government, and develop open-ended civic processes.¹³



THE CASE FOR CO-CREATION

Cities and citizens engage in co-creation for many reasons:

- 1. Public input and equality
- 2. Citizen empowerment
- 3. A more responsive government
- 4. Increasing citizen awareness
- 5. Increasing efficiency and effectiveness
- 6. Cost savings
- 7. Risk management
- 8. Value creation through innovation

Consistent with the intent of many other participation initiatives, co-creation has the ability **to increase public input and equity** into policy decision-making and build consensus. However, the inclusive nature of co-creation specifically provides the public, private, non-profit and academic sectors as well as citizens themselves the opportunity to serve as equal stakeholders. What further distinguishes co-creation from other participation initiatives is the involvement of these stakeholders at the very beginning of the decision making process beginning with the identification of the problem.

Citizen empowerment through co-creation can happen in several ways. For communities and citizen organizations, co-creation can offer opportunities to gain representation and be heard, exercise political rights and influence policy decisions. Citizens can become more **empowered**, breaking cycles of dependence¹⁴. Communities, through co-creation, may be able to create a new consensus based on local knowledge. Social capital can also increase through participation. Social capital improves the quality of social institutions, helps communities function more effectively, and creates a direct and positive effect on economic development. Improved social capital also balances the inequities that exist between races and classes. Additionally, participation can change institutions where privilege has embedded itself in societal norms, roles and organizations.

Some co-creation arrangements have evolved in response to declines in governance capacity. Co-creation can serve to fill voids when public administrations are unable to effectively cope with public needs. Critics may argue this is a deliberate transfer of responsibilities and accountability and highlight the risk of government becoming intentionally less responsive to public demands. However, co-creation stakeholders are shown to learn from one another¹⁵, and as a result, **government should become more responsive to citizen needs**¹⁶. Without community involvement, standardized solutions (those that are developed outside the community) have sometimes been found to be notoriously unreliable because they reduce the reliance on local knowledge and skill and limit the flexibility of people at the front lines to solve the problems they encounter¹⁷.

Policy makers must concern themselves with a balance between promoting progress and setting expectations. Allaying fears that co-creation creates unrealistic expectations in participants, proponents assert that citizens become more aware of and satisfied with the functioning of their local governments¹⁸. Opening a process to include input and participation at a fundamental level increases the exposure of stakeholders in both the opportunities and challenges of instituting change. While this may create pressure on institutions to change, it also serves to show how difficult change can be and provides an opportunity for challenges to be confronted by a larger and more diverse set of problem solvers.

Co-creation **increases the efficiency and effectiveness of city government**. While there are numerous examples of co-creation techniques resulting in positive change, there is a persistent question as to whether such an expansively inclusive process is an efficient way to operate. In many cases, co-creation is serving to tap into previously underutilized resources such as citizens themselves moving about the streets with smart phones. In Boston for example, *Street Bump*, a project of the Boston Mayor's Office of New Urban Mechanics, helps residents improve their neighborhood streets. As users drive, the mobile app reports data when bumps are encountered. That data provides the City with real-time information it uses to fix problems and plan long term investments. Digital co-creation tools have the power to quantitatively improve city government by facilitating real-time data collection, categorization, and redistribution of information. Co-creation also provides another means by which government can gain "social license" (i.e. gain legitimacy, credibility, and trust by community stakeholders) to enact policy.

The main reason that governments initiate these processes is to **lower costs and manage risks**¹⁹. For governments the main challenge is a common one: governments are told to watch and restrict their public expenses but are traditionally highly risk averse. Consequently, they hardly take any risk to implement services that could fail and thus innovation in the public sector is stymied. This is especially true of services that are not explicitly requested by citizens. Most governments do not have the right internal mechanisms to allow for the testing of new services and ideas. They either don't allow any innovative project to be implemented, or don't provide proper incentives (usually by punishing all failures), or they allow failures to continue endlessly. For public innovation to succeed, as in private business, failures should be acknowledged rapidly, and then changed based on feedback from end users to be tried again – and again²⁰. Initiation of new services is an area where co-creation can assist. Because co-creation inherently requires the participation of stakeholders throughout the process of problem identification and solution implementation, governments can be more confident in assuming risks along the way.

To lower costs, crowd-sourcing, for instance, can be used as an alternative to expensive outsourcing, such as hiring consultants. In this way, co-creation can reduce the costs of service provision, by as much as 60 percent in some cases²¹. Governments increasingly look to alternative measures of value beyond narrow cost-benefits²², and co-creation provides considerable intangible benefits, such as **value through innovation**. Dublin, for instance, shows how using low-tech or no-tech co-creation techniques can spur innovation and deliver not only costs savings, but intellectual property and potential new revenue streams as well. The Studio project in Dublin is a team of seven people from different areas of Dublin City Council whose aim is to grow the Council's capacity to innovate and improve the quality of city services by bringing people together to test new ideas and prototype new ways of working. The Studio uses approaches such as street conversations to consult with the public about different topics. (See The Studio Example) In the past two years, The Studio has participated in several projects including one for the Grafton Street Quarter to find out from a wide range of users what changes they would like to see in the area and their opinion about how to make it a better place to live, trade and use. The information coming out of the research will inform the work of the design team for the Quarter.

EXAMPLE: THE STUDIO

The Studio has successfully engaged employees and other stakeholders of the Dublin City Government to come up with new ways of achieving the desired results of their work in a more efficient way. In one such example, a public employee who led a team of laborers to maintain clear gutters and sewers, developed a new design for the city's storm drains that required less time to clean and thus allowed workers to more efficiently carry out their duties. The city has since patented the product, along with several others. This example highlights multiple levels of value creation - from efficiency to commercial patenting.



RISKS OF CO-CREATION?

Although there is the tantalizing promise of widespread civic engagement through co-creation, citizens vary considerably in terms of education, time, and motivation to participate in city government²³. Caution must be used in creating systems that are accessible only to some residents. It is critical to provide opportunities for all citizens to engage equally.

Co-creation tools such as the issue-oriented website MindMixer are only as good as their perceived credibility. Unlike a public meeting, neither city officials and staff nor other residents can trust each other's identities and credibility. Further, one cannot distinguish between citizen and corporate interests²⁴. And although the potential for expansion of participation is great, MindMixer only advantages those who are more tech-savvy and those with access to the tool to promote their ideas.

A significant amount of coverage on co-creation focuses on technology-enabled tools – smart phone apps, web-based forums, etc. – yet a majority of the world's population remains without access to such technologies. Smart phone usage, for example, is not nearly as ubiquitous as we may believe. Of the 5 billion mobile phones in the world, only a little over one billion are smart phones. If decision-makers are now paying attention to the volumes of data being produced by the users of these new technologies, are the voices of other city residents still being heard and responded to? Or, are these other residents' voices being drowned-out in a sea of data? Smart phone usage may be rising rapidly but officials must remain vigilant that co-creation goes beyond technology and truly embraces all stakeholders.

A core principle of co-creation is that an "extended peer community" consisting of all those affected by an issue will bring local knowledge to a project that would normally elude officials²⁵. To the extent this is true, participation, whether through co-creation or other mechanisms, may also lower the quality of government actions and the policy results. Increasing the amount of anonymous input could blur the line between "good participation" driven by civic interest and "bad participation" driven by NIMBYism and self-interest, a line that is inherently blurry to start with²⁶. An effective manager of the co-creative process must ensure participant engagement, manage risks, reduce complexity without imposing constraints, establish trust, and above all, continue to produce value for all participants²⁷.



CONCLUSION

One can see the potential of co-creation as a method of engaging citizens and demanding transparency and collaboration from government. While co-creation has existed for some time in the private sector by companies looking to capitalize on the value of their customer's feedback, it is increasingly recognized as an effective tool for governments as well. In many ways, the core principals of co-creation have been around for a long time - holding public meetings on projects and elected officials soliciting public feedback. But as the methodology of co-creation has evolved, this report seeks to establish some common "ground rules" for co-creation, including what we feel is the first true definition of the term as it is applied to the public sector.

The next phase of this research will focus on specific co-creation initiatives around the world, developing an index of successful methods and techniques for policy makers in order to increase public participation and enlist the resources within their communities to solve public policy problems and capitalize on opportunities.

9

REFERENCES

- Vargo, S., & Lusch, R. (2004). Evolving to a new dominant logic for marketing. Journal of Marketing, 68, 1-17.
- 2. (The Economist Intelligence Unit, 2008).
- 3. Bason, C. (2010). Leading public sector innovation. Bristol. Policy Press.
- Marian Dörk and David Monteyne. Urban Co-Creation: Envisioning New Digital Tools for Activism and Experimentation in the City. HCI, Politics, and the City (CHI 2011 workshop), May 2011.
- 5. Payne A; Storbacka K; Frow P, 2008, 'Managing the Co-Creation of Value', Journal of the Academy of Marketing Science, vol. 36, no. 1, pp. 83 96
- 6. Bason, 2010.
- 7. Ibid.
- 8. Ibid.
- 9. Lusch, R. F., & Vargo, S. (2006). Service-dominant logic: reactions, reflections and refinements. Marketing Theory, 6(3), 281–288.
- Gibson, R. (2006), Beyond the pillars: sustainability assessment as a framework for effective integration of social, economic, and ecological considerations in significant decision-making. Journal of Environmental Policy and Management. 08 (3)
- 11. Bott, M. & Young, G. (2012). The role of crowdsourcing for better governance in international develop ment. *Praxis: The Fletcher Journal of Security*, 27, 47-70.
- 12. Gibson, R. (2006), Beyond the pillars: sustainability assessment as a framework for effective integration of social, economic, and ecological considerations in significant decision-making. Journal of Environmental Policy and Management. 08 (3), 259
- 13. Ibid.
- 14. Needham, C (2008) 'Realising the Potential of Co-production: Negotiating Improvements in Public Ser vices', Journal of Social Policy and Society , themed section: 'Choice or voice or something else? User participation in public services', Greener, I. and Talbot, C. (eds), 7:2, 2008, pp. 221-31
- 15. Marian Dörk and David Monteyne. Urban Co-Creation: Envisioning New Digital Tools for Activism and Experimentation in the City. HCI, Politics, and the City (CHI 2011 workshop), May 2011
- 16. Percy, S. L. (1984). Citizen Participation in the Coproduction of Urban Services. Urban Affairs Review, 19(4), 431-446
- 17. Schorr, L. (1997). *Common purpose: strengthening families and neighborhoods to rebuild America*. New York. Anchor.
- 18. Leadbeater, C. (1984). Personalization through participation: a new script for public services. Demos. Lon don.
- 19. Bason, C. (2010). Leading public sector innovation. Bristol. Policy Press.
- 20. Arturo Muente-Kunigami. "Design Thinking for Government Services: What happens when the past limits our vision of the future?" Blogs.worldbank.org. Accessed on April 11, 2013
- 21. Bason, C. (2010). Leading public sector innovation. Bristol. Policy Press
- Kelly, G., Mulgan, G. and Muers, S. (2002), Creating Public Value: An Analytical Framework for Public Service Reform, discussion paper prepared by the Cabinet Office Strategy Unit, United King dom.
- 23. Sorensen, E. and Torfing, J. (2008). Theories of Democratic Network Governance. New York. Macmil
- 24. Needham, C (2008) 'Realising the Potential of Co-production: Negotiating Improvements in Public Ser vices', Journal of Social Policy and Society, themed section: 'Choice or voice or something else? User participation in public services', Greener, I. and Talbot, C. (eds), 7:2, 2008, pp. 221-31
- 25. Funtowicz, S. O., and J. R. Ravetz 1992. Three types of risk assessment and the emergence of post-normal science. In Krimsky, S., and D. Golding, ed. *Social theories of risk*. p. 251-274. Westport, CT: Prae ger. Accessed June 13, 2013.
- 26. Eden, S. and Bear, C. 2012. The good, the bad, and the hands-on: constructs of public participation, an glers, and lay management of water environments. Environment and Planning A 44(5), pp. 1200-1218.
- Kukkuru, M. Co-creation is today's most accepted model for innovation. Pricepoints.wordpress.com. Accessed March 4, 2013.

