

Data gathering as a transformative process for the common good

CONTEXT

Worldwide urban phenomena generate an enormous amount of data and, during the last two decades, the volume, accessibility and speed at which it is produced has increased significantly¹.

This evolution can be explained by the democratisation of gadgets for both personal (wearables, smartphones, etc.) and governmental use (sensors, satellite images, etc.), and also the data gathered by, for example, social networks and public and private apps. All this creates a scenario in which local governments have to implement, evaluate and design public policies within a paradox: the city and its inhabitants are producing a huge amount of data (data overload), but these datasets do not reflect the information required for the decision-making process (data dearth). To overcome this situation, we need to rethink the data gathering process in order to obtain more inclusive datasets both in terms of representation and accessibility to them.

To advance that goal, city stakeholders need to work together to build a shared vision: **data is a common good for designing appropriate public policies that improve people's quality of life.**

Data inequalities reflect urban inequalities

According to academic literature^{2,3}, there is a correlation between wealth and data quality (areas with higher incomes have better data). However, governments often have to design, implement and evaluate policies for the entire city using limited and incomplete datasets.

To overcome the risk of implementing decisions basedw on (always) incomplete datasets, it is important to identify the biases that affect the available datasets used in the policy-making process. To do so, co-designing with the community the method for gathering the data and deciding how it will be used could help to identify and correct data blind spots, increase people's trust in the process, and facilitate the incorporation of people's needs, ideas, and solutions based on their first-hand knowledge of the territory.

Data gathering as a transformative process

Most of the data used to design public policies has been created with the sole aim of obtaining the dataset. This approach does not consider the possibility of using the data gathering process for complementary objectives such as raising awareness, creating new communication channels between people and governments, and strengthening community ties.

Despite the fact that incorporating this transformative approach may increase the inherent complexity of an already complex process, the trade-off is positive for governments and communities. Examples of this positive trade-off includes the Waterproofing Data project in Rio de Janeiro⁴, the exploratory walks with women⁵, and community noise monitoring⁶. In the case of Rio de Janeiro, high school students were asked to monitor rainfall levels and to record floods. This helped young people to understand flood risk and increased their awareness of how climate-related hazards affect their neighbourhoods, whilst also generating valuable data for flood management agencies.

In the above examples, governments had the opportunity to involve the community in the data gathering process —although not an easy task—, to build more inclusive and representative datasets to support the design of public policies, whilst carrying out awareness-raising in the community.

POLICY RECOMMENDATIONS

- 1. All data-gathering processes should be designed with an inclusive approach** that leads to representative datasets of urban diversity (gender, age, education, wealth, etc.).
- 2. Innovation is not only based on the technologies used to collect information, but also the processes that facilitate data circulation** inside the administration and among all city stakeholders (private companies, community, academia, etc.).
- 3. The data gathering process can be designed not only to obtain datasets, but also to raise awareness on specific issues,** by, for example co-designing it with the community. However, it requires clear commitment and governmental action, time, and a lot of creativity.
- 4. Data literacy should be promoted at all levels,** paying particular attention to the use of commercial software and increasing awareness of its potential risks; e.g. identity theft, loss of privacy and online scams.
- 5. Digital trust.** Public stakeholders need to design strategies so that people can share their data with them as easily as they do with private stakeholders.

References

¹Between 2010 and 2021, the amount of data generated worldwide went from 2 zettabytes to 79 zettabytes. By 2025, it is forecasted to increase to more than 180 zettabytes. [Source: statista.com](#)

²[Source: Porto de Albuquerque et al. \(2022\) Policy Brief](#)

³[Cinnamon, Jonathan \(2019\).](#) Data inequalities and why they matter for development. *Information Technology for Development*.

⁴[Source: Porto de Albuquerque et al. \(2022\) Policy Brief](#)

⁵[More information: gendersteunescochair.com](#)

⁶[Source: making-sense.eu](#)

⁷[Source: theodi.org](#)

Data literacy

City stakeholders have implemented programmes aimed at increasing digital literacy among inhabitants so that they can take advantage of digital tools. However, we don't usually see the same effort being made to promote programmes explaining the potential use and misuse that public and private stakeholders may make of personal data.

Data literacy can be described as "the ability to think critically about data in different contexts and analyse the impact of different approaches when collecting, using and sharing data and information"⁷. It is a challenge to translate this into easy-to-understand guidelines for making the most appropriate decisions when sharing personal data. The legitimate public and private interest for obtaining permission to use such data have led to the creation of regulatory frameworks that are confusing for the average person. All of this has created a dual situation regarding the use of personal data: people easily share their information with private stakeholders —for private benefit—, but are reluctant to share similar information with public stakeholders —for the common good.

Data: a new common good

Governments need to move towards a framework in which data generated by the city and its inhabitants should be for the common good, while still representing benefits for private stakeholders. This objective is inherently complex and requires long, mid, and short-term strategies and actions.

 **Long-term:** In addition to existing open-data platforms, governments should build synergies in order to create platforms where data generated by all city stakeholders (public, academia, community and private) are easily accessible. With this kind of public-private platform, the public stakeholder can access better and more inclusive data to complement what they already have. In addition, private stakeholders can use that data to deploy their services in a more effective, tailored way.

 **Mid-term:** Designing digital strategies and collaborative platforms to gather, store and process data also facilitates data circulation among all city stakeholders and helps to increase public trust in digital platforms and public policies. This objective also helps to break down silos within and among different departments of a local government.

 **Short-term:** The data used by local authorities should be also translated into clear and easily comprehensible outputs with added value for people. In this regard, public stakeholders could improve significantly; for example, by proposing a data-based participatory process for policy design; traceability of the suggestions submitted by inhabitants; or by creating an evaluation and monitoring process for implementing policies. All of this helps to transform data, an intangible asset, into something that people can interact with.

These examples show a clear intention to increase people's trust in public and private stakeholders in relation to the use they make of their personal data. This trust is a key instrument for transforming data collected for a single purpose into data collected for the common good.

Common Good– In philosophy, economics, and political science, the common good refers to either what is shared and beneficial for all or most members of a given community, or alternatively, what is achieved by citizenship, collective action, and active participation in the realm of politics and public service. [Source: The Right to the City](#)