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Open Data

BENCHMARK REPORT

JULY 2021

This publication forms part of a suite of benchmark reports produced by the G20 Global Smart Cities Alliance to analyse trends in smart city governance across the 36 Pioneer Cities of the Alliance.

Introduction

Since its first appearance more than a decade ago, open data has grown in importance, impact and adoption. For city administrations, open data can deliver a range of benefits. These include:

– Providing smart city technologies and advanced urban services for much of their core functionality

– Making sure public servants and the private and voluntary sectors have access to data to pursue innovation opportunities in technology and analytics

– Increasing transparency and promoting more government accountability

– Creating an open, common and reliable evidence base to support policy development, decision-making and democracy

– Establishing open, contestable markets for technology in city services

Intended to be applicable to cities at all stages of development, and to respond to the challenges and opportunities presented by increasing data volumes and rapidly advancing data-intensive technologies, this policy builds on early practice across governance, standards and internal and wider ecosystem organization.

Some 34 Pioneer Cities provided details of their open data policies. Figure 1 shows the extent to which a policy for open data has been adopted in these Pioneer Cities.

Key findings

– **In contrast to other policy areas, the majority of Pioneer Cities are already implementing an open data programme** (26/34 cities) **and most have a written policy** (20/34 cities) (Figure 1).

– **Most Pioneer Cities have a central data team** (27/34 cities).[1] In most of these cases, a central team has organization-wide responsibility for data and open data management.

– The value and costs associated with open data platforms often depend on the degree to which they are integrated with the underlying data infrastructure of the city and its partners. When integration is lacking, data becomes more costly to publish and harder to tie into services that require reliable, regular (or real-time) data. **Direct integration between open data portals and data infrastructure is rare in Pioneer Cities** (5/34 cities).[2]

> **The City of Melbourne's open data team use(s) an integration software package called Feature Manipulation Engine. This allows for most data sources to be virtually integrated into the open data programme.[3]**
>
> **Melbourne,** Australia

– **Collaboration through open data platforms is hindered due to a low level of trust in data platforms and an inability to demonstrate business or social value.** Organizations need to be convinced to join a city data platform and share their data. Many Pioneer Cities face two main barriers to persuading organizations to join the city data platform:

  1. Low trust in the government's ability to address data misuse and data breach issues[4]

  2. Challenges in persuading organizations at an early stage of the benefits of an open data platform

  3. Lack of common governance arrangements for data sharing and publishing

  4. A complicated or unclear relationship with privacy laws and other city policies (e.g. data security)

- Once the initial excitement about a data platform dies down, cities need regular assessments to drive progress in unlocking data, maintaining high-quality data and demonstrating its value. The model policy specifies that as part of their open data plan cities should undertake periodic assessments of data availability, quality, interoperability and discoverability on at least a prioritized part of their data inventory (e.g. mobility). **Only about one-third of Pioneer Cities conduct such periodic assessments of their open data practices** (12/34 cities).[5]

- Open data is the most popular area of the five areas among Pioneer Cities, with 34 cities participating in the assessment. According to the survey, the top three biggest potential gains from adopting and implementing an open data policy area are:[6]

1. Encouraging the development of innovative technology solutions and data analytics by a broader group of stakeholders

2. Strengthening public understanding and trust of city operations and other information concerning their communities

3. Generating economic opportunity for individuals and companies

The current state of play

Our Pioneer Cities apply many of the features of an open data policy, from centralized data teams to dedicated funding and open data portals. However, many of the thorny issues surrounding open data remain, preventing cities from reaping the full benefits of the policy. Specifically, cities should consider:
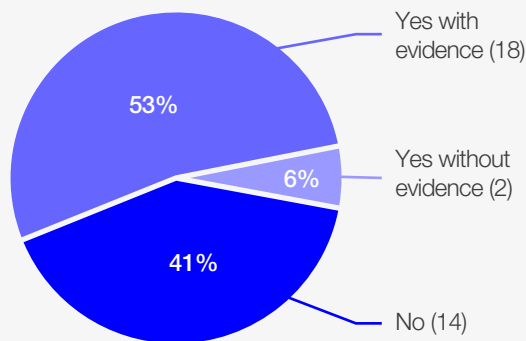
- Stronger integration of open data policy and data infrastructure to achieve cross-cutting data flows, which would be beneficial to the functionality of city services

- Developing flexible but clear data governance arrangements that provide clarity on the role of data custodians, data processors, data subjects and usage rights, but that also encourage data publishing
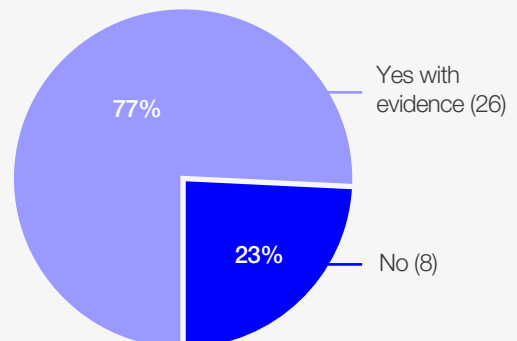
More guidance on these points can be found in the model policy.

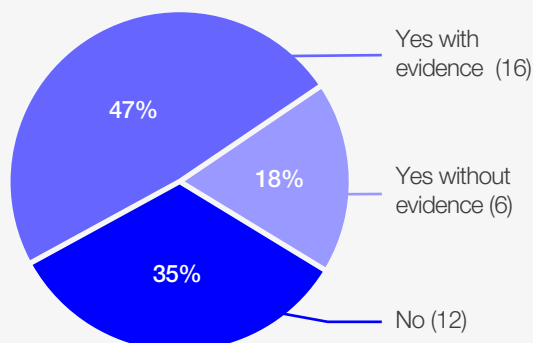FIGURE 1 | **Adoption and implementation of policies for open data**
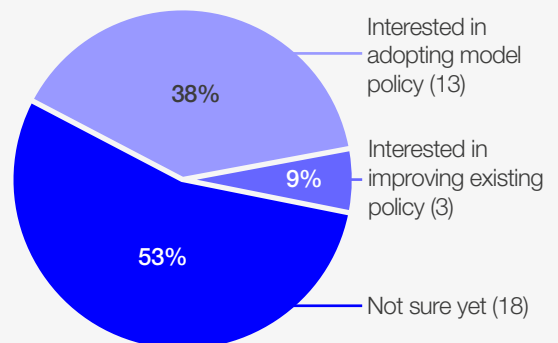

Cities with a written policy[7,8]

- 53% — Yes with evidence (18)
- 6% — Yes without evidence (2)
- 41% — No (14)

Cities with policies implemented[9,10]

- 77% — Yes with evidence (26)
- 23% — No (8)

Cities with funding/resources allocated[11,12]

- 47% — Yes with evidence (16)
- 18% — Yes without evidence (6)
- 35% — No (12)

Cities interested the model policy[13,14]

- 38% — Interested in adopting model policy (13)
- 9% — Interested in improving existing policy (3)
- 53% — Not sure yet (18)

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Acknowledgements

Endnotes

1. OD5.1: "Does your city have a central team or resource with organization-wide responsibility for data and open data management?"
2. OD5.3: "Is your city's open data portal directly integrated with the city's data infrastructure and e-government workflows? i.e. where possible, data is published automatically without manual data import."
3. Interviews with Melbourne city officials, conducted on 9/3/21, on Zoom.
4. Interviews with various Pioneer Cities, conducted 3/3/21–9/3/21 on Zoom.
5. OD5.5: "Does your city undertake periodic assessments of data availability, quality, interoperability and discoverability?"
6. OD6.1: "Which two or three of the following do you see as the biggest potential gains from adopting and implementing an open data policy (mark up to 3)?"
7. Pioneer City Assessment Survey OD2.1 "Does your city have a written policy (or set of policies) for open data?"
8. OD2.3: "Please share a link to the most relevant document – link."
9. OD3.1: "Does your city already have an open data platform available for use by data publishers and data consumers?"
10. OD3.2: "Please provide details and a link to this platform – link."
11. OD4.2: "Are there resources or funding available for the operation and maintenance of the open data platform?"
12. OD4.3: "Please describe these resources – funding/budget per year."
13. OD7.3: "Having reviewed the model policy, will your city work towards adopting the model policy or some version of it in the future?"
14. CPPF 2.1: "Please select all model policies that your city will be working on in future stages of the Pioneer Programme (including attending workshops and developing policy proposals)."

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