



BENCHMARKING HONG KONG AGAINST TAIWAN, UK, USA & SINGAPORE

A REPORT BY
THE OPEN DATA INITIATIVE
HOSTED BY
SOCIAL SCIENCES RESEARCH CENTRE
THE UNIVERSITY OF HONG KONG
JULY 2018

A SHORT BENCHMARK REPORT BASED ON THE DATASET AND METHODOLOGY IN THE GLOBAL OPEN DATA INDEX

This report provides a comparison between Hong Kong and some of the leading countries and territories in the world leading in Open Data: HK (No. 24) with Taiwan (No. 1), UK (No. 3), USA (No. 11) and Singapore (No. 17). The focus is on areas where Hong Kong can easily improve ranking to catch up significantly. This will help provide the key context on the social and economic value of Open Data amongst government bureau and departments, data providers, data users and other stakeholders.

The Open Data Initiative is sponsored by:

General Support Fund
Innovation and Technology Commission
HKSAR Government

Knowledge Exchange Office
The University of Hong Kong

A BENCHMARKING REPORT BY THE OPEN DATA INITIATIVE

HOSTED BY
THE SOCIAL SCIENCES RESEARCH CENTRE
THE UNIVERSITY OF HONG KONG

July 2018

Background and Introduction

Hong Kong ranks low among developed countries and territories in Open Data ranking (#24). Improving this rank would add a competitive edge for Hong Kong, in its ranking against other Asian countries and territories, and worldwide. For this, consensus on the major benefits to social and economic development should be sought. Question which ought to be asked include:

- Why and how can data owners around the world publish datasets as Open Data?
- Which are the easiest and hardest aspects of Open Data implementation in Hong Kong?
- What are the myths and what are the real difficulties at a practical level?
- What action can Hong Kong take in the short term to significantly improve its international Open Data ranking?

The Datasource, Strengths and Weaknesses of the Methodology

The analysis in this report focuses on the “Global Open Data Index 2016/2017” (GODI 2016/2017), particularly the datasets and methodology. The approach used in the global index applies a “crowdsourcing” method, which includes inviting volunteers to submit comments and responses of countries and territories around the world according to defined definitions on “Open”, “Open Data” and “Open Content”:

***“Open data and content can be freely used, modified,
and shared by anyone for any purpose”.***

<https://opendefinition.org/od/2.1/en/>

This measurement of the “Openness” of Government Data holds a civic perspective along established guidelines. The focus reviews “places” (cities, territories or countries) to measure specific data sets, which are:

- 1) Budget;
- 2) Spending;
- 3) Procurement;
- 4) Election results;

- 5) Company register,
- 6) Land ownership;
- 7) National maps;
- 8) Administrative boundaries; and
- 9) Locations.

GODI (Global Open Data Index) is still the most comprehensive index which measures 94 “places” and 166 open data sets from around the world. The main strengths of GODI are:

- 1) Comprehensiveness and global coverage;
- 2) Comparison across “places”; and
- 3) Simplicity, for the governments of “countries” and “territories” to implement simple measures to achieve rapid improvement (i.e. exactly what Taiwan did to achieve number one ranking in the world within 3 years).

The main weaknesses of GODI’s methodology are:

- 1) High reliance on the expertise and number of volunteers;
- 2) High reliance on a specific list of datasets;
- 3) Uncertain status (GODI has discontinued updating the rankings since 2016).

Strengths and Weakness of Hong Kong – Number 24 in the World

- Hong Kong’s **Overall score is 51%** and only **20% of government datasets are considered open** (i.e. “freely used, modified, and shared by anyone for any purpose”).
- “National Statistics”, “Procurement” information and “Air Quality” rank highly (100% openly licensed, machine readable, downloadable, up-to-date, publicly available and available free of charge).
- “Government Budgets”, “National Maps”, “Weather Forecast” and “Election Results” datasets get 80% to 85% score on account of some of the data are not downloadable at once or are not downloadable in commonly available dataset formats.
- “National Laws”, “Draft Legislation” and “Water Quality” get a low score 30% to 65% on account that they’re not up-to-date or are provided in pdf or non-machine-readable formats.
- “Administrative Boundaries”, “Company Register”, “Locations”, “Government Spending” and “Land Ownership” gets a 0% score on account that the datasets do not meet the open license, free of charge and other Open Data dataset provision criteria.

Strengths of Taiwan – Number 1 in the World

- Taiwan ranks number 1 in the world, has an **overall score of 90%** and **80% of its datasets are considered open**.
- Amazingly, Taiwan shot up from a relatively low rank of 36 in the world in 2013 to its number 1 position in 2016 position within 3 years;
- Nearly all of Taiwan’s datasets are now rated as 100% open. “Water Quality” and “National Laws” are rated 85% and 60% open on account of not being downloadable in XML format and some are not in machine-readable pdf format.
- It seems that many Open Data specialists/activists in Taiwan have been able to influence the Digital Ministry of their government and were able to influence change on how government officials view and implement the Open Data practice at practical level.

UK – Number 3 in the World and the Leading European Country

- UK has a **79% overall score** and is rated **40% open**.
- There are 100% scores in the categories of “Government Budget”, “National Statistics”, “Administrative Boundaries”, “Air Quality”, “National Maps” and “Company Register”.
- The scores range from 85% to 70% in the categories of “Procurement”, “National Laws”, “Draft Legislation”, “Weather Forecast”, “Water Quality” and “Government Spending”.
- “Location” and “Land Ownership” have a 50% and 35% score respectively as they’re not available publicly and they are not free of charge.
- “Election Results” scored at 0% as the data does not meet any of the Open Data standards.
 - This condition is unlikely to change as the UK Representation of the People Act 1983 requires polling stations to combine votes with at least one additional polling station before any counting occurs. This law and UK will continue to receive a low score unless GODI change the rating criteria.

Strengths and Weaknesses of USA – Number 11 in the World

- The USA has a **65% overall score** and is rated **33% open**.
- Only “National Statistics”, “Administrative Boundaries”, “Draft Legislations”, “National Maps” and “Weather Forecasts” are rated as completely 100% open.
- “Government Budgets”, “Air Quality”, “Water Quality” and “Procurement” receives a high 80% to 85% rating; while “National Laws” and “Government Spending” get 65%.
- “Company Register” gets a low 15% rating.
- “Election Results”, “Location” and “Land Ownership” datasets do not meet the Open Data criteria and get a 0% rating.
- The federal nature of the US Government and the size of the country makes standardization difficult. Some data sources are from the private company Dun and Bradstreet (D&B) and are unlikely to conform to “Open Data” standards as the Federal Government are republishing it instead of publishing it from the government.

Strengths and Weakness of Singapore – Number 17 in the World

- Singapore has a **60% overall score** and is **rated 33% open**.
- “Government Budget”, “National Statistics”, “Procurement”, “Administrative Boundaries” and “Company Register” are considered as completely open datasets (100%).
- “Air Quality”, “Weather Forecast”, “Locations”, “National Laws” and “Water quality” score highly (60% to 85%).
- “Draft Legislation” and “Land Ownership” has a 30% to 15% score respectively.
- “National Maps”, “Election Results” and “Government Spending” do not meet the Open Data criteria and have 0% score.
- The Singapore Government may not change these administrative arrangements for its own reasons, and the rating in these three categories are unlikely to change in future.

Review of Hong Kong datasets affecting ranking

- It does not seem that the HKSAR Government has been deliberately suppressing government-owned datasets for any reason.
- Many of the datasets do not meet Open Data criteria because of legacy, administrative or technical reasons. One example is the Land Ownership data that Lands Department charges uses for access.
- Low awareness of best practices in providing datasets to the public amongst Government Departments and Bureaux may be the main cause for Hong Kong’s low GODI score.
- The method for the HKSAR Government to drive Open Data best practice is through the OGCIO (Office of Chief Government Information Officer), and they publicly support more Government data for public use. Activists are well aware that Hong Kong does not follow best practices for the publishing of open data.
- Implementing some best practices for technical standards could bring quick improvements. For example:
 - i. Encourage or require Government Departments and Bureaux to conform to machine readable standards (e.g. XML format). This may be relatively easy to implement;
 - ii. Turning the administrative boundaries into data sets that meet Open Data standards may be another easily implementable action.
- Some administrative practices, such as changing the “Trading Fund” status of some Government Departments (especially for Lands Department) would be difficult and would need coordination at a senior government level. Examples that fall into this category include:
 - i. Lands Registry (e.g. building and land ownership);
 - ii. Company Registry (e.g. company ownership);
 - iii. Lands Department (e.g. maps).