



**Asia-Pacific
Economic Cooperation**

2022/CTI/WKSP5/002

Session 1

Facilitating Access to Open Government Data: Frameworks and Practices

Submitted by: United States



**Workshop on Facilitating Access to
Open Government Data
27 July 2022**



FACILITATING ACCESS TO OPEN GOVERNMENT DATA: FRAMEWORKS AND PRACTICES

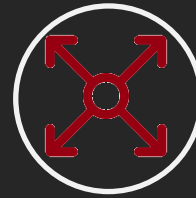
Grace Gown,
Head of Global Government Advisory, Access Partnership

OGD is

The sharing of non-sensitive data produced or commissioned by government entities

INTRODUCTION

OPEN GOVERNMENT DATA (OGD)
IS THE NEXT FRONTIER FOR DIGITAL GOVERNMENTS



Expands access

to ensure that government generated information are open, fair, and inclusive



Enhance trust

by making public institutions more transparent and accountable



Drive innovation

when data with commercial applications are made available

INTRODUCTION

OPEN GOVERNMENT DATA IS VITAL TO POST-PANDEMIC RECOVERY AND DYNAMISM

OGD enabled Post-Pandemic Recovery

Open Data Portal | Republic of Korea



Over 1,000 public service applications developed, including Food Poisoning Prediction Map service and the “National Disaster Management Information System”

Data.gov.sg | Singapore



Centralizes the publicly available datasets of 70 public agencies – enabling responsive services

Lessons from existing Framework and Policies

Avenues to operationalize OGD



Digital transformation plans, strategies, and trade agreements are several avenue used to introduce the OGD priority

Emerging OGD best practices



The governments of Chile, Indonesia, Mexico, Peru, The Philippines, and Thailand are among pioneers of OGD initiatives

This report aims to highlight

1. What are some of the OGD initiatives and impact in APEC?
2. How can OGD policies be operationalized?
3. What should APEC policymakers focus on?

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

ASSESSING THE OPENNESS OF APEC ECONOMIES

“Even as ever greater amounts of data are generated and stored, the ability to actually re-use this data in a productive and responsible manner to spur positive social change remains stunted.”

- Open Data Policy Lab (2021) *Third Wave of Open Data*, <https://opendatapolicylab.org/third-wave-of-open-data>

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

ASSESSING THE OPENNESS OF APEC ECONOMIES

Open Data Watch - Open Data Inventory (ODIN)

Assesses the scope, scale, and quality of data availability.

Examines the degree to which the data published by domestic statistical offices is openly and comprehensively available to public, private, and academic stakeholders alike.

According to ODIN criteria, all APEC economies openly share government data. But the amount and quality of published datasets varies greatly.

Singapore stands out with a wide range of high-quality, longitudinal datasets available in accessible formats and on user-friendly platforms.

For other APEC economies, current scores are largely encouraging but much work remains to be done.

Economy	ODIN Score	Rank
Australia	63	44
Brunei Darussalam	53	77
Canada	76	15
Chile	36	151
People's Republic of China	35	155
Hong Kong, China	78	12
Indonesia	68	33
Japan	68	32
Republic of Korea	70	22
Malaysia	53	78
Mexico	69	29
New Zealand	70	25
Papua New Guinea	21	178
Peru	60	58
The Philippines	73	18
The Russian Federation	59	59
Singapore	92	1
Chinese Taipei	60	56
Thailand	44	117
The United States of America	70	22
Viet Nam	49	91

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

ASSESSING THE OPENNESS OF APEC ECONOMIES

Open Knowledge Foundation - Global Open Data Index (GODI)

Benchmarks governments' progress on open data release.

Examines the findability and usability of the datasets published by governments around the world.

Government data is categorized under four distinct levels of accessibility: Open data, Public data, Access-controlled data, and Data gaps.

According to the GODI findings, only Australia and Chinese Taipei provide fully open datasets.

The other APEC economies are at varying degrees of openness.

Economy	GODI category
Australia Chinese Taipei	Open data
Canada Chile Hong Kong, China Japan Mexico New Zealand Singapore The United States of America	Public data
The Philippines The Russian Federation Thailand	Access-controlled data
Indonesia Malaysia Peru	Data gaps
Brunei Darussalam People's Republic of China Papua New Guinea Republic of Korea Viet Nam	Not included in study

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

ASSESSING THE OPENNESS OF APEC ECONOMIES

OECD - Open, Useful, and Re-usable data (OURdata) Index

Measures the extent to which an economy is “open by default”.

That is, the extent to which government data is treated as a public good, delivered with a purpose, proactively, and with a focus on re-use, in line with user needs and governed by the right policies in terms of data protection, privacy, transparency, ethics, and digital rights.

The OECD finds that many economies have adopted “open by default” approaches, paving the way for more mature OGD policies that can promote global policy actions in areas such as public sector integrity, gender equality, and sustainable development.

Overall, the Republic of Korea stands out as a leading economy when it comes to sustained government support to open data at the highest level.

Economy	OURdata Index score
Australia	0.72
Brunei Darussalam	Not included in study
Canada	0.73
Chile	0.41
People’s Republic of China	Not included in study
Hong Kong, China	Not included in study
Indonesia	Not included in study
Japan	0.75
Republic of Korea	0.93
Malaysia	Not included in study
Mexico	0.71
New Zealand	0.65
Papua New Guinea	Not included in study
Peru	Not included in study
The Philippines	Not included in study
The Russian Federation	Not included in study
Singapore	Not included in study
Chinese Taipei	Not included in study
Thailand	Not included in study
The United States of America	0.64 (2017)
Viet Nam	Not included in study

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

EXAMINING INNOVATIVE EXAMPLES OF OGD ACROSS APEC

“National Forest Monitoring System” | Chile



Provides consistent and accurate data on initiatives to reduce emissions related to deforestation and forest degradation—which fulfils multiple international agreements, including the Paris Agreement on forestry and land use.

Open Data and Knowledge Management Platforms | Peru



Launched to support scientific, clinical, and epidemiological research on COVID-19. Data was regularly updated and information on vaccination rates and vaccine manufacturer catalogue were subsequently added to the platform.

Open Data China | People’s Republic of China



A multi-stakeholder initiative involving leading state-owned financial institutions, the data collaboration project provides SMEs with access to financial data. This aims to reduce the cost of Fintech development by drawing on the expertise of key financial stakeholders.

Viettel Data Mining Platform | Viet Nam



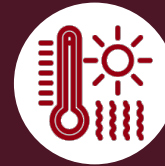
Provides real-time information gathered across disparate public and private sources, integrating specialized knowledge from sectors such as marketing, asset management, finance, and risk management to help optimize operations in enterprises.

“National Digital Platform on Public Procurement” | Mexico



Centralized dashboard to track and visualize the way a public entity is fulfilling its open data requirements. Pilot projects have helped generate and standardized data at a local level, and allowed for quality data to be captured and shared.

Multi-Agency Data Integration Project | Australia



Launched to improve the government’s understanding of the multiple risks associated with heatwaves. Several agencies worked together to build a custom database containing demographic characteristics, death information, as well as indicators of chronic disease.

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

EXAMINING INNOVATIVE EXAMPLES OF OGD ACROSS APEC

Three areas stand out in terms of concrete benefits for both emerging and maturing digital economies:

Economic Dynamism

Stimulating innovation and competition as businesses develop new products and services - leading to transformative business models and opportunities.

Social Development

Widening the scope, scale, and effectiveness of public service delivery, ensuring communities can both benefit from and contribute to the digital economy.

Responsible Governance

Increasing transparency and accountability at all levels of government, driving citizen engagement and participation for evidence-based policymaking.

OPERATIONALIZATION: OGD POLICIES FOR WIDESPREAD ADOPTION

EMERGING OGD FRAMEWORKS, STRATEGIES, AND PROGRAMS

Three types of OGD-centered mechanisms stand out in the region:

Multilateral Data-Sharing Frameworks

Many regional, international, and multilateral OGD frameworks run parallel to or complement each other to facilitate governments to enable OGD.

Domestic OGD Policies

Some economies develop policies and regulations specific to OGD, while others bundle OGD within broader data-enabling frameworks .

Digital Economy Agreements

OGD provisions are emerging within digital economy and digital trade agreements, especially those promoting cross-border digital collaboration.

OPERATIONALIZATION: OGD POLICIES FOR WIDESPREAD ADOPTION

MULTILATERAL DATA-SHARING FRAMEWORKS

ASEAN

ASEAN Data Management Framework (DMF)

Contains key resources and tools for ASEAN businesses to utilize in their data-related business operations. Provides a step-by-step guide for businesses, SMEs, to put in place a data management system, which includes data governance structures and safeguards.

G8

Open Data Charter

Adopted in 2013, sets out the expectation that all government data will be published openly by default. Also describes principles to increase the quality, quantity, and re-use of the data that is released in 14 high-value areas.

OECD

Enhancing Access to and Sharing of Data (EASD)

The first internationally agreed upon set of principles for governments to maximize the cross-sectoral benefits of all types of data including personal, non-personal, open, proprietary, public and private while continuing to protect the rights of individuals and organizations.

OPERATIONALIZATION: OGD POLICIES FOR WIDESPREAD ADOPTION

DOMESTIC OGD POLICIES

Measures Specific to OGD

Malaysia

- Public Sector Data Sharing Policy (DPDSA) guides public sector agencies on how to share data between other public sector agencies (G2G), business community (G2B), and with citizens(G2C)
- “National Data Sharing Policy (NDSP)” (currently in process) is envisioned to set out Malaysia’s long-term strategy agenda.

The United States of America

According to Title II of the Foundations for Evidence-Based Policymaking Act 2018 (also known as the OPEN Government Data Act), government agencies are statutorily required to publish information online as open data, using standardized, machine-readable data formats on the United States government’s data.gov platform.

Broad Data-Related Frameworks

Canada

The 2018-2020 “National Action Plan on Open Government” has a number of OGD recommendations currently being enacted. The more recent Digital Charter in Action outlines government plans and citizens’ perspectives on data governance, as well as the digital landscape across Canada.

Hong Kong, China

In 2018, the Office of the Government Chief Information Officer (OGCIO) issued guidelines to all government bureaus and departments on its open data policy and implementation measures requiring a progressive opening and publishing of their data for free use by the public on the data.gov.hk portal.

Both Categories

New Zealand

The New Zealand Open Data Action Plan took effect in July 2017, following public consultation, and sets out goals and initiatives. The aim of the plan is to develop an enabling open data environment to maximize the value of open government data.

The Philippines

- Circular No. 2020-03 on Data Sharing Agreements provides guidance on data sharing agreements between data controllers.
- Anti-Red Tape Authority (ARTA) is leading an initiative to speed up the data-sharing process among government agencies, to allow for faster document processing.

OPERATIONALIZATION: OGD POLICIES FOR WIDESPREAD ADOPTION

DIGITAL ECONOMY AGREEMENTS

Digital Economy Partnership Agreement (DEPA)

Signed by Chile, New Zealand, and Singapore, the DEPA asserts the commitment of signatories to ensuring that government data is made available to the public as open data, and signals a further commitment to collaboration within and across economies to identify sectors where open datasets with 'global value' can be used to facilitate technology transfer, talent formation and innovation.

United States-Mexico-Canada Agreement

Highlights that parties choosing to make government data available to the public must endeavor to do so in a machine-readable and open format that can be searched, retrieved, used, reused, and redistributed. It also encourages signatories to cooperate to identify ways to expand access to and use of government data to enhance and generate business opportunities, especially for SMEs.

RECOMMENDATIONS

Engage and collaborate

1. Design an Open Data policy for effective stakeholder engagement
2. Put citizens' needs and experiences at the center of OGD initiatives
3. Incentivize public sector organizations to actively collaborate in the OGD space

Enable institutional development

4. Put OGD at the top of domestic and APEC-level agendas
5. Promote the use of interoperable standards
6. Strengthen governance frameworks
7. Follow guidelines and best practices around OGD
8. Drive and support research and development (R&D) specifically for OGD

Encourage adoption

9. Implement OGD across government organizations to streamline and rationalize processes
10. Position OGD as a key tool for crisis readiness and response
11. Implement and sustain supportive policy frameworks
12. Make datasets visible, accessible, and usable

APPENDIX I: ECONOMY EXAMPLES

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

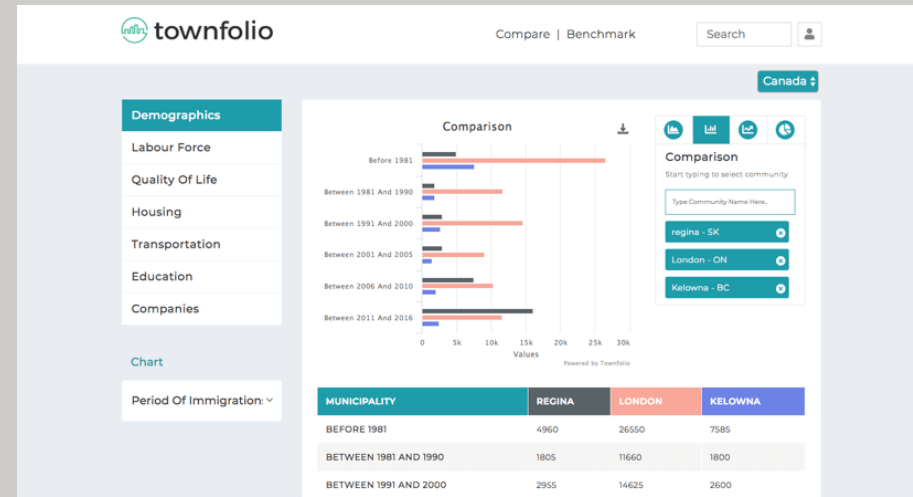
Canada

Townfolio is a city marketing tool that aggregates publicly available data to build 'dashboards' for communities, presenting all types of socio-demographic data in an accessible manner.

It includes comprehensive census data that can be leveraged by private businesses or development organizations to develop products and services in a uniquely targeted manner.

With over 38,000 profiles for communities and municipalities, the platform presents a wide range of opportunities for agile businesses—especially SMEs—to expand across North America.

In return, the fact that municipalities can “market” themselves on the platform gives them more control over the type of business, industry, or investor they attract, ensuring a durable, self-determined approach to economic development.



The screenshot shows the 'Population' dashboard in Townfolio, displaying a table of demographic metrics for various municipalities. The table includes columns for Name, Populations, Employment Rates, Unemployment Rates, Participation Rates, Home Owners, Home Renters, Average Household Income, Average Rents, and Average Housing Price.

Name	Populations	Employment Rates	Unemployment Rates	Participation Rates	Home Owners	Home Renters	Average Household Income	Average Rents	Average Housing Price
Halifax, NS	403,131	62.1	-	67	104,245	69,090	-	989	307,511
Markham, ON	328,966	58.7	-	63.3	88,395	14,285	-	1	893,165
Saskatoon, SK	314,769	65.6	5	70.4	65,875	32,685	-	1,032	383,406
Vaughan, ON	306,233	64.6	-	68.6	84,490	9,765	-	-	893,065
Regina, SK	247,192	66.3	4.9	70.5	59,340	28,075	-	1,043	311,909
Kitchener, ON	233,222	64	-	68.7	57,240	34,975	-	980	366,792
Burnaby, BC	232,755	59.2	-	63.2	57,220	34,980	-	-	961,174
Windsor, ON	217,188	51.8	-	57	58,225	33,410	-	754	204,510
Richmond, BC	198,309	57.1	-	60.6	54,545	18,910	-	1,304	967,385
Richmond Hill, ON	195,022	60.6	-	65.1	52,855	11,260	-	1,246	994,031

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

People's Republic of China

Open Data China has launched a data collaboration project to enhance Fintech innovation.

A multi-stakeholder initiative involving leading state-owned financial institutions, the project provides SMEs with access to financial data.

This cross-sector, public-private data collaboration aims to reduce the cost of Fintech development by drawing on the expertise of key financial stakeholders.

Thanks to a sandbox approach and the creation of physical “data clean rooms,” SMEs and technology startups can expedite the launch of their Fintech products and solutions.

Indeed, they can trial innovative products and services in a secure environment with flexible regulatory arrangements.

The screenshot shows the homepage of the Shanghai Public Data Open Platform. The header includes the platform name and navigation links for Home, Data Resources, Data Overview, Map Services, Typical Applications, Open Ecosystem, Interactive Community, Security Sandbox, and Industry Applications. The main content area features a large blue banner with the platform name and a 3D illustration of server racks. Text on the banner states: '现已开放50个数据部门, 100个数据开放机构, 5,457个数据集 (其中2,320个数据接口), 59个数据应用*。 44,896个数据项, 980,613,615条数据。' Below the banner is a '快捷入口' (Quick Entry) section with icons for Economic Construction, Resource Environment, Education and Technology, Road Traffic, Social Development, and Public Safety.

The screenshot shows the search results page on the Shanghai Public Data Open Platform. The header is identical to the homepage. The main content area is divided into a left sidebar with filters for '数据领域' (Data Field) and '资源类型' (Resource Type). The main content area displays search results for '1978年以来住宅投资和竣工建筑面积' (Residential Investment and Construction Area since 1978). The results list includes details such as '1978年以来上海住宅投资和竣工建筑面积', '96413次浏览', '52120次下载', and '2021-06-23 11:19:16更新'. Other results include '上海市普通高等学校信息' and '上海旅游统计数据-本市接待入境旅游者人数 (人次)'. A right sidebar shows '热门搜索' (Hot Search) and '使用申请公示' (Usage Application Announcement).

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Singapore

The Monetary Authority of Singapore (MAS) has launched over a dozen types of open datasets as APIs.

Drawing from its monthly statistical bulletins since 2016, MAS provides datasets that include price index, number of listed companies, turnover, and capitalization, among others.

The launch is in line with the government's push for government agencies to publish open APIs in hopes of encouraging public innovation and engagement.

Use case examples include financial institutions that leverage MAS data to benchmark themselves against the industry; application developers that use the APIs to create applications to compute exchange rates to help companies file tax returns; and users that automate the extraction of MAS' data to illustrate trends quickly and easily.

Advantages of an API economy

The creation of an API economy generates a multitude of advantages for the stakeholders across FSI and cross sectors. Whilst there exist potential advantages for the industry and its customers, also existing is an opportunity to create a sustainable macro environment that promotes cooperation and collaboration between stakeholders.

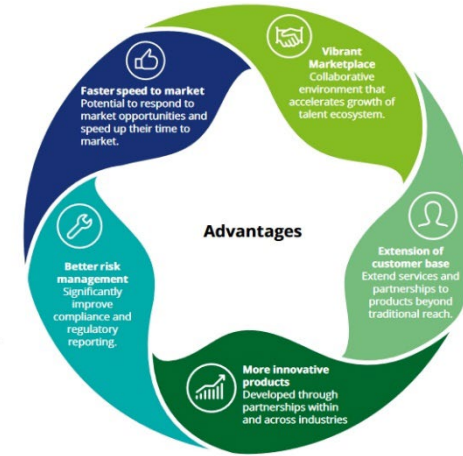


Exhibit 03: Advantages of an API economy

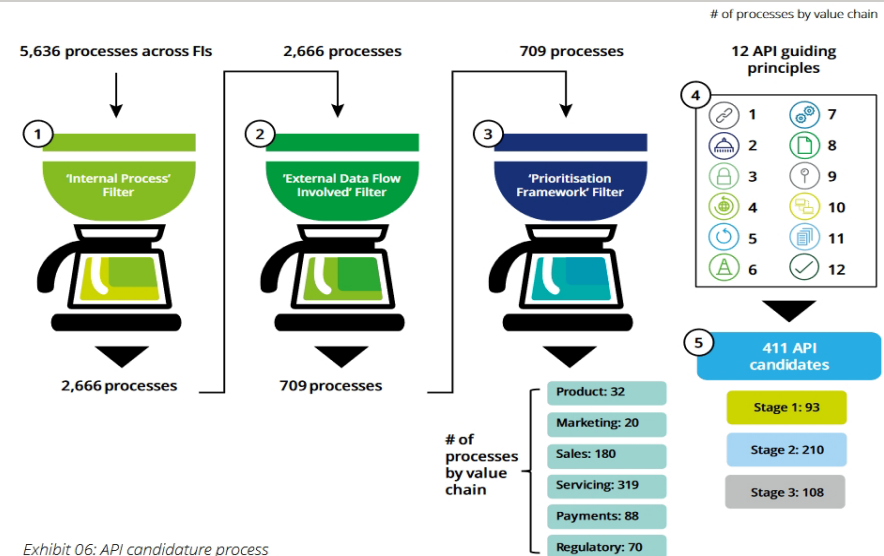


Exhibit 06: API candidature process

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Viet Nam

Viettel Telecoms Group has launched the Viettel Data Mining Platform to build the foundations for wider applications of big data in government and business.

The platform aims to help local entities use data to develop more targeted products and services.

The Viettel Data Mining Platform provides real-time information gathered across disparate public and private sources, integrating specialized knowledge from sectors such as marketing, asset management, finance, and risk management to help optimize operations in enterprises from those specific fields.

The Viettel Data Mining Platform is furthermore intended to be used alongside the Viettel AI Open Platform, which was developed to help government agencies and private organizations rapidly improve production and working methodologies.



**VIETTEL
DATA MINING PLATFORM**
PHÂN TÍCH DỮ LIỆU KHÔNG CÒN LÀ
BÀI TOÁN KHÓ!!!

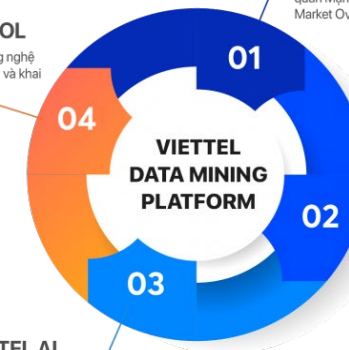
viettel
data mining platform

BIG DATA & DATA MINING TOOL

(4) Tích hợp đa dạng các công nghệ tiên tiến trong Xử lý dữ liệu lớn và khai phá, phân tích dữ liệu

SOCIAL LISTENING PLATFORM

(1) Thế mạnh dữ liệu và phân tích tổng quan Mạng xã hội (Reputa) cung cấp Market Overview cho doanh nghiệp



ADVANCED CRAWLER TECHNOLOGY

(2) Công nghệ thu thập dữ liệu mạng xã hội hỗ trợ làm giàu dữ liệu cho Doanh nghiệp

VIETTEL AI PLATFORM

(3) Công nghệ AI với độ chính xác cao: Hỗ trợ xử lý dữ liệu phi cấu trúc (image, voice, text)

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Malaysia

ZerOhunger works with partners to create visual heatmaps of hunger spots to better coordinate efforts and enhance the effectiveness of relief operations.

This enables more transparent and verified beneficiary profiling to both avoid duplication and wastage of resources.

Through its online and mobile platforms, ZerOhunger also plays a centralized coordinating role: it allows interested participants to find out if food, clothes, and other types of donations are required across different groups or locations, while providing confirmation that aid has effectively been delivered as intended.

ZERØHUNGER About Team Campaigns Media Contact Partners Log In Need Help

Our Technology

The technology we build allows us to create visual awareness of hunger spots thus centrally coordinating efforts to mitigate duplication and enhance the efficiency and effectiveness of relief operations. In addition, it allows us to execute on-demand food aid to beneficiaries, transparent verified beneficiary profiling, avoiding duplication or scams. The data and information we receive from multiple data sets go to connecting funding partners to verified information, with regional and global scalability that meets UN Sustainable Development Goals.

OutSystems November 17, 2021

Overview Comments

Seen at #OSDevCon: Since launching their platform with #OutSystems, ZerOhunger is expecting a 20x increase in fulfilling assistance requests, going from 50,000 to 1 million people impacted.

Be the first to leave a comment.

ZerOhunger Increases Their Impact by 20x

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Chile

The “National Forest Monitoring System” provides consistent and accurate data on the initiatives launched by the “National Strategy for Climate Change” and Vegetation to reduce emissions related to deforestation and forest degradation.

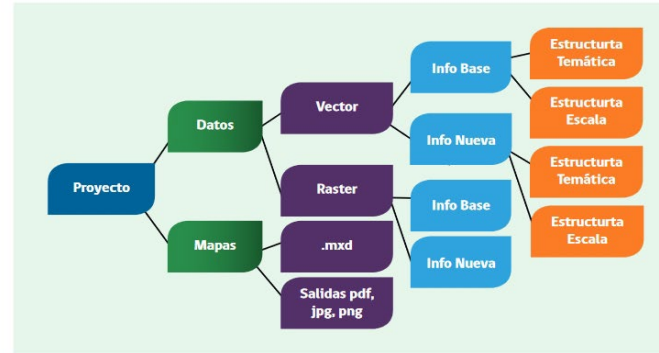
The project involves a strong, integrated participatory process, which ties together branches of government, academia, and civil society, encouraging data sharing and collaboration within and between stakeholders.

These data-driven monitoring activities allow Chile to fulfill multiple international agreements, including the Paris Agreement on forestry and land use.

I. Estructura y Organización de Archivos:

a) Estructura

El o los sistemas de información de cada consultoría o proyecto deben tener un orden bajo la siguiente estructura de archivos:



La Figura 5, describe gráficamente la participación de cada fuente de información indicada en la generación de información para la estimación de emisiones y absorción de carbono forestal.

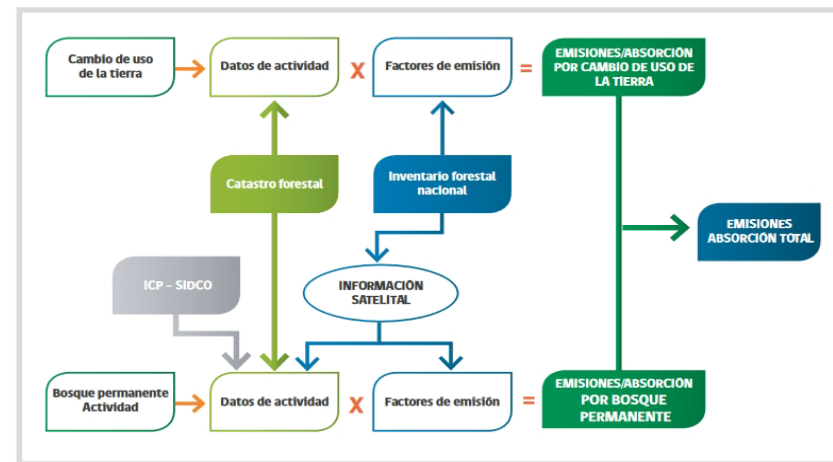


Figura 5. Fuentes de información para las estimaciones de emisiones y absorción de carbono forestal.

LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

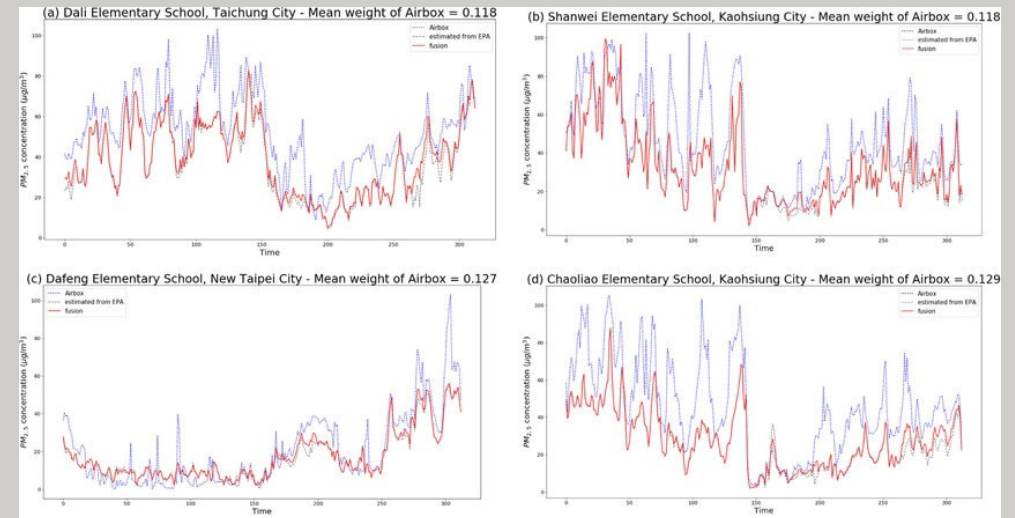
Chinese Taipei

The AirBox project is an open-source air quality sensor designed to collect air quality data from as many parts of Chinese Taipei as possible.

In Chinese Taipei, efforts to monitor air quality to inform research on air pollution have been stymied by the poor availability of granular data.

The AirBox project complements existing air quality monitoring methodologies by providing more granular data for use in big data analyses on public health.

The project is further intended to stimulate interdisciplinary innovation in public health, risk management, urban planning, atmospheric science, and other studies.



LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Peru

Peru is one of several economies that leveraged OGD to communicate the socioeconomic impact of the COVID-19 situation to its citizens.

The Open Data and Knowledge Management Platforms for COVID-19 was launched to support scientific, clinical, and epidemiological research on COVID-19.

Relatively early-on into the pandemic, the ministry of health (MINSA) started publishing open datasets related to COVID-19 cases and deaths.

Data was regularly updated and information on vaccination rates and vaccine manufacturer catalogue were subsequently added to the platform.

gob.pe Inicio > El Estado > Coronavirus Buscar en PCM

Todo sobre la vacuna contra la COVID-19

- Consulta el Padrón Nacional de Vacunación - Pongo el hombro**
Conoce si ya estás registrado en el Padrón Nacional de Vacunación contra la COVID-19...
[Leer más >](#)
- Consulta los centros de vacunación contra la COVID-19 en Lima Metropolitana y Callao**
Informate sobre los centros de vacunación contra el coronavirus que atienden de lunes a viernes...
[Leer más >](#)
- Campana Nacional de Vacunación contra la COVID-19**
Pongo el hombro por el Perú
YO ME VACUNO
[Leer más >](#)

Sala Situacional COVID-19 Perú del 19/06/2022 Actualizado 20/06/2022

31,197,959 MUESTRAS **3,600,993** TOTAL CASOS (+)

Resumen Descargar el excel **INFORMACIÓN EPIDEMIOLÓGICA** **Detalle de Contrataciones COVID 19** **Ver Ejecución Presupuestal COVID 19** **Ver Distribución EPP Cenarios MINSA**

1,105,107 PCR(+)
955,880 PRUEBA RÁPIDA(+)
1,540,006 PRUEBA ANTIGENA (+)
213,395 FALLECIDOS
5.93 % LETALIDAD
DATOS ABIERTOS COVID19

País	PCR (+)	PRUEBA RÁPIDA (+)	PRUEBA ANTIGENA (+)	TOTAL CASOS (+)	FALLECIDOS	LETALIDAD (%)
PERÚ	1,105,107	955,880	1,540,006	3,600,993	213,395	5.93 %
UCAVALI	6,483	22,016	11,109	39,608	3,265	8.24 %
TUMBES	10,462	9,021	8,140	27,623	1,696	6.14 %
TACNA	9,467	15,945	28,719	54,131	2,143	3.96 %
SAN MARTIN	10,365	28,817	22,698	61,880	3,171	5.12 %
PIURA	17,235	46,753	94,973	159,961	13,111	8.25 %
PASCO	2,960	9,469	11,639	24,068	1,109	4.61 %
MOCHISGUA	13,425	18,225	17,987	49,337	1,635	3.31 %
MADRE DE DIOS	3,796	9,950	4,166	17,912	858	4.79 %
LORETO	11,021	28,226	18,773	58,020	4,393	7.57 %
LIMA REGIÓN	17,715	31,739	67,942	117,396	7,756	6.61 %
LIMA METROPOLITANA	659,153	318,745	546,502	1,524,400	86,652	5.69 %
LAMBAYEQUE	25,452	35,397	45,000	105,939	9,250	8.73 %
LA LIBERTAD	32,413	39,659	75,256	147,328	10,875	7.38 %
JUNIN	23,091	42,386	61,330	126,807	7,492	5.91 %
ICA	11,666	32,258	59,258	104,182	8,948	8.59 %
HUANUCO	9,058	21,951	21,251	52,260	2,900	5.55 %
HUANCAVELICA	4,420	8,346	13,113	25,879	1,276	4.93 %
CUSCO	24,387	25,674	67,780	117,841	5,181	4.40 %
Fuente: MINSA	AC 043	36 470	ACC 11	1 87 777	10 037	7 17 %

- Positividad de casos COVID-19**
- Hospitalizados COVID-19**
- Disponibilidad de camas UCI**
- Defunciones COVID-19**
- Vacunación COVID-19**

Fuentes: Instituto Nacional de Salud y Centro Nacional de Epidemiología, Prevención y Control de Enfermedades - MINSA

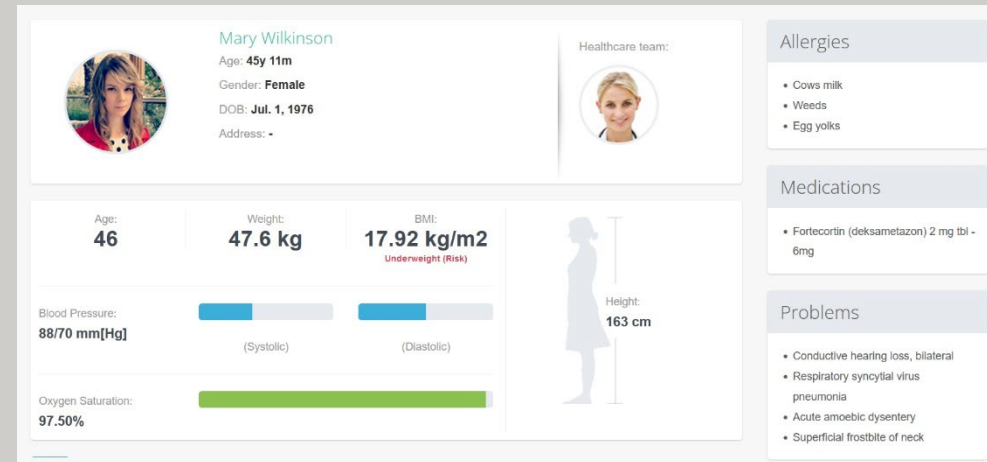
LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Russian Federation

Launched in 2016, the open electronic health record (openEHR) system is a cloud-based, vendor-neutral, and centralized EHR system that stores and manages the health data of Russian citizens.

openEHR has allowed healthcare providers to digitize most of their paper-based document management processes, reduce time spent filling up unnecessary paperwork and patient wait time, and gain better access to decisive information when needed.

When the COVID-19 pandemic struck, Moscow was able to leverage this central repository of digitalized patient care record to establish a comprehensive digital health platform within a relatively short time.



Mary Wilkinson
Age: **45y 11m**
Gender: **Female**
DOB: **Jul. 1, 1976**
Address: -

Healthcare team:

Allergies

- Cows milk
- Weeds
- Egg yolks

Medications

- Fortecortin (dexametazon) 2 mg tbl - 6mg

Problems

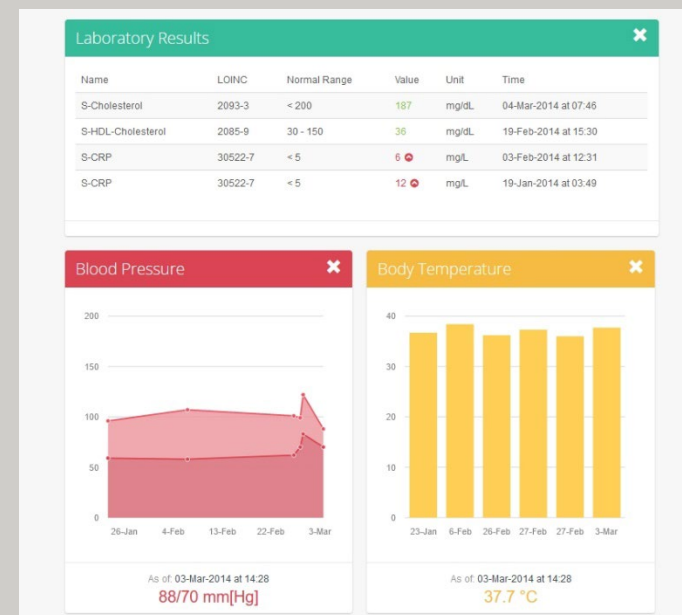
- Conductive hearing loss, bilateral
- Respiratory syncytial virus pneumonia
- Acute amoebic dysentery
- Superficial frostbite of neck

Age: **46** Weight: **47.6 kg** BMI: **17.92 kg/m²**
Underweight (Risk)

Blood Pressure: **88/70 mm[Hg]**
(Systolic) (Diastolic)

Oxygen Saturation: **97.50%**

Height: **163 cm**



Laboratory Results

Name	LOINC	Normal Range	Value	Unit	Time
S-Cholesterol	2093-3	< 200	187	mg/dL	04-Mar-2014 at 07:46
S-HDL-Cholesterol	2085-9	30 - 150	36	mg/dL	19-Feb-2014 at 15:30
S-CRP	30522-7	< 5	6	mg/L	03-Feb-2014 at 12:31
S-CRP	30522-7	< 5	12	mg/L	19-Jan-2014 at 03:49

Blood Pressure

AS of: 03-Mar-2014 at 14:28
88/70 mm[Hg]

Body Temperature

AS of: 03-Mar-2014 at 14:28
37.7 °C

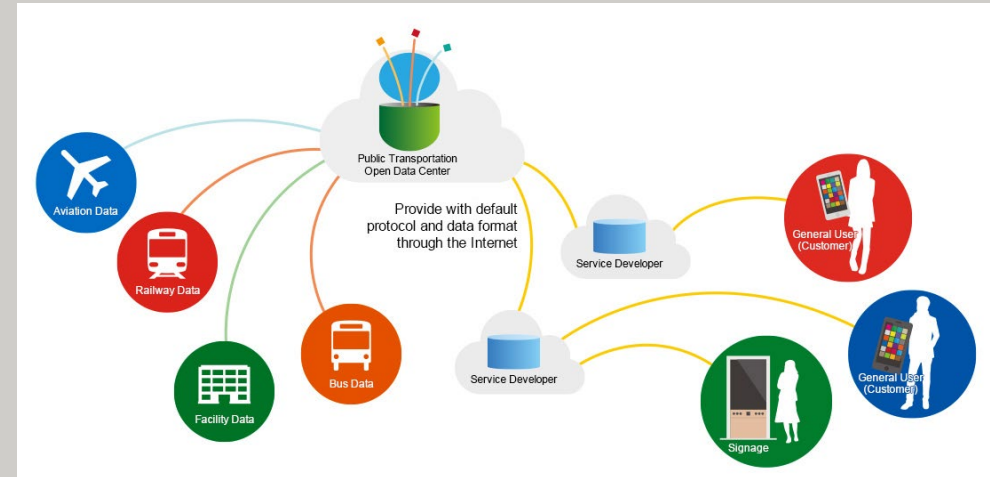
LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Japan

The Open Data Challenge for Public Transportation brought policymakers and developers together to crowdsource ideas to make Tokyo's public transportation systems more accessible to visitors—including tourists, the disabled, and the elderly.

By making government data available to third parties, the competition aimed to develop a multi-lingual mobile application that would provide a wide range of services.

Types of data shared included: static and dynamic data for trains, buses, ferries, and planes; data related to intra-station maps; and other data such as mobile users, space usage statistics, and bike-sharing data.



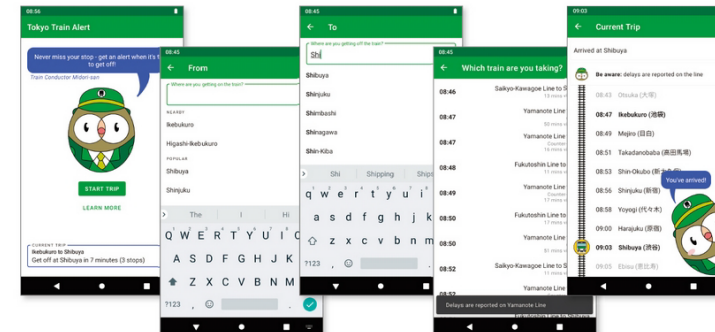
Tokyo Train Alert

Little Bird Solutions

Although Tokyo's train network is arguably the best in the world, as a foreigner it can be a bit overwhelming to use. One issue that we have personally experienced is knowing when to get off the train. During busy periods, it can be difficult to see or hear the station name - especially as only the Japanese kanji or hiragana might be visible.

Thus, in light of the Olympics approaching, as well as the overall increase in tourism to Japan, we designed an easy-to-use mobile application which focuses on showing the user the progress of their journey on Tokyo train, metro and subway lines in real-time and alerts them to get off the train at their destination. Therefore, the app is also particularly useful for persons who are hard of hearing.

The application also works offline, where it uses the timetable data provided. This enables tourists who don't have roaming mobile data available to take advantage of Tokyo's extremely punctual train network. However, when live data is available, or the user updates the application using WiFi in the station for example, the application will also update for any delays on the line, making the data more accurate.



LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Hong Kong, China

The Intermodal Transport Data Sharing Programme is a proof of concept (POC) that operationalizes intermodal data sharing between both government and private transport operators.

Within two years, the POC yielded impactful results, especially on the rail-to-bus interchange dynamic—a key lever for Hong Kong, China’s Smart Mobility plan under the “Hong Kong Smart City Blueprint”.

Increased trust in data sharing is largely beneficial in the long term, as it helps the general public understand that such information can help policymakers make timely, relevant decisions that affect their day-to-day.

BEC EnviroSeries Online Conference (27 November 2020)

Inter-Modal Transport Data Sharing Programme

Urban Transport on the Move: Connecting Policies, People and Business Opportunities

Presentation by
Dr John Ure
Programme Coordinator

Fellow of the Centre of Urban Studies and Urban Planning
The University of Hong Kong
Director of TRPC
Johnure@trpc.biz



Mobility data analytics open the treasure chest to create added value – for both travellers and operators



LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Republic of Korea

The Seoul Metropolitan Government partnered with major telecommunications operator KT to access and analyze anonymized mobile communication data of over three billion mobile call logs and data from over five million taxi rides to map the distribution of late-night commuters.

The night bus route was designed based on the travel pattern obtained and the Owl Bus service was born.

Since 2016, the Owl Bus services are used by an average of 7,900 daily passengers, helping to reduce approximately 2.3 million individual car trips yearly and reducing an estimated 500 tons of greenhouse gas emissions.



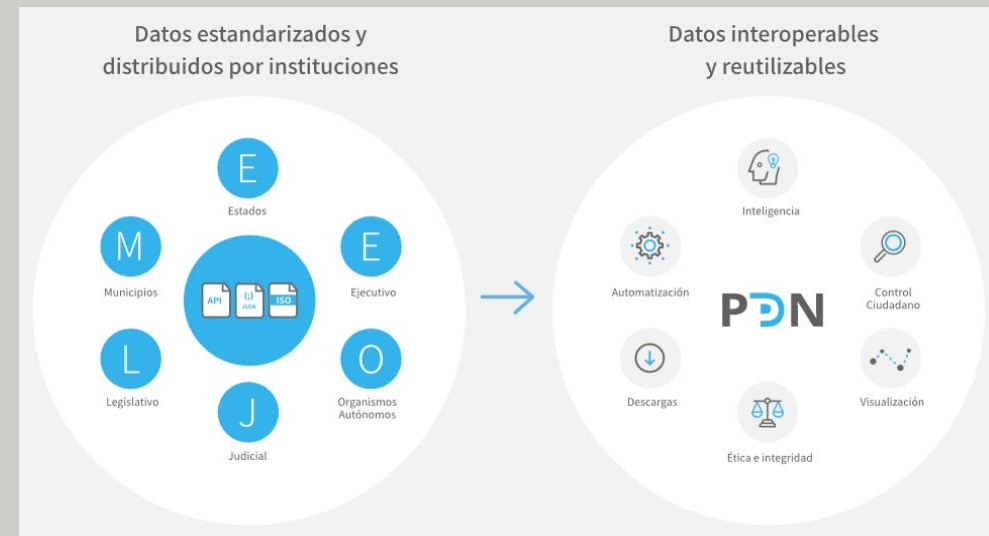
LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Mexico

The “National Anti-Corruption System Secretariat (SESNA)” launched the “National Digital Platform on Public Procurement”, a centralized dashboard to track and visualize the way a public entity is fulfilling its open data requirements.

In 2019, SESNA worked with the UK Government Digital Services Global Digital Marketplace Program to run pilot projects in three states, with a focus on helping the states to develop capabilities to report information concerning public officials.

SESNA’s pilot projects have helped generate and standardized data at a local level, and allowed for quality data at the state level to be captured and shared on a domestic platform.



LANDSCAPE: OGD INITIATIVES AND THEIR IMPACT

Australia

The Multi-Agency Data Integration Project (MADIP) was launched to improve the government's understanding of the multiple risks associated with heatwaves.

Several agencies worked together to build a custom MADIP database containing demographic characteristics and death information, as well as indicators of chronic disease.

The project was able to establish links with weather observations and environmental characteristics, such as dwelling type and distance from health services, to estimate the likelihood and impact of a person getting sick or dying during heatwaves.

Overview of MADIP

The **Multi-Agency Data Integration Project (MADIP)** is a secure, person based research data asset combining information on health, education, government payments, income and taxation, employment, and population demographics to create a comprehensive picture of Australia over time..

MADIP Uses

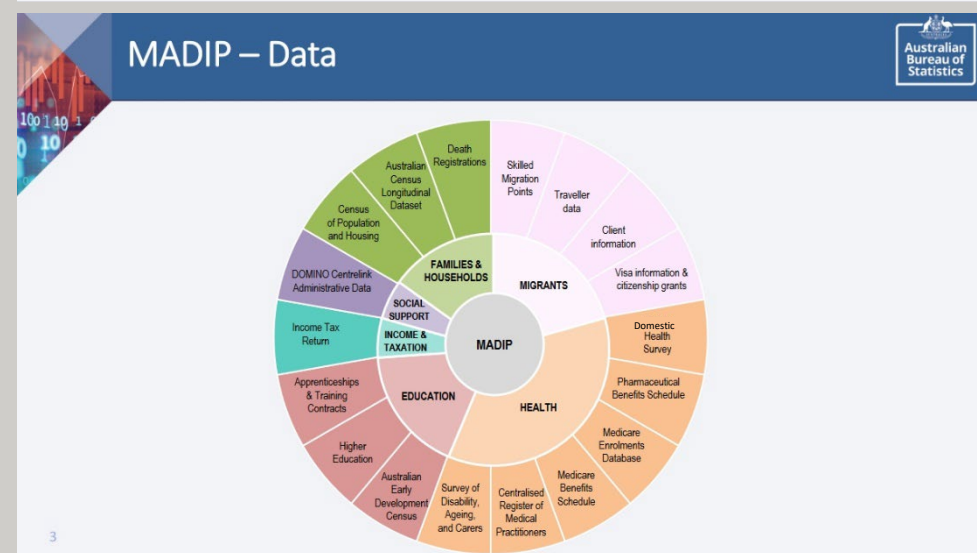
- Answer policy questions
- Program evaluation
- Empirical research on socio-economic issues
- **No identification of individuals**
- **Used only for statistical and research purposes (never for compliance)**

MADIP Partner Agencies

- Australian Bureau of Statistics
- Australian Taxation Office
- Department of Health
- Department of Social Services
- Department of Education
- Services Australia

Domestically important datasets

MADIP data is securely held by the ABS – access is only made available to approved researchers for approved purposes.



APPENDIX 2: DOMESTIC POLICY EXAMPLES

OPERATIONALIZATION: OGD POLICIES FOR WIDESPREAD ADOPTION

DOMESTIC OGD POLICIES

Measures Specific to OGD	
Brunei Darussalam	The "E-Government National Centre (EGNC)" maintains an open data platform data.gov.bn which publishes open government data from government agencies to encourage other agencies and the public to access and reuse the data.
Malaysia	The two main policies for open government data are the Public Sector Data Sharing Policy (DPDSA) and the "National Data Sharing Policy (NDSP)". The DPDSA guides public sector agencies on how to share data between other public sector agencies (G2G), with the business community (G2B), and with the people (G2C). This policy also provides guidance on implementing authentic, secure, and effective data sharing initiatives in accordance with a set of prescribed data sharing principles. The NDSP is currently in the process of obtaining approval but is envisioned to set out Malaysia's long-term strategy designed to create a holistic, conducive, and inclusive data ecosystem to support Malaysia's socio-economic development agenda.
Mexico	Mexico's most recent open government framework with implications for data sharing is the Mexico Action Plan 2019-2022. The plan makes information regarding expenditure on social programs, including privately-run funds that use public resources, available to all. There are also commitments to opening data at sub-domestic levels of government.
Japan	In 2012, Japan's Information Technology (IT) Strategic Headquarters adopted its Open Government Data Strategy to promote the use of public data. The government has also passed the Basic Law for Promotion of Utilization of Public-Private Data in 2016, requiring central and local governments to promote open data.
Papua New Guinea	Papua New Guinea's Data Portal png-data.sprep.org was launched in 2019 and focuses on environmental datasets that may be used for monitoring, evaluating, and analyzing environmental conditions and trends to support decision-making on environmental planning and forecasting. While the focus is currently on environmental data, the portal is built to allow for more multi-sector and multi-ministry access and collaboration.
Peru	A series of Open Government initiatives have been launched and implemented in line with the "National Open Government Strategy 2017-2021", which aims 'to promote innovation by creating public value with the reuse of open data, to contribute to economic and social development, and to strengthen citizen participation, innovation, collaboration and improvement of public services.'

OPERATIONALIZATION: OGD POLICIES FOR WIDESPREAD ADOPTION

DOMESTIC OGD POLICIES

Measures Specific to OGD	
The Russian Federation	Pursuant to Decree No.601 on the Main Directions in Improving the Public Administration System, signed into law on 7 May 2012, government ministries and agencies are required to provide access to open data contained in government information systems. The Russian Federation's Open Government Data Portal, data.gov.ru, was launched in 2014.
Republic of Korea	The Act on Promotion of the Provision and Use of Public Data prescribes the government's open data policy to promote the provision of and use of public institution data to guarantee the rights of citizens to access and use the data, with the aim to improve the quality of life and develop the domestic economy. The Act is also accompanied by an Enforcement Decree and Enforcement Rules which prescribe implementation of the Act.
Chinese Taipei	The Open Government Action Plan 2021-2024 references international open data and data reuse policies to focus on prioritizing open data with high value, strengthen data standards and format quality, and establish processes to deal with public data needs.
The United States of America	According to Title II of the Foundations for Evidence-Based Policymaking Act 2018 (also known as the OPEN Government Data Act), government agencies are statutorily required to publish information online as open data, using standardized, machine-readable data formats on the United States government's data.gov platform. The OPEN Government Data Act furthermore requires that metadata is also included in the data.gov catalogue. Most recently, in January 2021, Economic Leader Joe Biden issued a Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking, which re-emphasizes positions taken in the OPEN Government Data Act and expands them.
Viet Nam	Viet Nam launched its open government data portal in 2020 at data.gov.vn following the passing of Resolution No. 17 (on key tasks, solutions to e-Government development), which specifically prioritizes six databases to be linked through a common data exchange platform. In 2020, the government also issued Decree No. 47/2020/ND-CP on management, connection and sharing of digital data of state agencies which prescribes the activities related to the management, connection, and sharing of digital data of state agencies, including providing open data by state agencies to organizations and individuals.

OPERATIONALIZATION: OGD POLICIES FOR WIDESPREAD ADOPTION

DOMESTIC OGD POLICIES

Broad Data-Related Frameworks

Canada	The “2018-2020 National Action Plan on Open Government” has a number of OGD recommendations currently being enacted. The more recent Digital Charter in Action outlines government plans and citizens’ perspectives on data governance, as well as the digital landscape across Canada.
Chile	The Chile Action Plan 2020-2022 includes plans to introduce open government principles that would foster data sharing. Following on from engagements such as the Open Government Roundtable in September 2020, the government has made commitments that have not yet been formalized into a specific strategy.
People’s Republic of China	Municipal governments in Beijing, Shanghai, and other localities have launched their own open data portals with hundreds of datasets covering a variety of topics. The General Office of the State Council of China in 2018 released the “Measures for Managing Scientific Data” which requires all researchers to share data they generate on domestic repositories. The “Chinese National Committee for CODATA” has also been working with the Ministry of Science and Technology to develop a domestic basic scientific data sharing network.
Hong Kong, China	In 2018, the Office of the Government Chief Information Officer (OGCIO) issued guidelines to all government bureaus and departments on its open data policy and implementation measures requiring a progressive opening and publishing of their data for free use by the public on the data.gov.hk portal. Apart from government data, public/private organizations also share various types of Public Sector Information (PSI) on the portal.
Indonesia	The One Indonesia Data Program is being developed to encourage the implementation of data accessibility between government agencies and encourage transparency and accountability within the government itself to create more targeted policies and improving public services. The program requires collaboration of various agencies to realize an Electronic-Based Government System (SPBE) for clean, effective, efficient, transparent governance and accountable.
Thailand	Management of data published as open data is outlined under the Open Data Framework. Pursuant to the Thailand Digital Government Development Plan (2020-2022), greater provision of data for public, business, and inter-agency use is a priority for the DGA. Meanwhile, the Digitalization of Public Administration and Services Delivery Act B.E. 2562 (2019), or the Digital Government Act, requires government agencies to ensure that public services are to be provided through digital means, obliges them to accept documents submitted digitally, and lays the groundwork for an agency to oversee government-wide open data frameworks.

OPERATIONALIZATION: OGD POLICIES FOR WIDESPREAD ADOPTION

DOMESTIC OGD POLICIES

Both Categories	
Australia	Australia’s commitment to Open Data is formalized within the Australian Government Public Data Policy Statement, though open data practices have been informally adopted by government agencies since 2012. Australia’s Vision 2025 involves leveraging OGD mechanisms to improve the relevance and timeliness of services (the “Tell Us Once” service, for example, allows users’ details to be shared among relevant government agencies). The Australian House of Representatives is also contemplating the passage of the Data Availability and Transparency Bill.
New Zealand	The New Zealand Open Data Action Plan took effect in July 2017, following public consultation, and sets out goals and initiatives. The aim of the plan is to develop an enabling open data environment to maximize the value of open government data.
The Philippines	In December 2020, The “National Privacy Commission (NPC)” issued Circular No. 2020-03 on Data Sharing Agreements, pursuant to Section 21(a) of the Data Privacy Act of 2012 (Republic Act No. 10173) and Section 20 the Implementing Rules and Regulations of Republic Act No. 10173. The circular provides guidance on data sharing agreements between data controllers. To facilitate data sharing among government agencies, the Anti-Red Tape Authority (ARTA) is leading an initiative to speed up the data-sharing process among government agencies, to allow for faster document processing.
Singapore	The Data Collaboratives Program seeks to support businesses to explore how to implement and manage mechanisms that allow for safe and economically sustainable data sharing. To help businesses innovate and get involved in data sharing, the government has developed a Trusted Data Sharing Framework. The program also includes a Data Regulatory Sandbox which allows businesses and their data partners to explore and pilot innovative use of data in a safe manner and consult government at the same time.