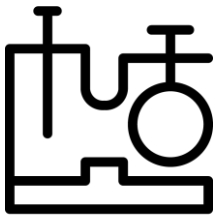
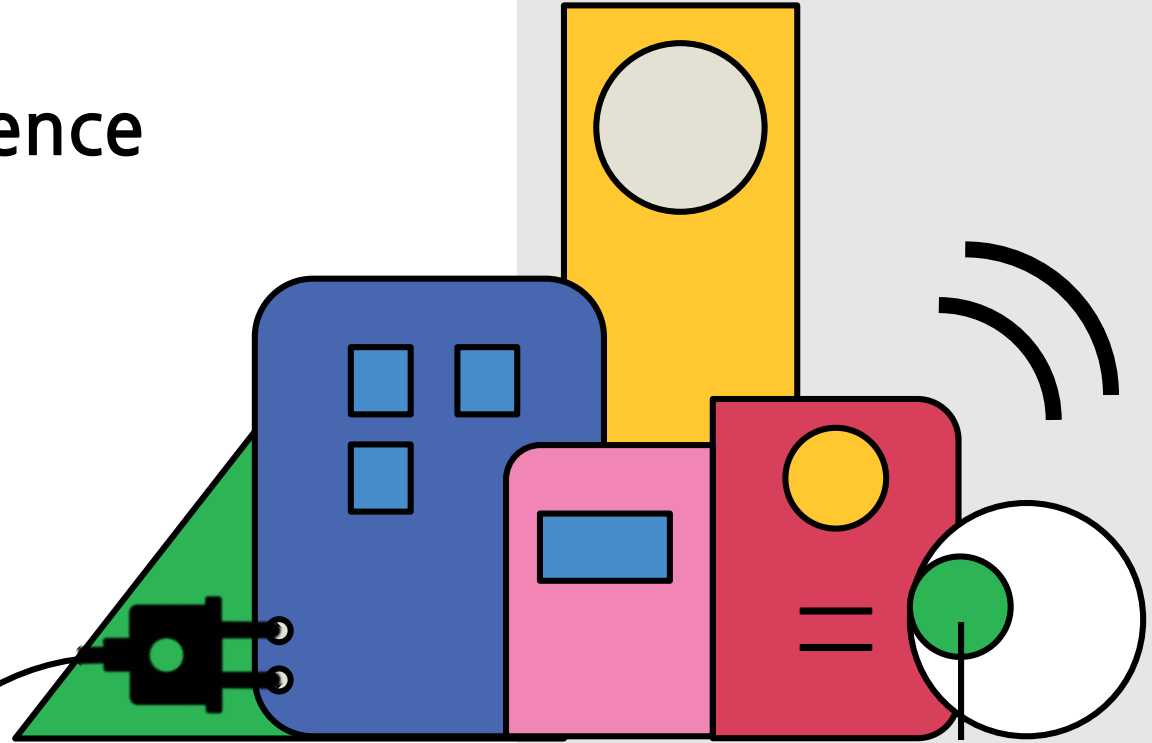


Geo-powering Cities for Resilience

City Planning Labs



CPL City
Planning
Labs





Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation



Korea
Green Growth
Trust Fund



Gayatri Singh



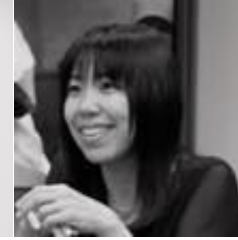
Edith Zheng



Jeremia
Mamola



Nina
Nurrahmawati



Yuko Arai



Jessica
Ludwig

**CPL
team**



Vivi
Nur Arifina



Ikrar Eka
Praya



Danielle
Robinson



Daniela Evia

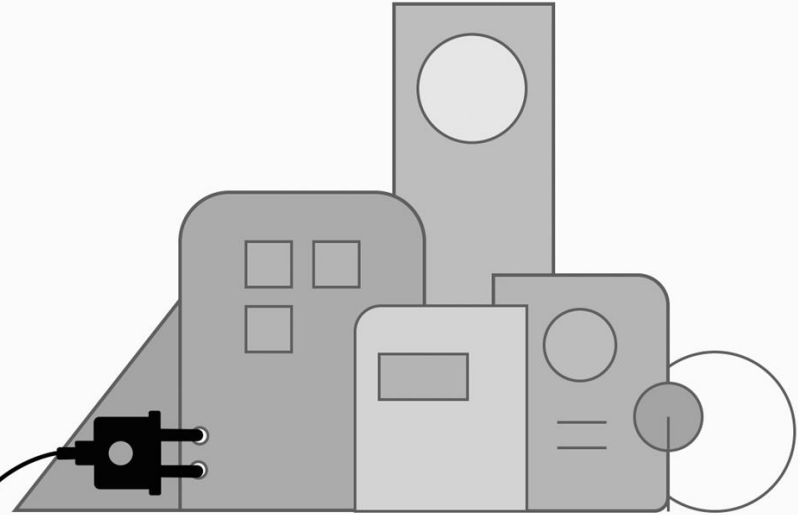


Ricardo
Ochoa



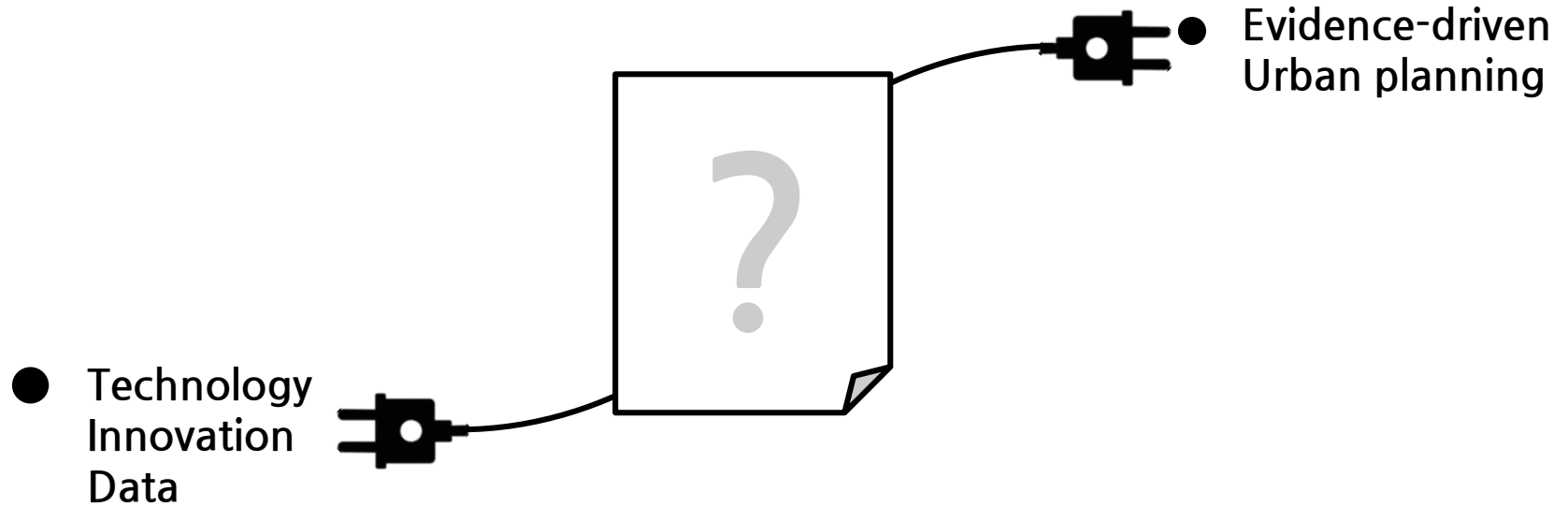
Objective

To discuss how **geospatial data ecosystems** are key to advance more **resilient, sustainable** and **smarter cities**.





What is the missing piece?



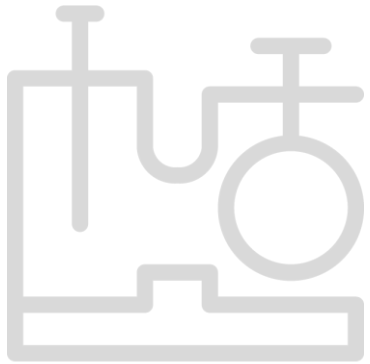


City Planning Labs

Building Data Foundations
for Smarter, Sustainable
Cities

“
**Data is to this
Century what
oil was to the
last one...**

The Economist, 2017



CPL City
Planning
Labs



No.1
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No.3
CPL & MSDI

No.4
Rapid Clinic

No.5
One Data Portal

No.6
Tools & Cases

No.7
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Closing



© Arkaprava Ghosh / Barcroft India





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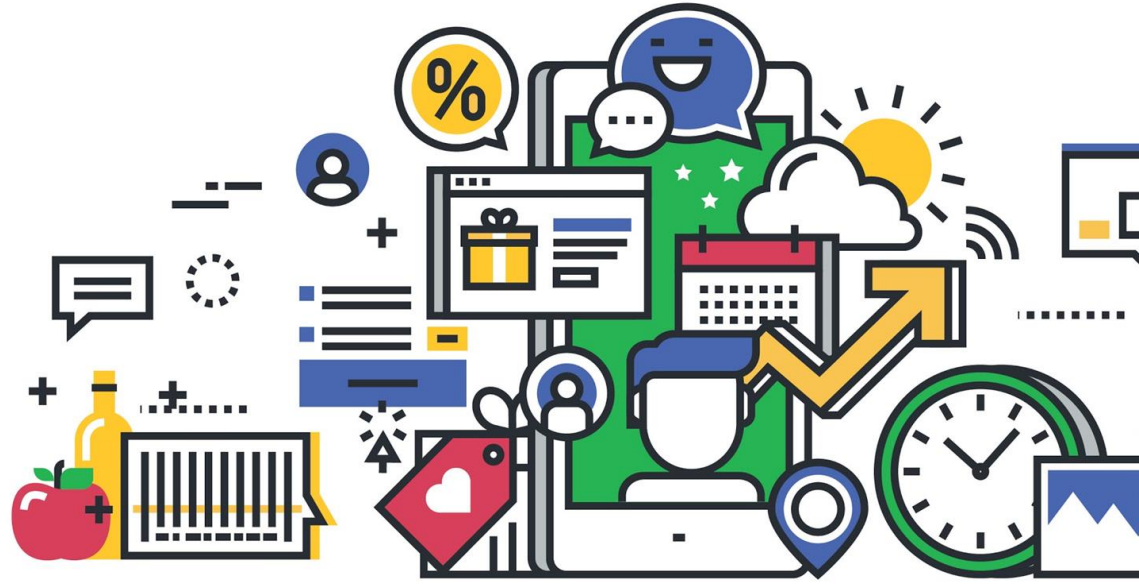
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Apps, apps... everywhere





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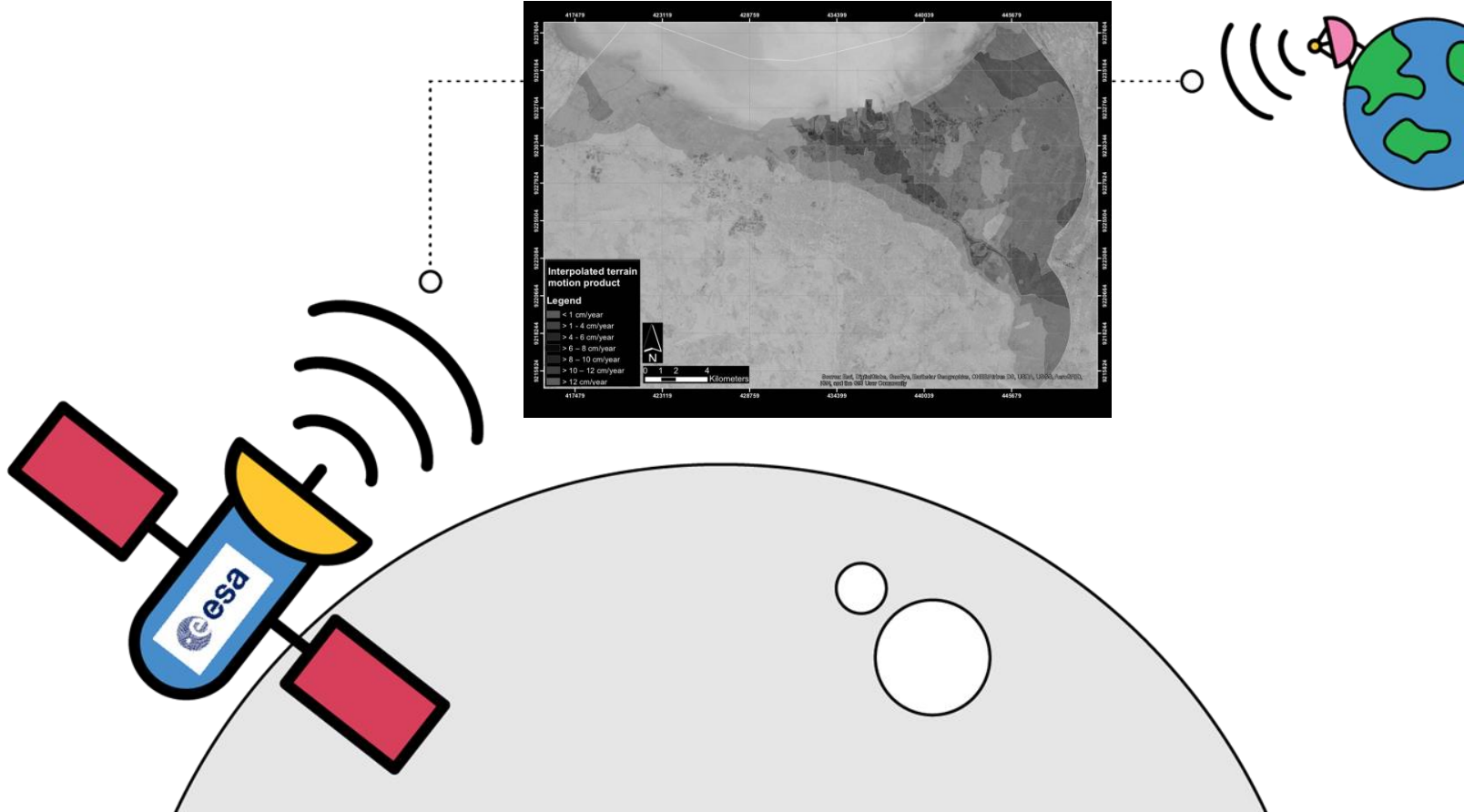
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briannoredraws.com

This is it, Smythe --the Tomb of the Lost Unshared Data! ...





Money Down the Drain





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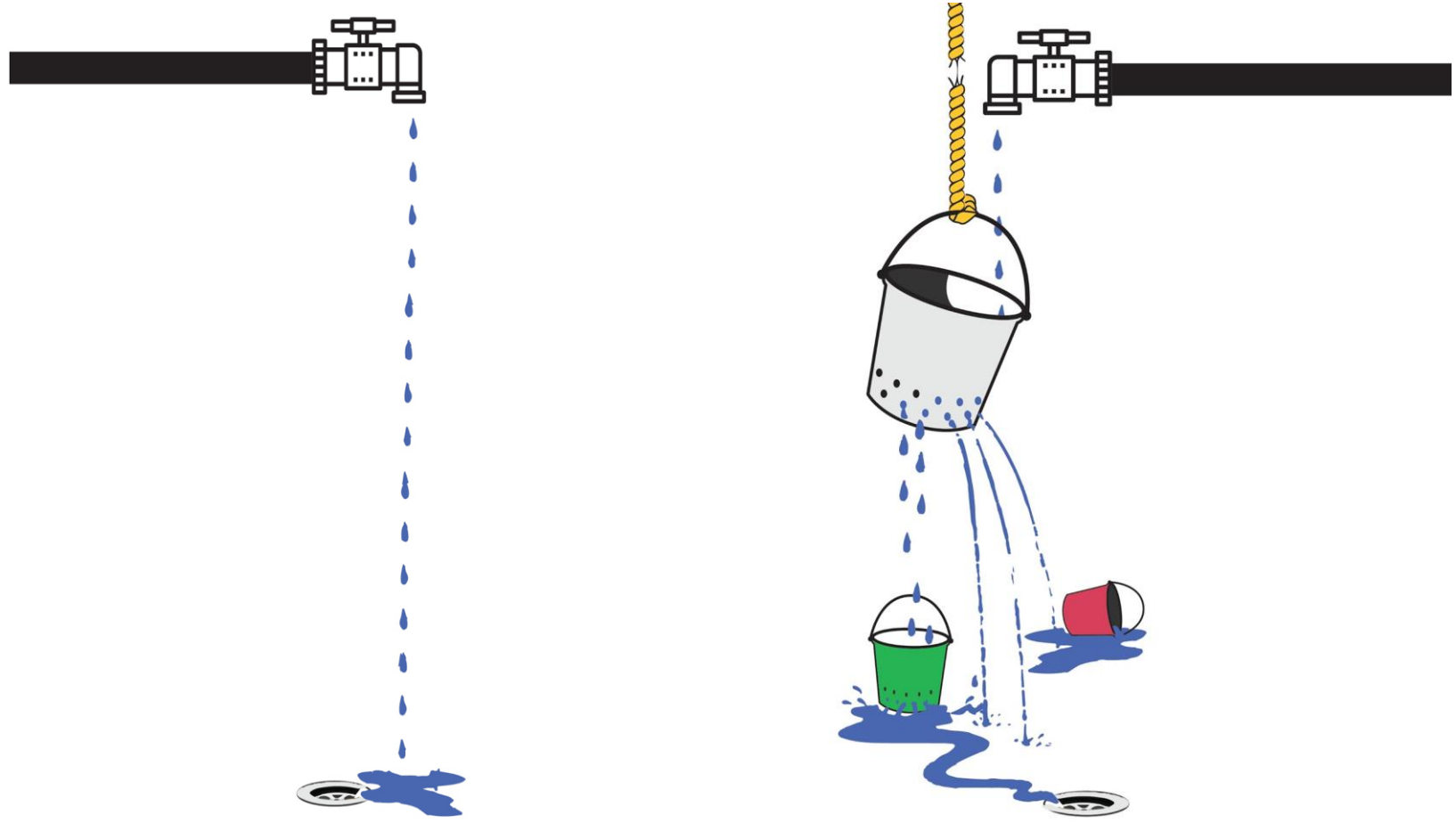
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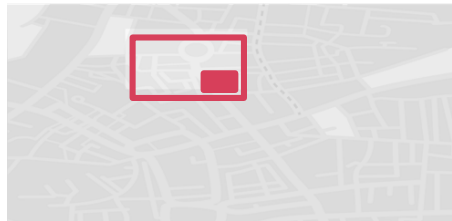
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Data as infrastructure

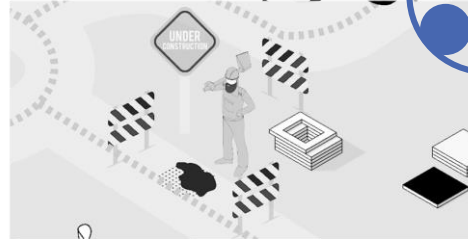




Thinking **data** as roads, they need:



Institutions to set and monitor and verify the regulations



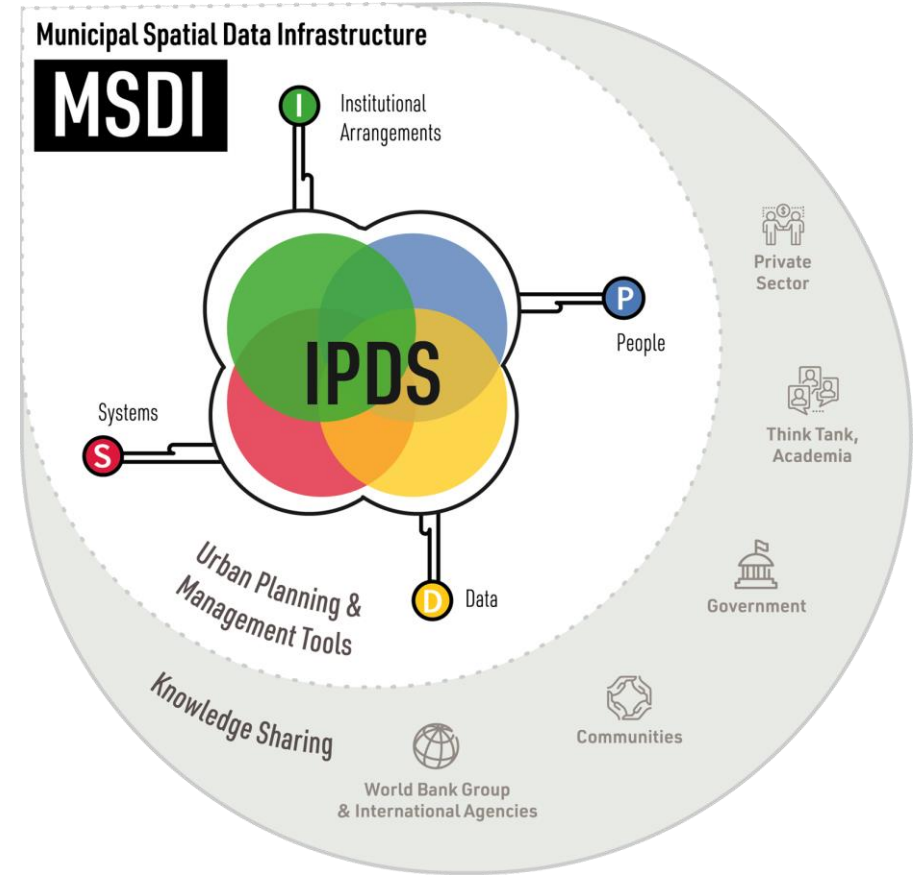
People to maintain, and repair them



To be planned, managed and treated as part of a **system**.



Municipal Spatial Data Infrastructure: an ecosystem approach.



UR2020

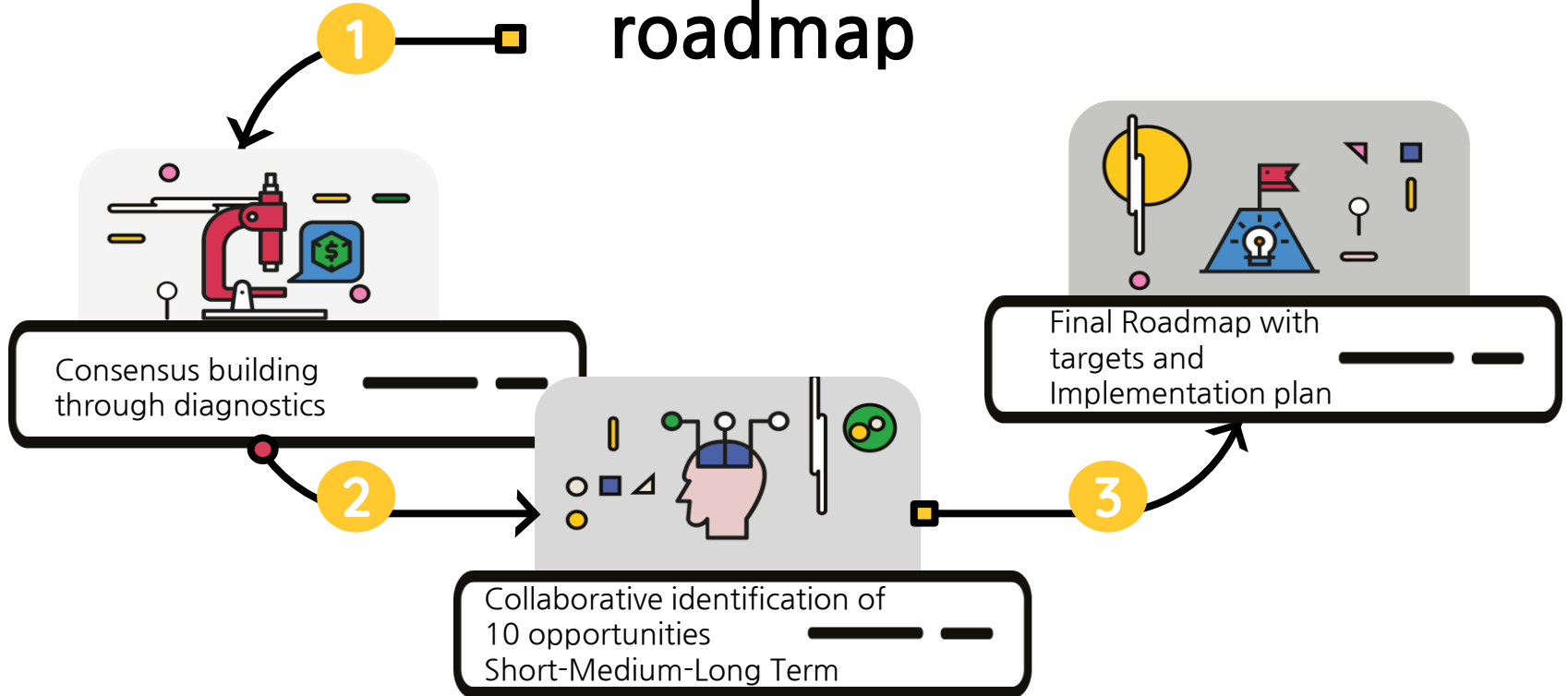
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Creating a roadmap



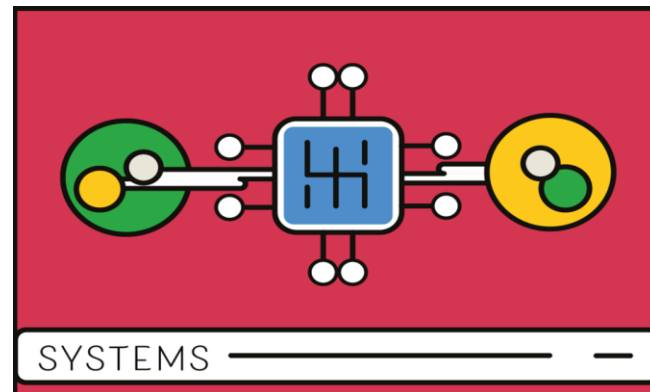
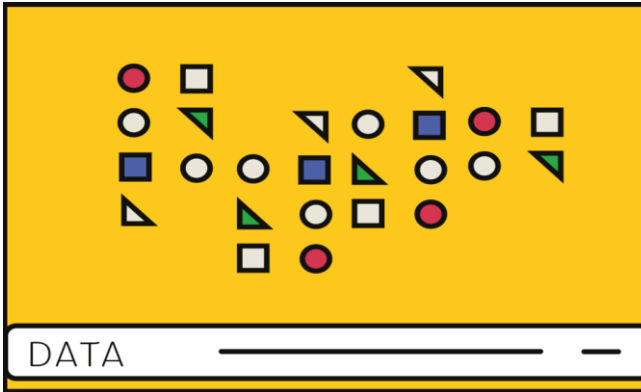
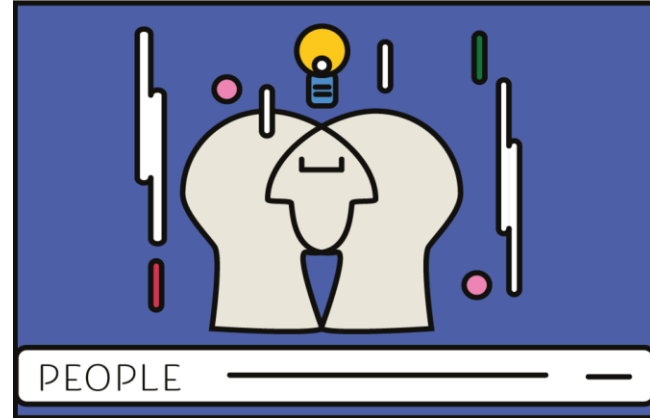
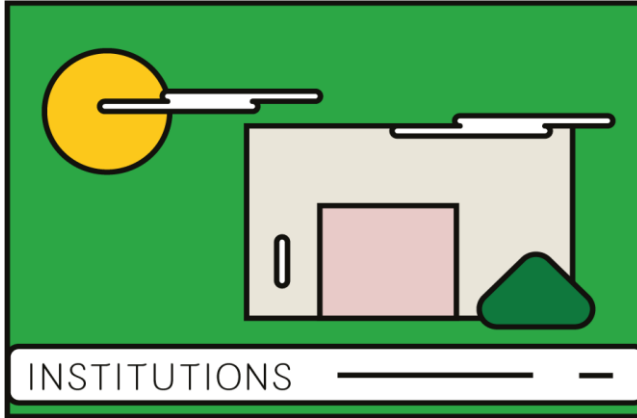


MSDI Manual



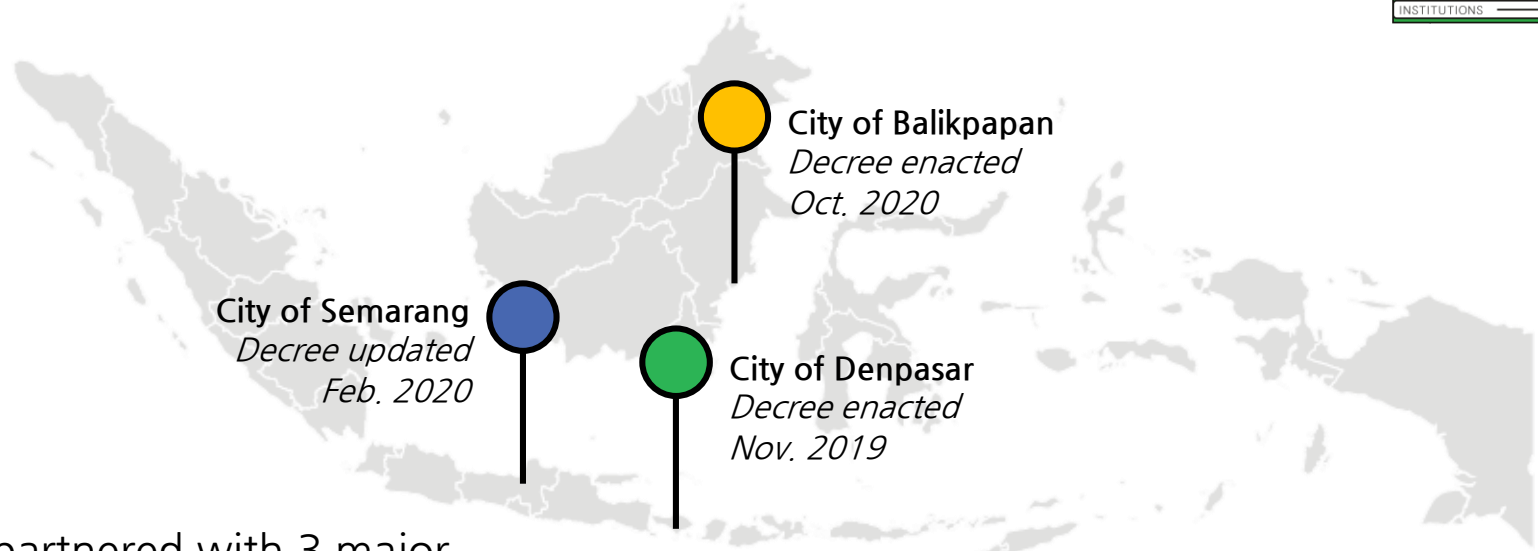
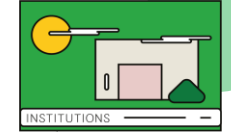


Four Pillars Toolkits





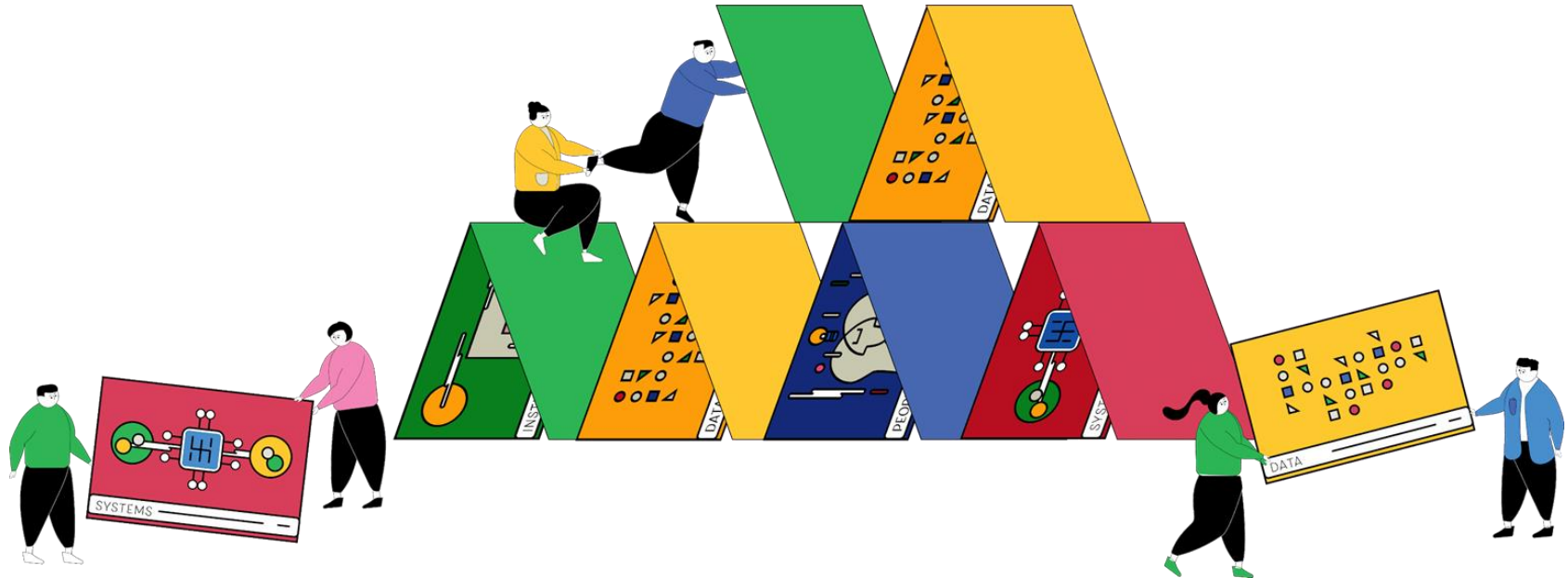
“Institutional arrangements are the fuel that geopower cities”



CPL partnered with 3 major cities in Indonesia to enact Perwalis that strengthen their spatial data infrastructure.



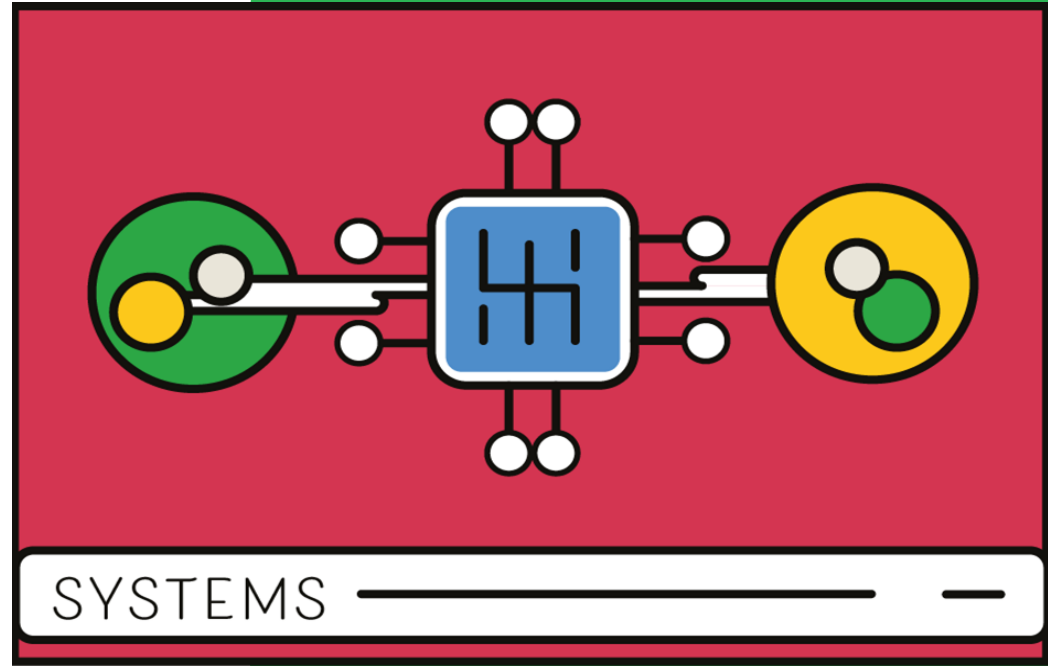
Collaboration is the cornerstone of **MSDI**.





One Data Portal

Data foundation systems for smart cities





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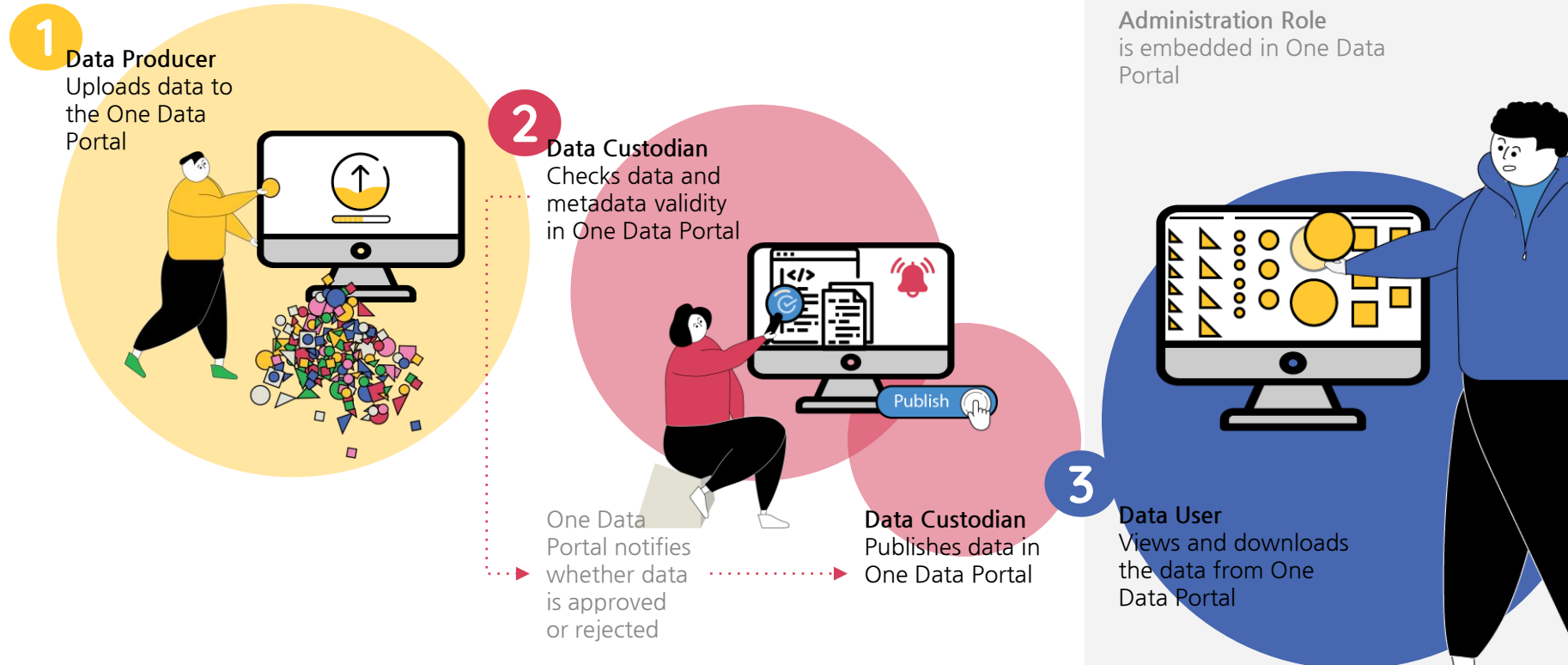
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One Data Portal

How do agencies use the One Data Portal?

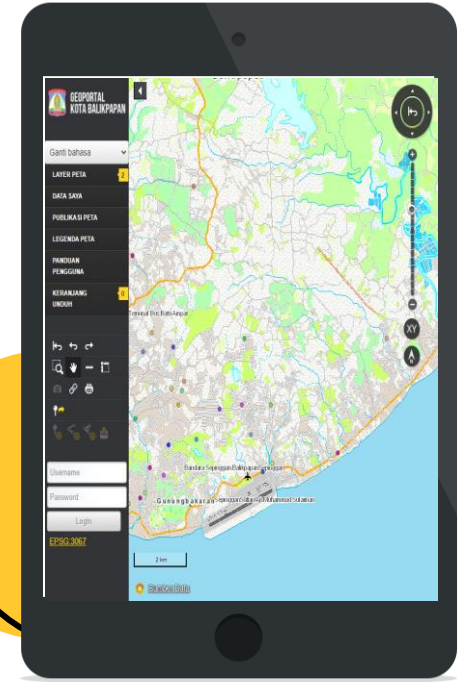
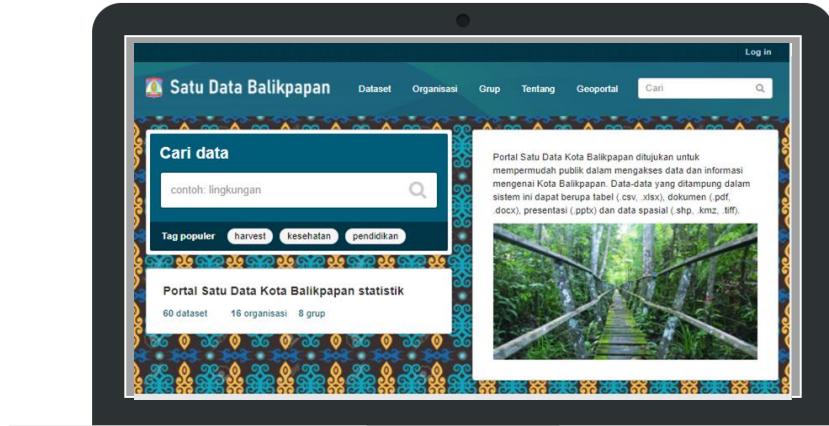


Operationalization of data management

Administration Role is embedded in One Data Portal



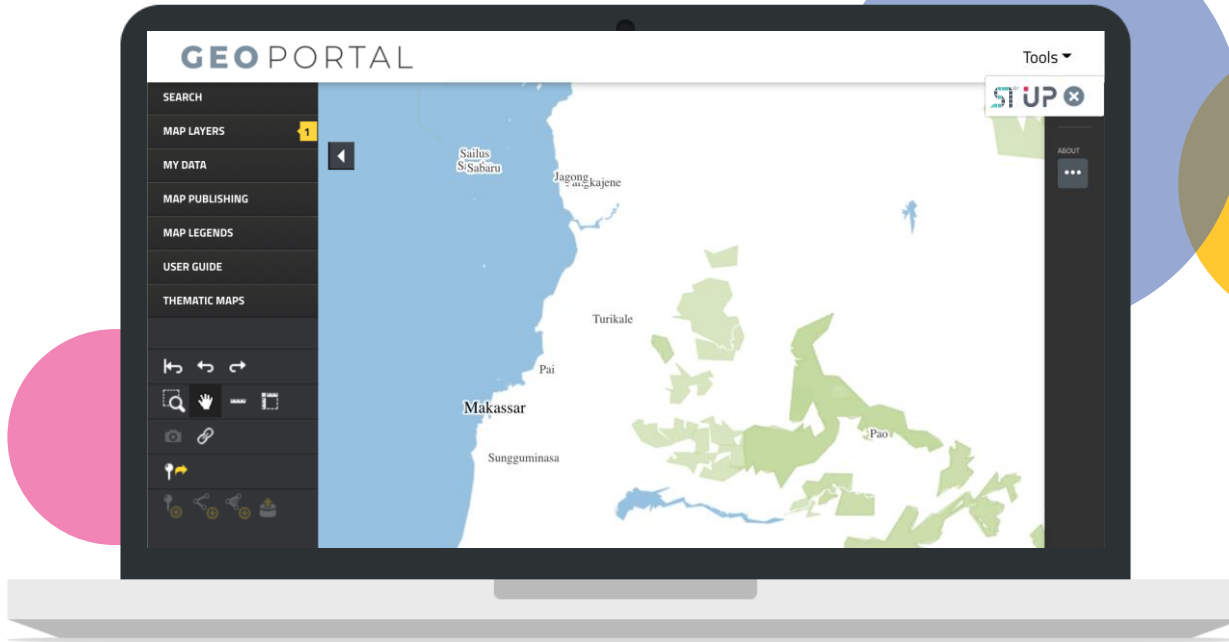
Data Portal



Geoportal

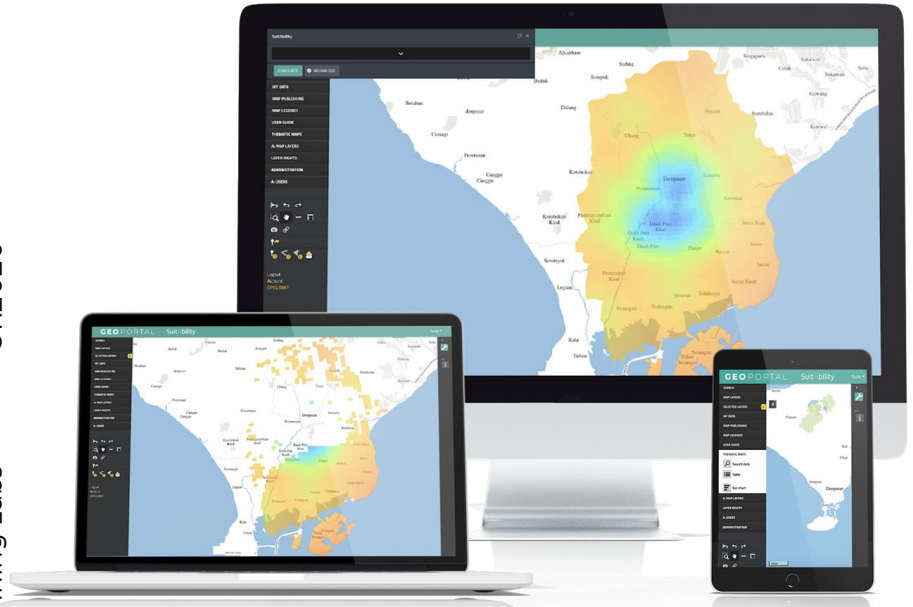


The Geoportal includes two analytical tools





3 tools
developed
and tested



What it is

Suitability is a powerful web application that identifies optimal locations for a specific activity within a city, displaying heat maps of access to urban services and infrastructure.

What it does



Land Suitability



Social Housing Projects



Create Consensus

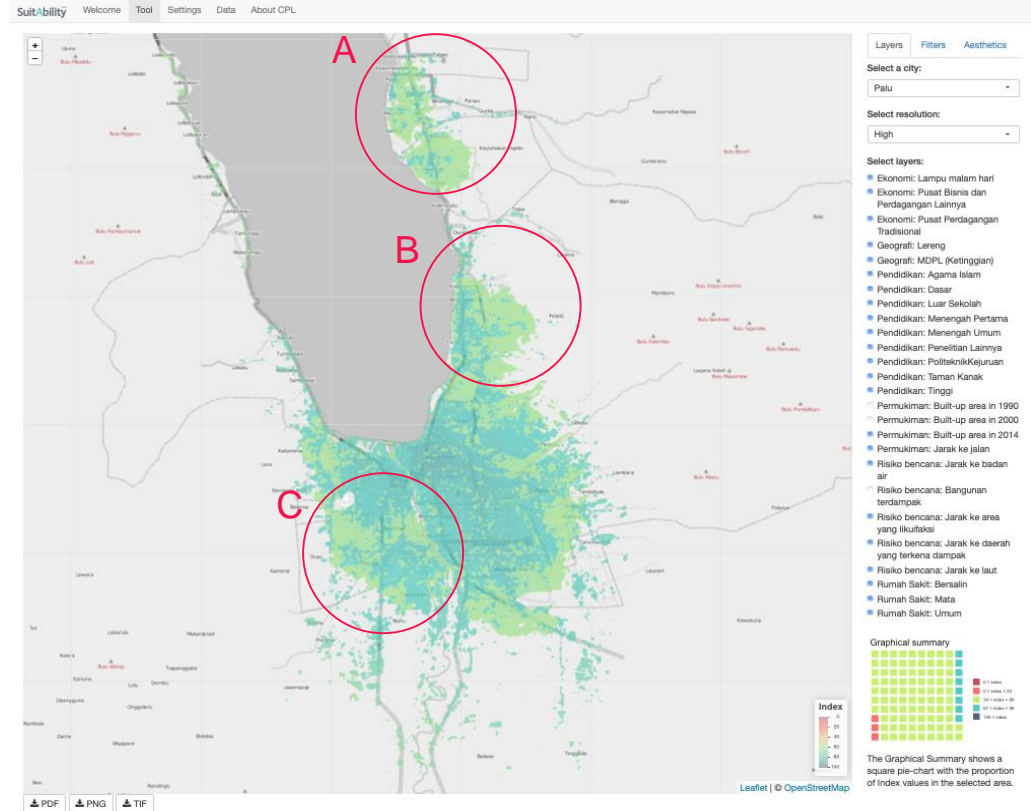
Suitability

Finding strategic locations for informed urban planning



Analytical tool for resilience and disaster risk reduction

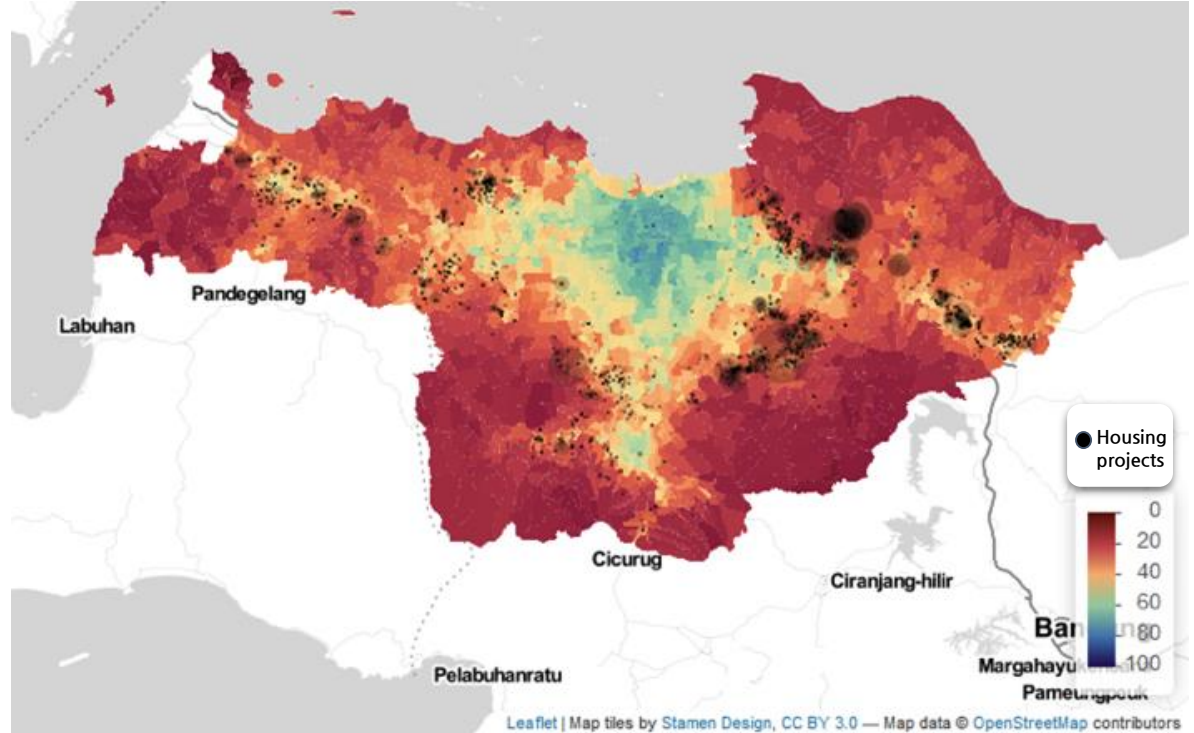
- Palu earthquake and tsunami reconstruction
- Identified resettlement areas
- Dramatically reduced assessment (3 weeks vs 5 months)





Supports planning agencies and city governments to define the optimal location of investments, for example:

- Affordable housing projects
- Hospitals
- Schools
- Transportation infrastructure





What it is

Urban Performance is a tool that assesses the city's present and future performance by creating multiple growth scenarios that include investment projects, public policies and land regulations. The results are evaluated with a set of SDG indicators.

What it does



Scenarios development



City plan evaluation



Evidence-based decision-making



Urban Performance

Assessing present & future performance



Semarang used the tool to compare present conditions (BASE scenario), the application of their detailed spatial plan (RDTR) and the implementation of a transport-oriented development (TOD) policy in the city. The main goal was to identify what the city could do to improve social conditions and economic performance, with low carbon growth.

	Urban Footprint [km ²]	Population Density [inhabitants/km ²]	Municipal Service Costs [IDR/capita]	GHG Emissions [kgCO ₂ e/capita/year]	Energy Consumption [kWh/capita/year]
BASE	317	7,682	950,428	2,355	6,444
RDTR	413	6,961	1,031,548	2,560	7,244
TOD	317	9,083	828,866	2,248	6,041



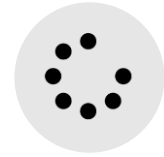
What it is

Collabdata is a robust digital platform that captures needs, challenges and ground realities of the communities, strengthens public consultations and simplifies the analysis of collected data with powerful visualizations.

What it does



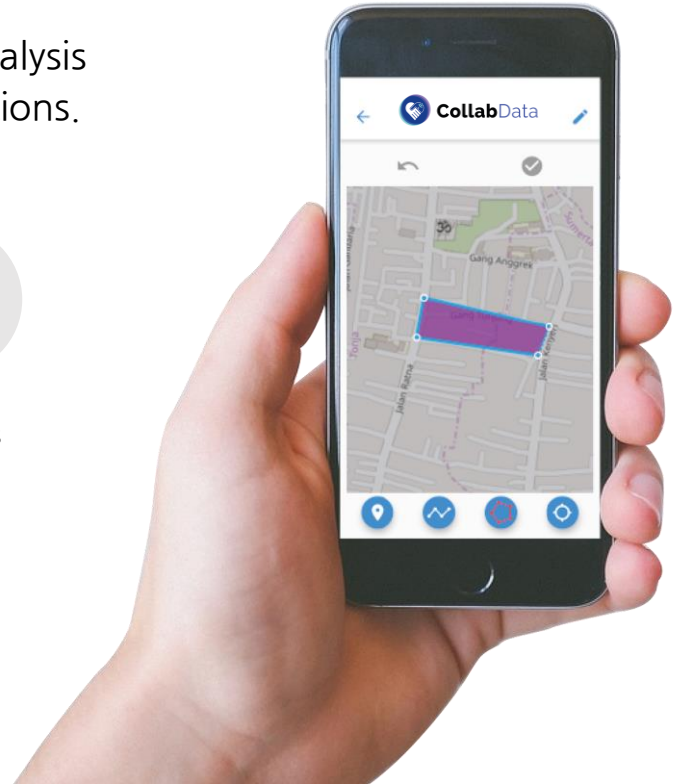
Public Consultations



Social Monitoring



Analytics



Collabdata


Bringing communities & governments closer



Semarang

Pilot Results:

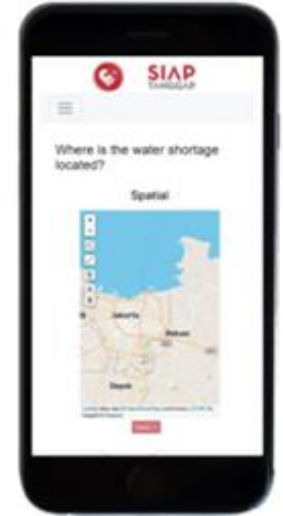
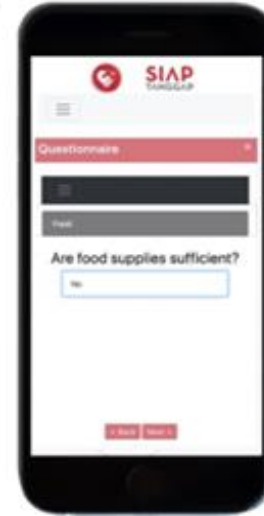
 **7,200**
registered users

 **11,400**
data entries in less
than one week

Monitored ground realities by
collecting data on:

- **Health**
- **Social issues**
- **Economic issues**
- **Food security**

Currently preparing for
second round, this time to
improve school conditions



Collabdata
& COVID-19

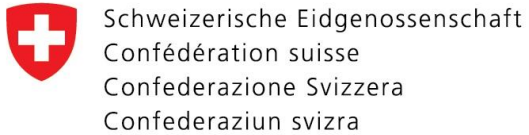


Urban Planning Tools support collaborative, evidence-driven decision-making, building more resilient cities.

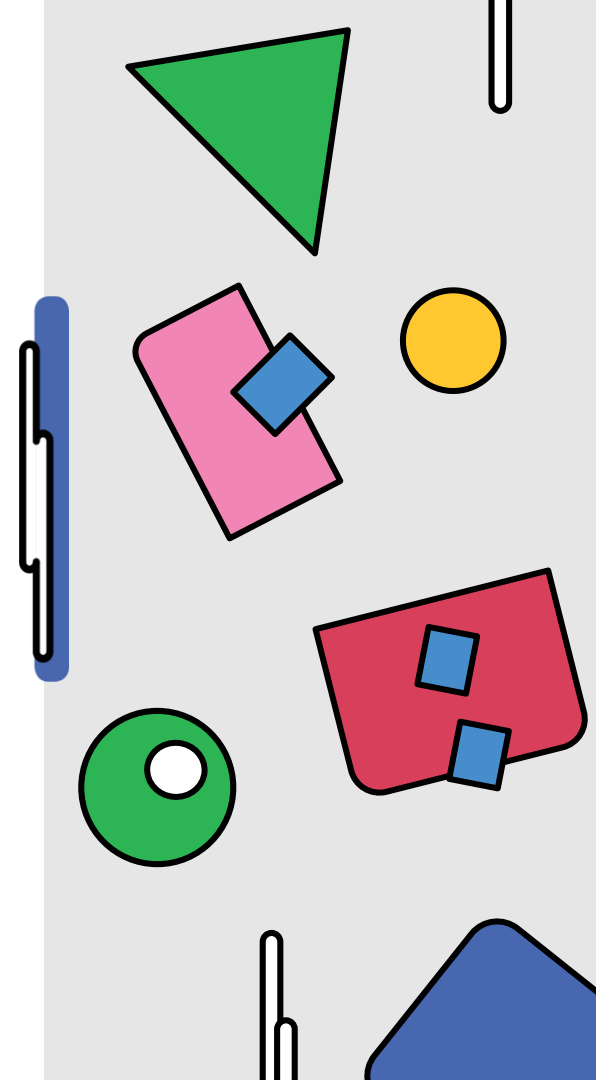




Support



Swiss Confederation



Thank You!

City Planning Labs

