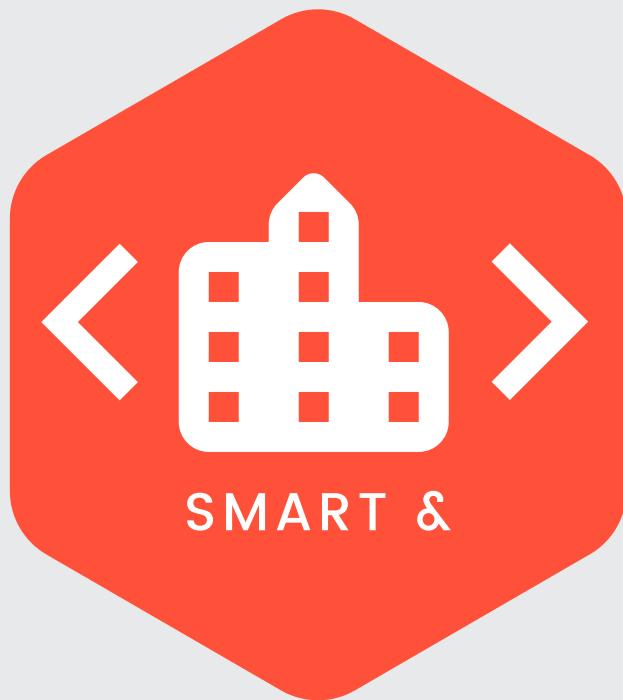


# GETTING STARTED



Card kit for Local Government Units

GUIDE BOOK

PROJECT OF:



SUPPORT FROM:



01

# Preview

GUIDEBOOK : Getting Started with Being Smart and Data-Driven for LGUs Card Kit

 SmartCT  
Making Smart Cities Open.



## A project of SmartCT with support from Friedrich Naumann Foundation Philippines

This guide is published under the Creative Commons BY-SA 4.0 Licence and is available on Github. Find anything that should be improved? File an issue so we can work on it! Want the guide or cards in your language? Help us translate it!

**GUIDEBOOK : Getting Started with Being Smart and Data-Driven for LGUs Card Kit**



# WHAT



The Getting Started with Being Smart and Data-Driven for LGUs Card Kit consists of a CARD SET and this GUIDEBOOK.

The CARD SET is made up of two kinds of cards: BUILDING BLOCKS and GETTING STARTED cards. These cards introduce concepts such as open data, data literacy, data portals, and how to get started with being smart and data-driven from the perspective of a Local Government Unit (LGU) leader.

Meanwhile, the GUIDEBOOK explains the kinds of cards, illustrates how different stakeholders can use the cards and provides an example of an LGU best practice in being smart and data-driven.

GUIDEBOOK : Getting Started with Being Smart and Data-Driven for LGUs Card Kit

# WHY



Smart Cities, that is digital transformation in our cities and communities, are developing fast and changing more and more areas of our lives, often without us noticing.

We wanted to create a tool that makes it easier for busy local government leaders (LGU leaders) to work with smart cities and data, moving from talking to action - getting started.

There are many different aspects to consider in the smart cities field. With the Card Kit for Data-Driven LGUs, anyone, even without prior technical knowledge, can quickly get an overview of smart cities through the lens of becoming a data-driven local government.

By creating common visual cues and using non-technical language with which the LGU leaders can refer to anytime, the Card Kit for Data-Driven LGUs allows you to address the uncertainty of the LGUs of the future-- smart cities.

# HOW



The Getting Started with Being Smart and Data-Driven for LGUs Card Kit provides a visual and non-technical overview of the most important elements, actions, and aspects that make up a data-driven local government.

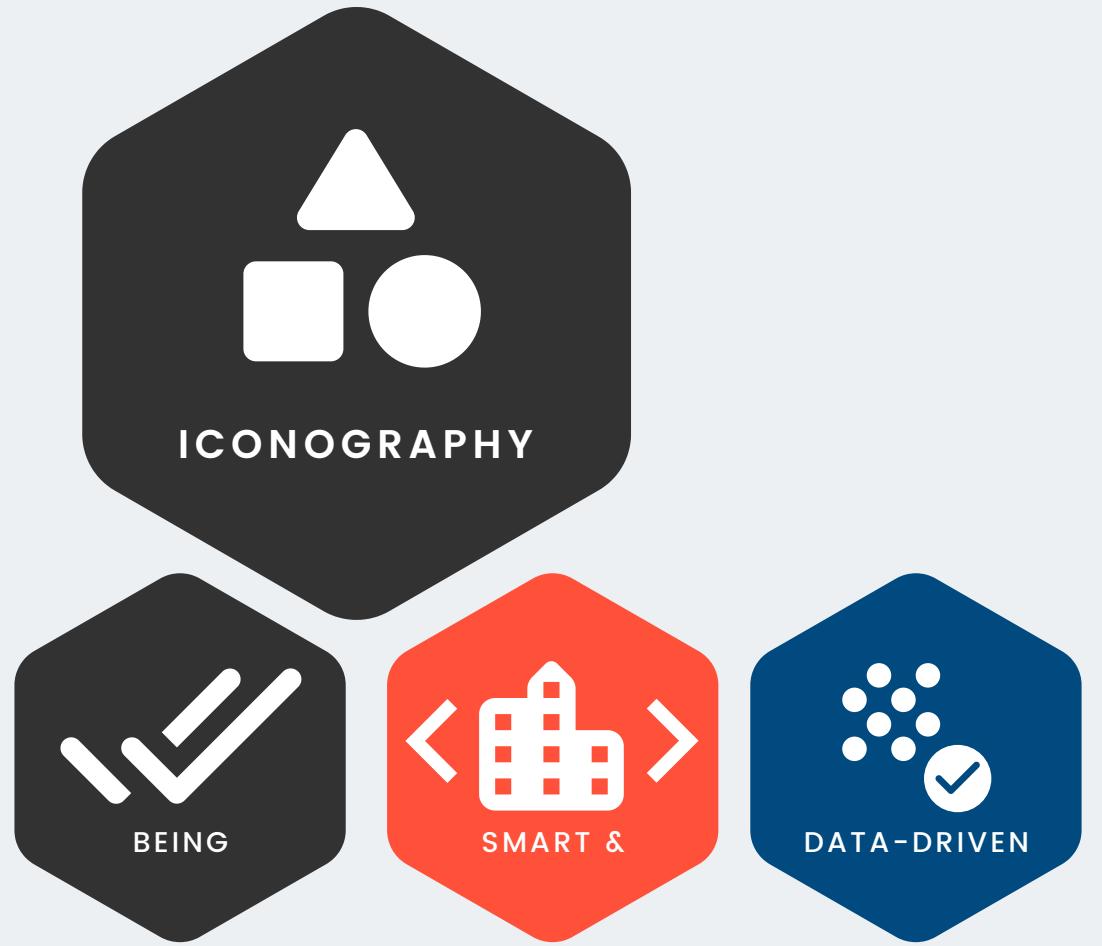
The kit is designed to be printable, simple, and straightforward to use. You can:

- Spread them out on your desk;
- Tape them to a wall;
- Sort them into piles; or
- Come up with your own groupings.

With the Getting Started with Being Smart and Data-Driven for LGUs Card Kit, anyone, even without prior technical knowledge, can quickly get an overview of smart cities through the lens of becoming a data-driven LGU.

02

# Cards & Design



Each icon is carefully crafted using known system icons from the internet to form a unified taxonomy and visual cues symbolizing common terms in being data-driven and smart.

We mainly used the following references for iconography:

- Digital Trust for Places and Routines (DPTR): an open-source communication standard that enables people's transparency, accountability, and control. The standard is free for anyone to use.
- Material.io : a design system created by Google to help teams build high-quality digital experiences for Android, iOS, Flutter, and the web. We mixed and matched Material.io's system icons to represent a command, file, device, directory, or common actions.

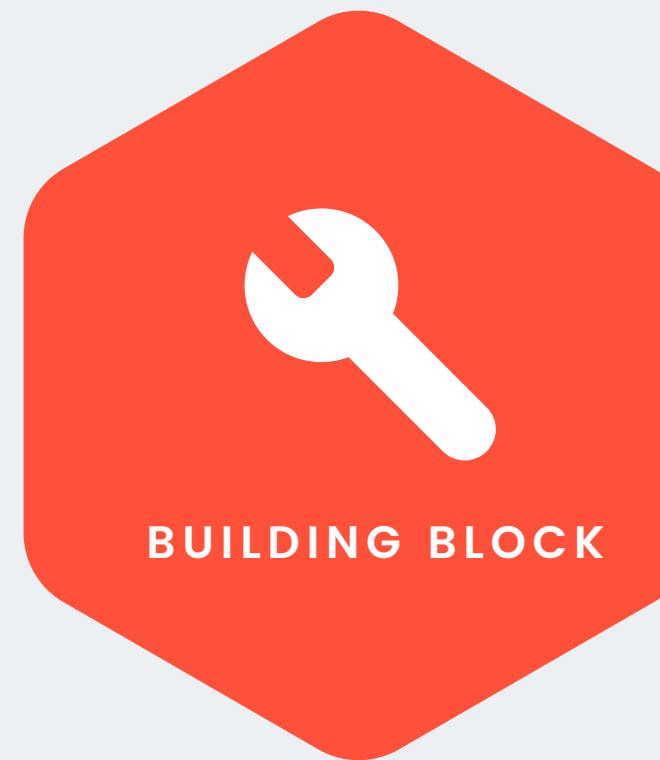
We chose the hexagon shape because it is a shape that is predominant in nature (e.g. bees, snow) and also popular among technology enthusiasts.



The CARD SET is made up of two kinds of cards: BUILDING BLOCKS and GETTING STARTED cards.

These cards introduce concepts such as open data, data literacy, data portals, and how to get started with being smart and data-driven from the perspective of a Local Government Unit (LGU).

We are proud to present the first set of cards, 26 cards, with topics based on our research, user testing, and rounds of prioritization workshops.



# Building Blocks

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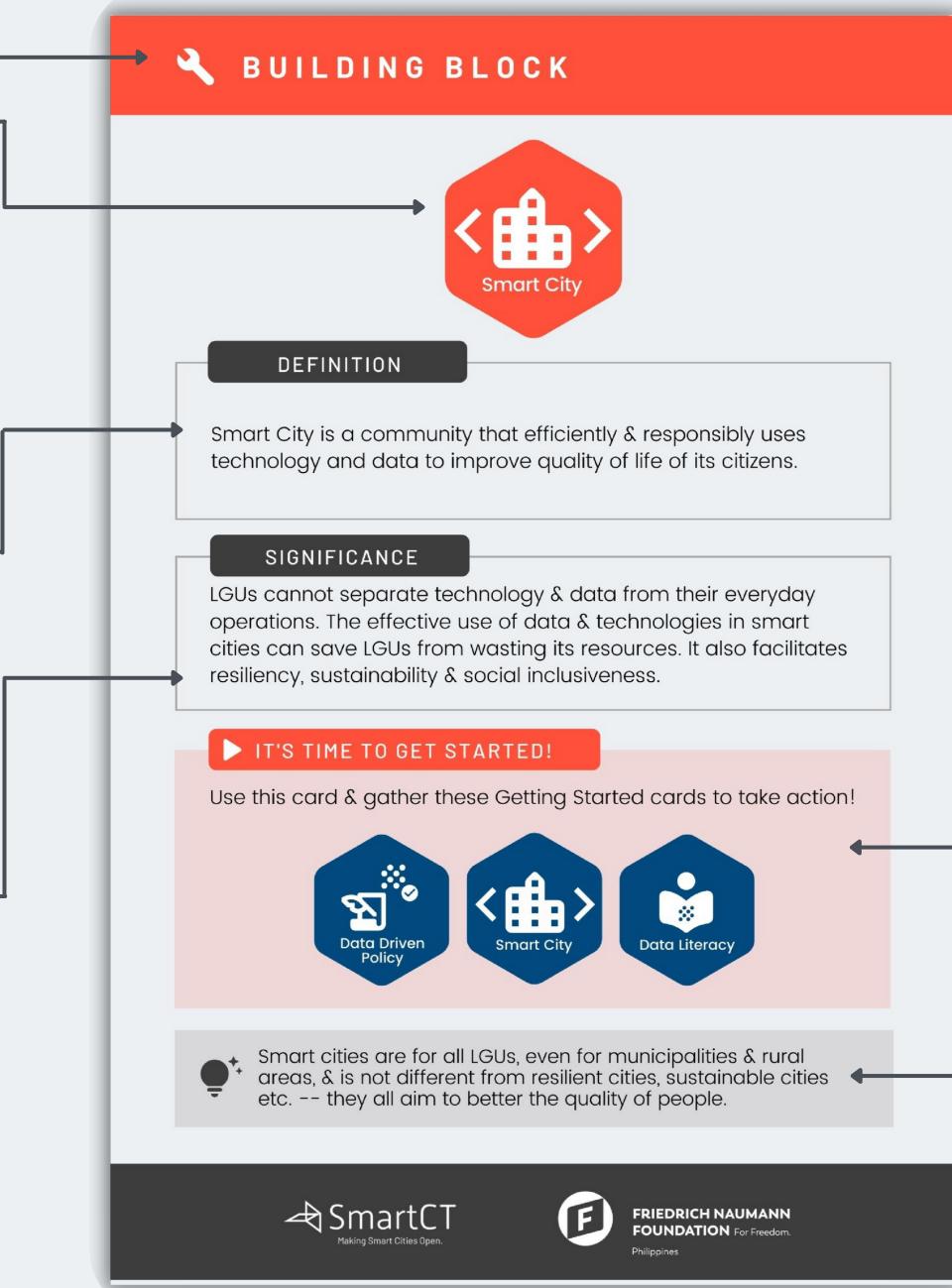
# Building Blocks

The building blocks are the most commonly reoccurring elements and features that data-driven organizations and smart cities are consists of.

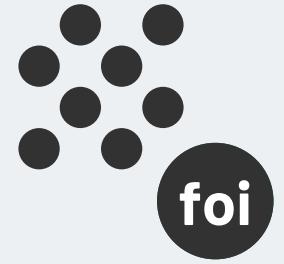
This first iteration of the Getting Started Card Kit for Being Data-Driven and Smart is a library of 15 Building Block cards with different aspects that can be combined and connected to the Getting Started cards. They encourage creative playing and reshaping of ideas.

- 1.freedom of information
- 2.data
- 3.open data
- 4.machine-readable data
- 5.data ethics
- 6.data privacy and security
- 7.data-driven organizations
- 8.data visualization and presentation
- 9.data literacy
- 10.data fallacies
- 11.data inventory
- 12.smart cities
- 13.data stewardship and data governance
- 14.data sharing
- 15.dashboards

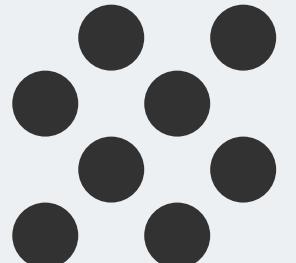
- Type of card**
- Icon** : This is an informational sign which the LGU & the public can adopt. These icons serve as visual cues that anyone can grasp when trying to recall new information about being smart & data-driven.
- Definition** : We use the non-technical explanation of each key concept to help you explore the complex social nature of being smart & data-driven.
- Significance** : This answers the question - What's in it for the LGU? This is a great entry point for discussion so that the LGU can reflect on what they really want to & can achieve from the given concept.



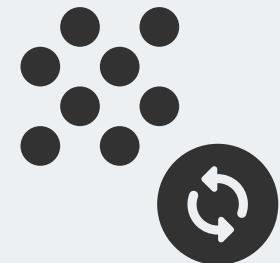
- Connection to the Getting Started Cards** : Now that you know about the concept & its significance, how can you put this into action? Use the Building Block Card with the listed 3-4 Getting Started cards & you will now have the key points & steps from other longer guides in a compact & easy digest form.
- Tips** : A bonus section for Building Block Cards, which includes tips, & common misconceptions



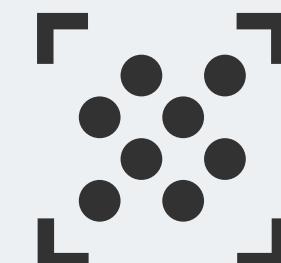
Freedom of  
Information



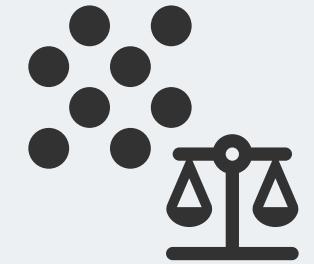
Data



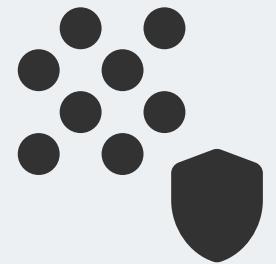
OpenData



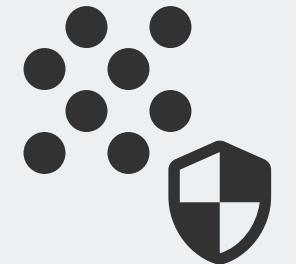
Machine Readable



Data Ethics



Data Privacy



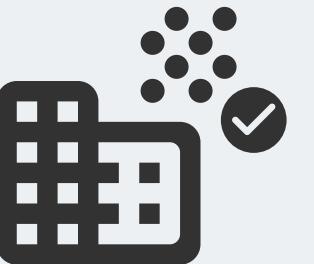
Data Security



Openness



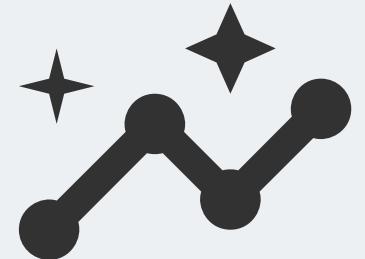
Data Driven



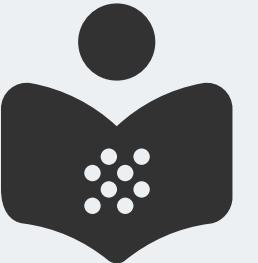
Data Driven  
Organization

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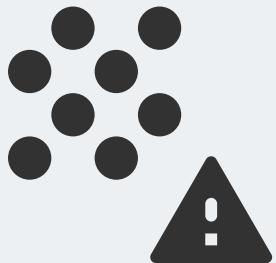
 **SmartCT**  
Making Smart Cities Open.



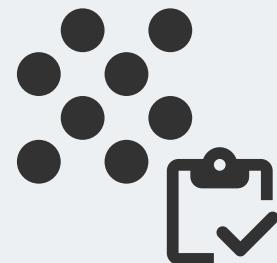
Data Visualization



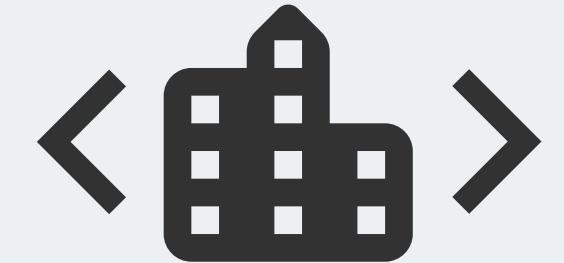
Data Literacy



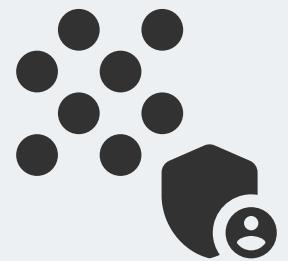
Data Fallacy



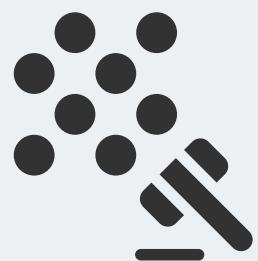
Data Inventory



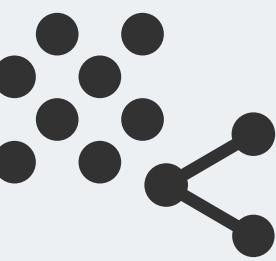
Smart City



Data Stewardship



Data Governance

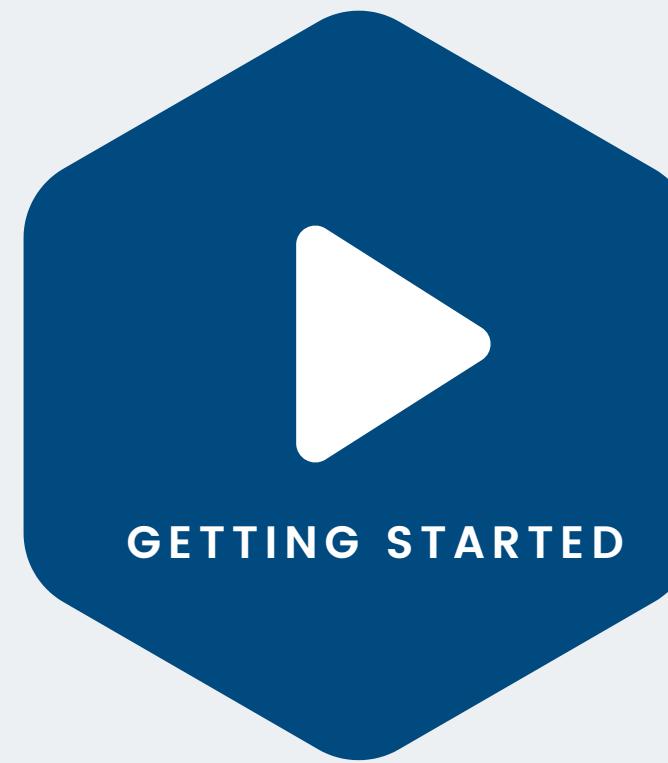


Data Sharing



Dashboard

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# Getting Started

GUIDEBOOK : Getting Started with Being Smart and Data-Driven for LGUs Card Kit



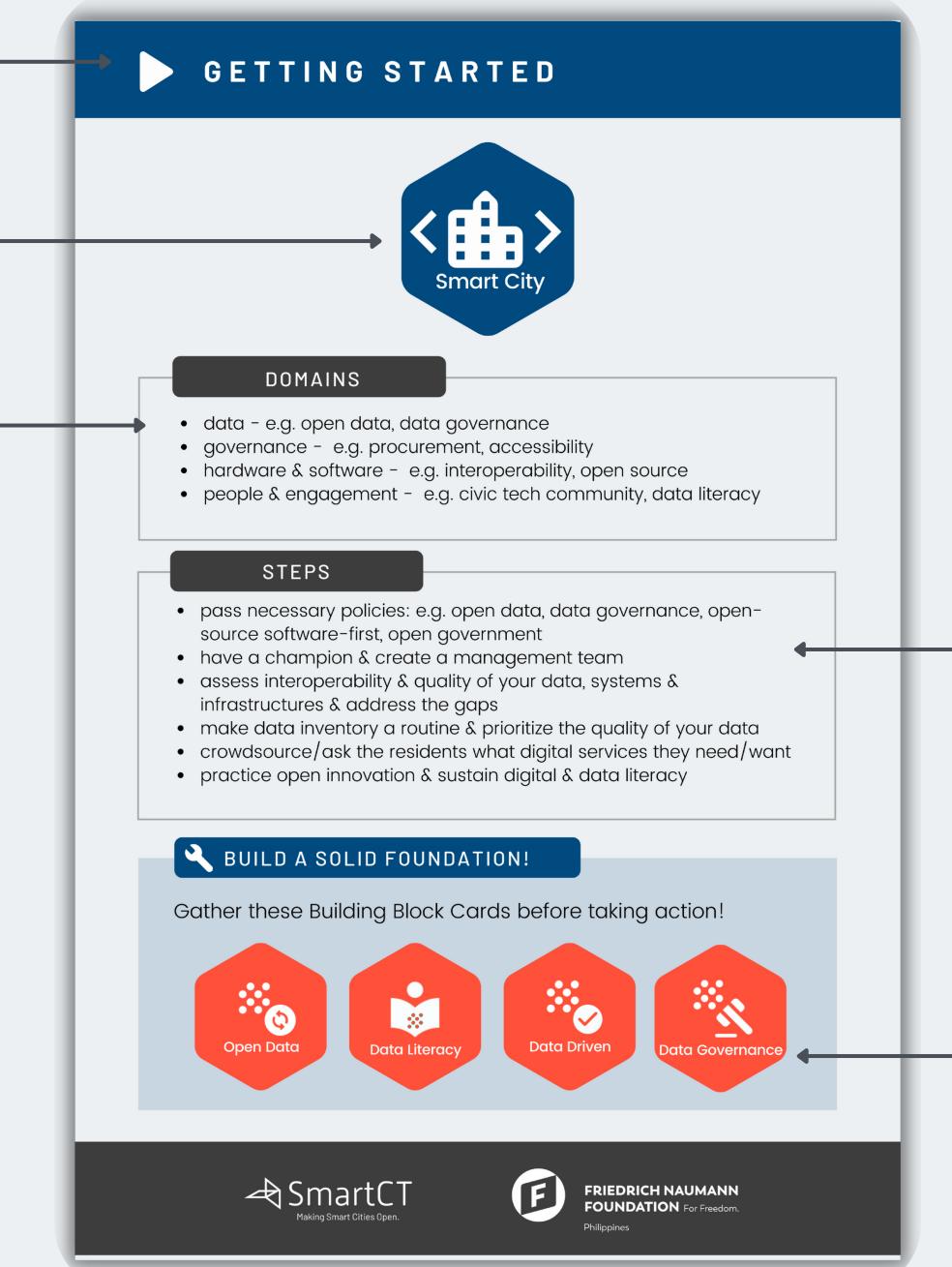
# Getting Started

The Getting Started Cards offer LGU leaders a practical overview and guidance on how to get started with being smart and data-driven local government units (LGUs). It provides a set of tools to be smart and data-driven based on the Building Block cards.

This first iteration of the Getting Started Card Set for Being Data-Driven and Smart has 11 Getting Started cards which are connected to several building blocks as foundations to accomplish the getting started goal.

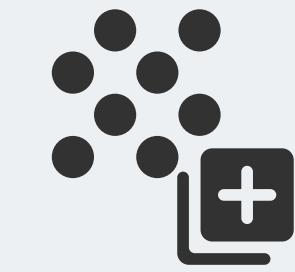
1. how to gather data
2. how to do a data inventory
3. how to get started with data-driven policies
4. how to digitize data
5. how to open up data
6. how to analyze data
7. how to present data
8. how to share data internally
9. how to be data literate
10. how to be a smart city
11. how to use data for disasters

- Type of card**
- Icon** : This is an informational sign which the LGU & the public can adopt. These icons serve as visual cues that anyone can grasp when trying to recall new information about being smart & data-driven.
- Considerations** : There are various key considerations in getting started to being smart & data-driven LGUs. Expect prerequisites, domains, key considerations in this section that are needed for successful implementation.

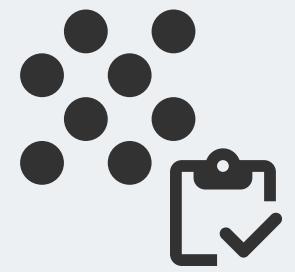


**4. Steps** : If not done correctly, getting started with being smart and data-driven can be costly and a risk to the safety and security of the LGU. The goal of this section on steps is to provide you with clear guidelines in a compact format.

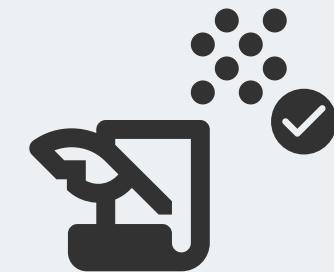
**5. Building Block Cards as Foundation:** Now that you know about the steps and prerequisites, use the listed 3-4 Building Block cards as foundation and requirements to get started.



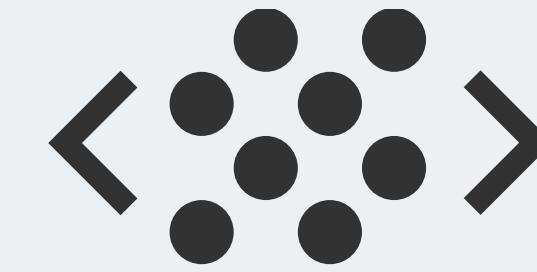
Gather Data



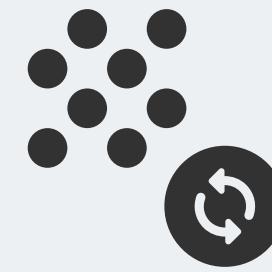
Data Inventory



Data Driven Policy



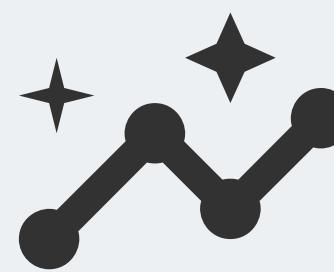
Digitize Data



Open Data



Analyze Data



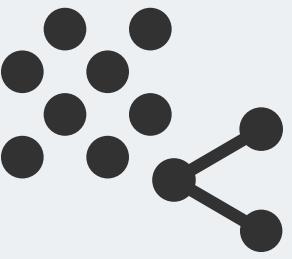
Data Visualization



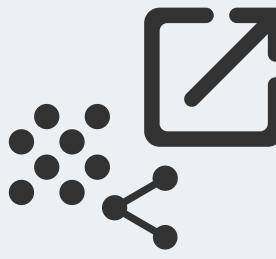
Data Literacy

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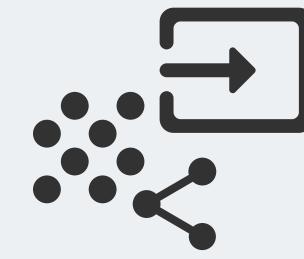
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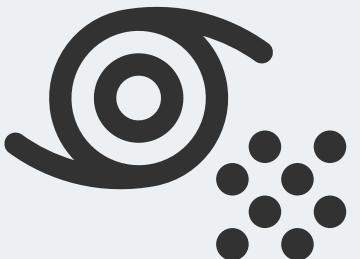
Data Sharing



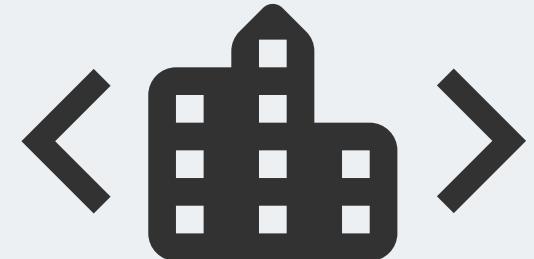
External Sharing



Internal Sharing



Disaster Data



Smart City

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03

# How to Use

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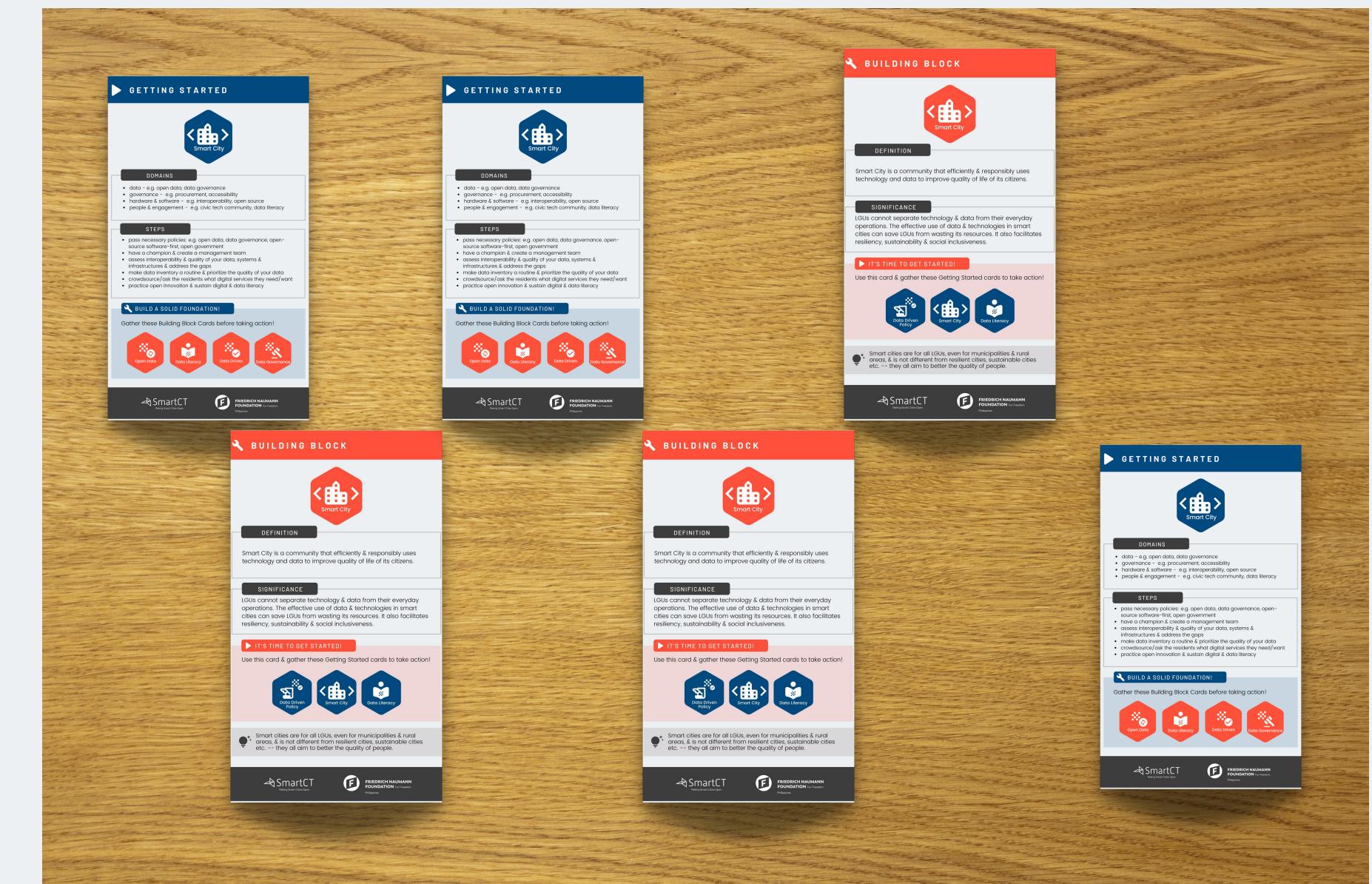


# Common Uses

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# ...by laying them out

The best way to start is to spread out the entire deck on the table and start talking about it. Allow the dialogue to guide you.



# ...with post-its for brainstorming

To map and define a topic, use the cards in conjunction with post-its.

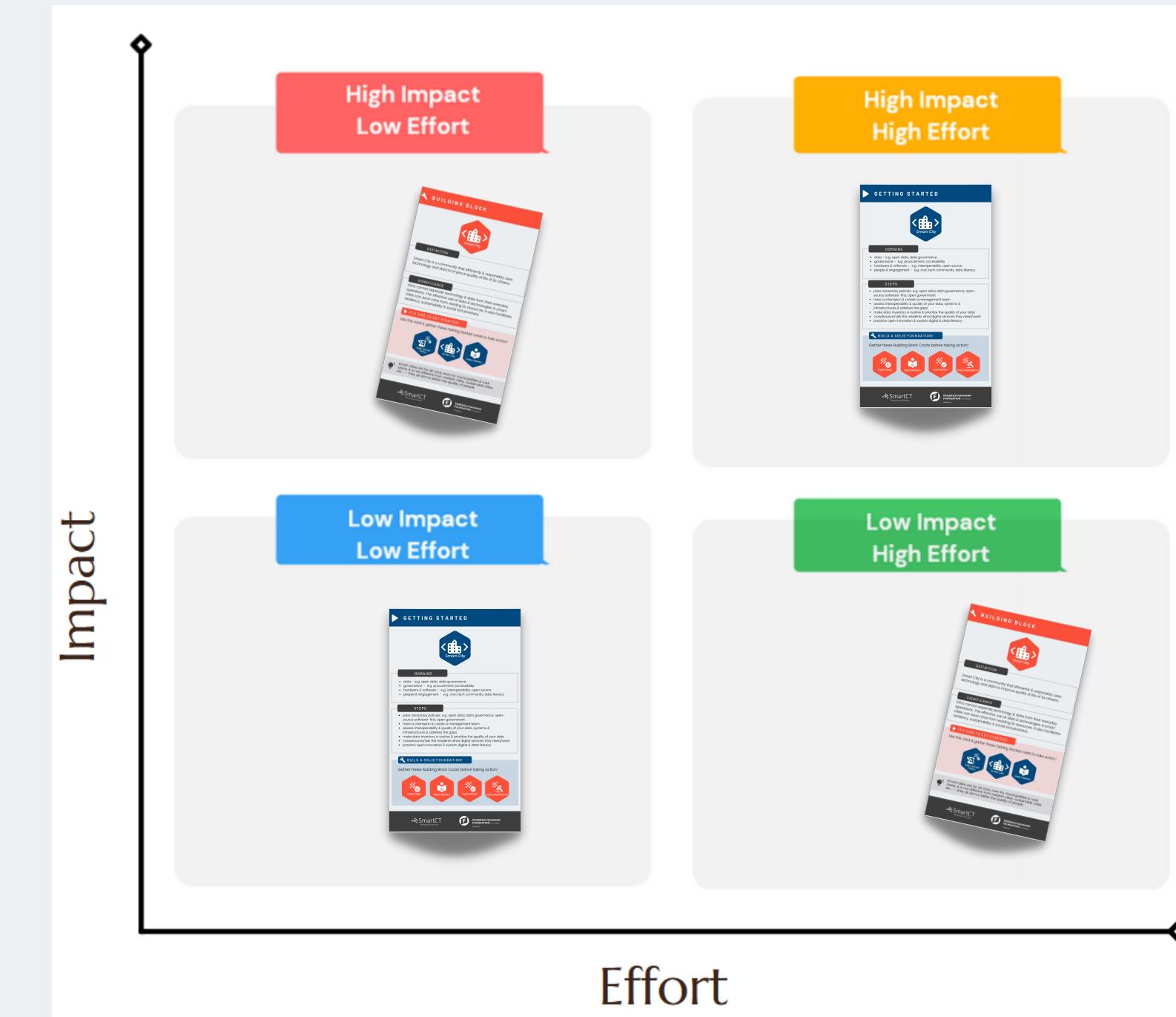
- Choose a couple of cards to work with
- With post-its, begin to define each card depending on your goal.



# ...with grids for prioritization

Grids are a useful tool for sorting, gaining a better understanding, and determining priorities.

- Select cards to use
- Choose a suitable grid
- Start discussion and sorting





# Sample Scenarios

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## Communication tool for Mayors

By using an image-based language that can quickly convey information to people the same way that street and traffic signs do, Mayors can easily introduce new concepts to its constituents.



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## Checklist tool for Policymakers

Use the cards as a tool to shift the focus from being re-active to pro-actively designing and planning for data driven and smart-related policies!



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## Planning tool between planners and citizens

Use the cards as an interface. The cards use easy to understand terminologies making it easier for citizens to take part, and feel comfortable in understanding and sharing ideas.



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## Assessment tool for Department Heads

The Department Heads can use the cards in order to gain a deeper understanding of their agency's data-driven and smart initiatives. The cards can be a visual framework for surveys and inventories.



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04

# Resources & Tips



# Best Practices

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## LGU-level Open Data Policy

The Municipality of Arteche signed into effect Executive Order No. MB-15 or the Open Data Policy on June 14, 2021. Arteche's Open Data Policy can improve services, promote transparency and accessibility to public information, and enhance coordination among departments, partners, and citizens.

It also mentioned the right and freedom of the people to information. But, the policy also takes measures on data privacy, confidentiality, and security.

The of the Open Data Policy addressed the issues experienced by agencies to collect and analyze data. The policy fostered innovation to come with various ways to share public data to save time and money.

Access the copy of the Open Data Policy here:  
<https://krisvl.com/wp-content/uploads/2021/06/E.O.-2021-15-OPEN-DATA-POLICY.pdf>



## Farmers Agriculture Resource Management System - MAIS

Based on interactive computer software developed by the Local Government of Mina, Iloilo, this program collects, sorts, evaluates, and utilizes agricultural data in real-time. Agricultural data in this program pertains to farmers and their families and activities, land, crop, and livestock production.

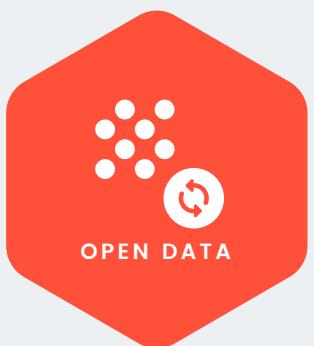
To maximize government programs for agriculture and enable more farmers to become economically sufficient, MAIS helps stocks or inventory of food and other commodities be managed more efficiently and aid decisions for importation. MAIS was made possible by volunteers (barangay or village level) who regularly submit reports on the status of crops in their respective communities and the help of the Municipal Agriculture Office for sorting and use of data.

Know more about Mina's Farmers Agriculture Resource Management System - MAIS here:  
<https://iciaed.com/index.php/about-icia-ed/>



# Tools & Resources

GUIDEBOOK : Getting Started with Being Smart and Data-Driven for LGUs Card Kit



#### OPEN DATA HANDBOOK

Link: <https://opendatahandbook.org/guide/en/>

The legal, sociological, and technical elements of open data are discussed in this handbook. Anyone can use it, but it is specifically built for those who want to open up data. It goes over the why, what, and how of open data, including why to go open, what open is, and how to actually 'open' data.



#### INTERNATIONAL OPEN DATA CHARTER

Link: <https://opendatacharter.net/principles/>

Governments can adopt the Open Data Charter, commit to delivering open data policies that make data accessible and freely available while protecting the rights of people and communities. The International Open Data Charter was launched at the margins of the 2015 United Nations General Assembly after a global consultation led by key representatives from governments including the UK, Canada, and Mexico, and civil society organisations.



#### STATE OF PHILIPPINE SMART CITIES

Link: [https://drive.google.com/file/d/12nc9uG1fulUGYCB4I\\_6lawb4X\\_eC0SKQ/view?usp=sharing](https://drive.google.com/file/d/12nc9uG1fulUGYCB4I_6lawb4X_eC0SKQ/view?usp=sharing)

Most of the current resources about smart cities in the Philippines focus on technologies and highly urbanized LGUs. A research done by SmartCT in partnership with Friedrich Naumann Foundation in 2020 highlights that the path to creating smart cities should be through a culture of openness, co-creation and shared resources.



#### SMART LGU ASSESSMENT

Link: [https://drive.google.com/file/d/1Z09YQhcT7NifBRmlKWBUp6uhv2Jd\\_UUK/view?usp=sharing](https://drive.google.com/file/d/1Z09YQhcT7NifBRmlKWBUp6uhv2Jd_UUK/view?usp=sharing)

The Smart LGU Growth Model, developed by SmartCT in partnership with Friedrich Naumann Foundation, is developed to support any LGU in assessing the current level at which the LGU uses data and information to facilitate\_effective, efficient, sustainable, and strategic operations of its daily business and social activities.

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#### GOVERNING SMART CITIES

Link: <https://www.weforum.org/whitepapers/governing-smart-cities-policy-benchmarks-for-ethical-and-responsible-smart-city-development>

The Governing Smart Cities is a report by World Economic Forum serves as a baseline for cities aiming to build regulations for ethical and responsible smart city governance. It looks into present practices in five key areas: ICT accessibility, privacy impact assessments, cyber responsibility, digital infrastructure, and open data.



#### DATA ETHICS IN THE PUBLIC SECTOR

Link: <https://www.oecd.org/digital/digital-government/good-practice-principles-for-data-ethics-in-the-public-sector.htm>

The OECD Digital Government and Data Unit released the Good Practice Principles for Data Ethics in the Public Sector which is a document to understand the aspects of ethical practices in data governance and to develop a multilateral human-centred digital and data-enabled community organizations.



#### CORE SKILLS FOR PUBLIC SECTOR INNOVATION

Link: <https://drive.google.com/file/d/1eAgQnQrJIJH7JjKwYMQlhVHQJZb6sS5s/view?usp=sharing>

The beta skills model for public-sector innovation developed by the OECD is based on six "core" skill areas. In order to enable greater levels of innovation in the public sector, all officials in a modern 21st-century public service should have at least some awareness of these six areas: iteration, data literacy, user centricity, curiosity, storytelling, and insurgency.



#### DATA SKILLS FRAMEWORK

Link: <https://drive.google.com/file/d/1z06pUtcIOVYdw0Ky88guw9p5PFjuC-hc/view?usp=sharing>

The Data Skills Framework, developed by the Open Data Institute, is a tool that can be used by the LGU to learn about the skills required to work with data. It can assist the LGU in analyzing your present data literacy practices, identifying skill mismatches, and addressing data literacy gaps within your organization.

# Other Tools and References

- **Why is Freedom of Information (FOI) important for me?**
  - Carter Center. (n.d.). Why is Freedom of Information (FOI) important for me? <https://www.cartercenter.org/resources/pdfs/peace/ati/liberia/value-of-foi-trifold-final.pdf>.
- **What is data, and why is it important?**
  - Import.io. (2018, June 28). What is data, and why is it important? <https://www.import.io/post/what-is-data-and-why-is-it-important>
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  - Data.gov. (2012, September 24). A Primer on Machine Readability for Online Documents and Data. <https://www.data.gov/developers/blog/primer-machine-readability-online-documents-and-data>.
- **Data Privacy FAQs**
  - Data Privacy Philippines. (n.d.). Data Privacy FAQS. <https://www.privacy.com.ph/learn-data-privacy-compliance/data-privacy-faqs/>.
- **Data Fallacies to Avoid**
  - Geckoboard. (n.d.). Data Fallacies to Avoid. <https://www.geckoboard.com/uploads/data-fallacies-to-avoid.pdf>
- **Data Inventory Guide**
  - Center for Government Excellence. (n.d.). Data Inventory Guide. <https://labs.centerforgov.org/data-governance/data-inventory/>.
- **Improved data governance leads to better economic outcomes for Philippine citizens**
  - <https://www.sdsntrends.org/research/2018/11/5/case-study-philippines-statistics-authority?locale=en>
- **Quick Guide to Natural Hazard Data**
  - <https://www.adb.org/sites/default/files/institutional-document/387631/natural-hazard-data-quick-guide.pdf>

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