



**FRIEDRICH NAUMANN
FOUNDATION** For Freedom.
Philippines



GETTING STARTED WITH BEING SMART AND DATA-DRIVEN CITIES

Card kit for Local Government Unit

ANALYSIS

GETTING STARTED ▶



Card kit for Local Government Units

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Getting Started with Being Smart and Data-Driven for LGUs

What things do I need to know and where do I start?

INTRODUCTION & RATIONALE

Data Literacy is as much about individual knowledge as it is about organizational processes and policies. A knowledgeable individual in a non-data-driven organization can only thrive if they are provided an environment to learn, experiment, and share their knowledge with others. In turn, an organization relies on data-literate individuals so that it can be data-ready, build data-informed processes, and create data-driven decisions.

Knowledge of concepts such as data literacy and open data are crucial for local government leaders to start the journey of their Local Government Units (LGU) towards becoming smart, sustainable, and data-driven. There are countless ways to learn about data literacy, open data, and being smart and sustainable. These vary in terms of the topics they cover and the amount of time needed to complete them. Some come in the form of self-paced online learning courses, others are offered as training and workshops that last a day or two, while there are also options that include taking a university course.

Unfortunately, the busy nature of the work of local government leaders often does not allow them to partake in long-term learning opportunities about data literacy, open data, or smart cities. Most of the time, their experience with these topics comes in the form of crash-courses, webinars, or if they are lucky, short-term training, and workshops. That's not entirely bad. However, without any follow up to these short term events or the opportunity to apply what they learned, local government leaders can easily forget these topics as quickly as it was taught to them.

What's needed is a learning resource that is easy-to-use and easy-to-understand. Something that may not cover all the topics in-depth but could serve as a reminder to an experienced local government leader or a reference to someone who's just getting started with creating an open, smart, sustainable, and data-driven LGU.

OBJECTIVES

This project aims to create easy-to-use and easy-to-understand learning materials in the form of cards/posters/booklets that will help local government leaders learn about building a culture of data and openness for developing smart, sustainable, and data-driven LGUs.

OUTPUT

- **Building Block cards**
 - Foundation-specific set of learning cards about openness, data, and data literacy for developing smart, sustainable, and data-driven LGUs copyrighted to the Foundation.
- **Getting Started Cards**
 - Introduce the basic principles that serve as building blocks to these fields, provide examples on how to use these building blocks to answer common questions and get started with common activities related to the topics of data, openness, and smart sustainable cities, and;
- **Guidebook**
 - suggest resources such as tools, datasets, and other learning materials
- **Webpage**
 - Develop an online platform where materials will be uploaded making it accessible to the target audience. They will be released under an open Creative Commons BY-SA License for accessibility purposes.

Learning Cards : Content

Persona Testing

We used the Personas as a tool to characterize our target users to make better decisions on the card contents. Creating personas helped us develop empathy with the people with whom we intend to use the cards. Workshops and information gathering with stakeholders from the Department of Interior and Local Government (DILG), local government units in CALABARZON, Friedrich Naumann Foundation (FNF), etc were held.

Prioritization

Prioritization exercises with the stakeholders helped us identify the essential cards. This structured, objective approach helped achieve a more collaborative consensus and ensure that the target audience's needs would be addressed.

Final Card List

After several rounds of prioritization exercises, we held consultation meetings with the stakeholders, including FNF. Consequently, below is the final list of cards.

#	card	type
1	bb: open data and freedom of information	building block
2	bb:data	building block
3	bb:open data	building block
4	bb:machine-readable data	building block
5	bb:data ethics	building block
6	bb:data privacy and security	building block
7	bb:data-driven organizations	building block
8	bb:data visualization and presentation	building block
9	bb:data literacy	building block
10	bb:data fallacies	building block
11	bb:data inventory	building block
12	bb:smart cities	building block
13	bb:data stewardship and data governance	building block
14	bb:data sharing	building block
15	bb: dashboards	getting started
16	gs: how to gather data	getting started
17	gs: how to do a data inventory	getting started
18	gs: how to get started with data-driven policies	getting started
19	gs: how to digitize data	getting started
20	gs: how to open up data	getting started
21	gs: how to analyze data	getting started
22	gs: how to present data	getting started
23	gs: how to share data internally	getting started
24	gs: how to be data literate	getting started
25	gs: how to be a smart city	getting started
26	gs: how to use data for disasters	getting started

Card Design

A/B testing

We produced two sets of card designs for A/B testing. These variants of the cards were shown to users at random, and analyses were used to determine which variation performs better. Below are the final designs as indicated in the Guidebook.

1. **Type of card**

2. **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.

3. **Definition** : We use the non-technical explanation of each key concept to help you explore the complex social nature of being smart & data-driven.

4. **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.

5. **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.

6. **Tips** : A bonus section for Building Block Cards, which includes tips, & common misconceptions

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

1. **Type of card**

2. **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.

3. **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.

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

Output Links

- **Web-page**
 - <https://smartctph.github.io/getting-started-with-smart-and-data-driven-igus/preview.html>
- **Building Block cards**
 - PNG
 - https://github.com/smartctph/getting-started-with-smart-and-data-driven-igus/tree/main/getting-started_cards/fnf/building-block-cards/BB%20Cards-PNG
 - PDF
 - https://github.com/smartctph/getting-started-with-smart-and-data-driven-igus/tree/main/getting-started_cards/fnf/building-block-cards
- **Getting Started Cards**
 - PNG
 - https://github.com/smartctph/getting-started-with-smart-and-data-driven-igus/tree/main/getting-started_cards/fnf/getting-started-cards/GS%20Cards-PNG
 - PDF
 - https://github.com/smartctph/getting-started-with-smart-and-data-driven-igus/tree/main/getting-started_cards/fnf/getting-started-cards/GS%20Cards-PDF
- **Guidebook**
 - https://github.com/smartctph/getting-started-with-smart-and-data-driven-igus/blob/main/getting-started_guidebook/Getting%20Started%20Smart%20and%20Data-driven%20Guidebook.pdf
- **Design Guide**
 - https://github.com/smartctph/getting-started-with-smart-and-data-driven-igus/blob/main/getting-started_design/Getting%20Started%20Smart%20and%20Data-driven%20Design%20Guide.pdf
- **Icons**
 - https://github.com/smartctph/getting-started-with-smart-and-data-driven-igus/tree/main/getting-started_icons/
- **GitHub Repository**
 - <https://github.com/smartctph/getting-started-with-smart-and-data-driven-igus>

References

A Data and Analytics Leader's Guide to Data Literacy

<https://www.gartner.com/smarterwithgartner/a-data-and-analytics-leaders-guide-to-data-literacy>

A Primer on Machine Readability for Online Documents and Data

<https://www.data.gov/developers/blog/primer-machine-readability-online-documents-and-data>

Data Ethics: What it is and Why it's important

<https://impacx.io/blog/data-ethics-what-is-it-and-why-is-it-important/>

Data Fallacies to Avoid

<https://www.geckoboard.com/uploads/data-fallacies-to-avoid.pdf>

Data Inventory Guide

<https://labs.centerforgov.org/data-governance/data-inventory/>

The Data-Driven Policy Analysis Framework as a Template for Healthcare Policy Analysis

<https://austinpublishinggroup.com/nursing-research-practice/fulltext/anrp-v1-id1005.php>

Data Privacy FAQs

<https://www.privacy.com.ph/learn-data-privacy-compliance/data-privacy-faqs/>

Data Sharing Is a Business Necessity to Accelerate Digital Business

<https://www.gartner.com/smarterwithgartner/data-sharing-is-a-business-necessity-to-accelerate-digital-business>

Data Storytelling: The Essential Data Science Skill Everyone Needs

<https://www.forbes.com/sites/brentdykes/2016/03/31/data-storytelling-the-essential-data-science-skill-everyone-needs/?sh=200b5b4f52ad>

Digitizing the Philippines

<https://opinion.inquirer.net/141452/digitizing-the-philippines>

The Five Stages of Data Analysis

<https://www.lighthouse labs.ca/en/blog/the-five-stages-of-data-analysis>

Implementing Sustainable Development Goal 11 by connecting sustainability policies and urban planning practices through ICTs

https://unece.org/DAM/hlm/documents/Publications/U4SSC_Brochure_Implementing_sustainable_development_goal_11.pdf

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>

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<https://www.snowflake.com/data-warehousing-glossary/internal-data-sharing/>

The Key to Establishing a Data-Driven Culture

<https://www.gartner.com/smarterwithgartner/the-key-to-establishing-a-data-driven-culture>

Open Data Policy of Arteche Municipality, Iloilo

https://krisvl.com/wp-content/uploads/2021/06/E.O.-2021-15-OPEN-DATA-POLICY.pdf?fbclid=IwAR1bjO-ctdg_Et2WtbzeRAZFte-nwnowkqPZ3uo070St_a_Si0CqBQnmRTw

Quick Guide to Natural Hazard Data

<https://www.adb.org/sites/default/files/institutional-document/387631/natural-hazard-data-quick-guide.pdf>

Smart Cities and Infrastructure

https://unctad.org/system/files/official-document/ecn162016d2_en.pdf

Seven Steps To Better Data Visualization

https://www.fontbonne.edu/wp-content/uploads/2020/04/AA_Data_Visualization_White_Paper_Proof_1_20.pdf

What is a Data Dashboard?

<https://powerbi.microsoft.com/en-us/data-dashboards/>

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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<https://searchdatamanagement.techtarget.com/definition/data-governance>

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What is Open Data?

<https://opendatahandbook.org/guide/en/what-is-open-data/>

Why is Freedom of Information (FOI) important to me?

<https://www.cartercenter.org/resources/pdfs/peace/ati/liberia/value-of-foi-trifold-final.pdf>

Why Open Data?

<https://opendatahandbook.org/guide/en/why-open-data/>

