# Map your way to smartness success

### The Smart LGU Assessment & Growth Map Booklet





Smart LGU Assessment is brought to you by SmartCT in partnership with Friedrich Naumann Foundation to enable any local government unit (LGU) to assess their smartness growth. We love to evolve and iterate. Feel free to contact us at assess@smartct.org.

#### What's inside?

- 1. The SmartCT 11-step Growth Assessment
- 2. What this Growth Assessment does NOT do
- 3. Setting an assessment process
- 4. The Smart LGU Assessment Tool and LGU Practices
- 5. Smart LGU Growth Map Model

## 01

# SmartCT 11-step Growth Assessment

#### SmartCT 11-step Growth Assessment

Every Local Government Unit (LGU) needs to be able to assess its current level of growth and capacity in enabling smart initiatives before moving forward.

The Smart LGU Growth Model is being developed to support any community 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.

This evaluation is based on existing Climate Change models (CCC). British Commission Standards Institute (BSI), IDC, Union. International European Telecommunication Union (ITU), Open Datas Institute (ODI), and the Scottish Cities Alliance - and emphasizes the organizational mechanisms and dimensions that a Smart LGU must take and have to become truly smart sustainable communities.

It provides any community with a faster and simple way to assess it's smart readiness and growth against 11 vital dimensions:

- 1. LGU strategy
- 2. Localizing Climate Change and Sustainability
- 3. Stakeholder Engagement & Communications
- 4. Operating Model & Service Delivery
- 5. Asset Management
- 6. Data Strategy
- 7. Access to Data
- 8. ICT Plan
- 9. Standards
- 10. Innovation Ecosystem
- 11. Performance Management

For other analysis on your community's state of smartness, you may also refer to the following models:

#### British Standards Institution

PAS 181 'Smart City Framework: Guide to establishing strategies for smart cities and communities' and PD 8100 'Smart Cities Overview'

IDC Government Insights: Smart City Maturity Model: Assessment and action on the path to maturity

Smart Cities Council: Smart Cities Readiness Guide

### What this **Growth Assessment** does NOT do

### This LGU Growth Map is not set in stone.

We love to evolve and iterate.

This is not a comprehensive assessment. The results should not be taken as a comprehensive assessment of the way in which your local government operates, but rather as an indication of the success of your initiatives to date.

This does not suggest what the ultimate priorities of your LGU should be. The priorities of your LGU should always be based on and tailor-fitted to the needs of your citizens. However, the goals outlined in this booklet are the best socio-technical foundation we gathered thus far.

This booklet is not set in stone. As the saying goes, change is the only constant thing we have and as vou notice technological rapid advancement is and unpredictable. As part of the we plan to evolve process. ourselves and LGUs will also need to make frequent reviews and corrections along the way.

On a high level, the Smart LGU Assessment Tool and Growth Map have been drawn from the key objectives common to all schools of Smart City thinking and implementation:

- 1. A desire to improve the quality of life for citizens
- 2. An aspiration to deliver sustainability, resilience, and high quality services
- 3. Greater engagement with society and collaborative leadership
- 4. Informed decision-making and reduced levels of risk
- 5. Innovative, appropriate, and efficient use of technologies

# Setting an assessment process

## The following steps outline a suggested approach to self-assessment:

Identify

01

02 Assess 03 Action

**Iterate** 

04

 Identify an organizational lead – a specific lead should coordinate and facilitate

the evaluation.

the growth map model can be used to test each department or organization but we suggest starting with an evaluation of the LGU as a whole

Identify core
 members – These
 members should be
 knowledgeable and act
 as the specialist in each
 11 dimension

Assess - Measure each dimension using the Growth model

Take Action - Circulate the results and use the result to develop your Smart LGU Strategy or action plans

Set date for next assessment

 This allows the LGU to monitor its progress

## 04

# The Smart LGU Assessment Tool & LGU Practices

	01 LGU Strategy			
		Yes	No	Unsure
1	Do you have a clear vision of what you'd like your LGU to look like in the future?			
2	Do you have a set of goals, priorities and actions?			
3	Do you know what main challenges your LGU needs to address?			
4	Do LGU stakeholders and LGU users have input into your LGU vision?			
5	Is your vision being revised regularly in light of both the changing urban or rural environment and the availability of technological solutions?			
6	Have you conducted a horizon scanning exercise including a PEST and SWOT analysis to enhance your smart LGU development?			
7	Is your strategy citizen centric?			
8	Have you mapped the skills needed to deliver smart LGU projects?			
9	Do you have established a common terminology agreed among all LGU stakeholders?			
10	Are you using insights obtained through data analytics – or similar methods - to inform your decision and policy making process			



#### Clark Green City Vision

To become the Philippines' first green, smart, and disaster-resilient city.

	02 Localizing Climate Change and Sustainability					
		Yes	No	Unsure		
1	Do you have an updated Local Climate Change Action Plan?					
2	Is your Local Climate Change Action Plan consistent with the provisions of the Local Government Code, United Nations Framework Convention on Climate Change (UNFCCC) and National Climate Change Action Plan?					
3	Have you established a Climate change information system at the local level?					
4	Is the Integrated Water Resource Management (IWRM) with CCA-DDR integrated in your local comprehensive land and water use plans?					
5	Do you have local programs to enhance the knowledge and capacity of the LGU and communities on integrated ecosystem-based management approach?					
6	Do you have an implementing resettlement plan for population congestion and to secure and manage disaster prone and affected areas?					
7	Have you developed a municipal or LGU sustainability plan focusing on sustainable production and consumption, green workforce, transit-oriented development, and CC adaptation and building retrofits?					
8	Do you have local and community programs enhancing the knowledge and capacity of the LGU for CCA-DRRM?					
9	Do you implement Health emergency response, preparedness and post-disaster management at the local or community level?					
10	Do you have a local database on climate-smart industries and services to monitor and integrate existing and new climate-smart industries and services within existing business registration system?					



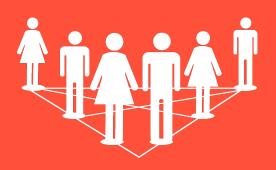
#### **IRIGA CITY**

The SDGs should be monitored and assessed through its indicators. Many of these indicators can be localized by gathering data at territorial level.

Iriga City is a frontrunner city when it comes to the dimension on localizing SDG. Iriga City's strength lies on profiling risk and hazard and the capacity to build early warning response centers for tyohoon and other disasters.

Iriga City, Camarines Sur is also one of the identified 25 Digital Cities to be monitored by the DICT for the next 3 years. The city is expected to optimize and encourage the growth of IT-BPM centers and provide more jobs.

	03 Stakeholder Engagement & Communica	ation		
		Yes	No	Unsure
1	Are cross-departmental representatives, private sector experts and citizen part of the leadership team?			
2	Do you engage the citizen in the planning processes for your LGU?			
3	Do you act upon the collectively agreed decisions?			
4	Do you keep stakeholders informed on decisions taken?			
5	Do you capture the views and ideas of the different LGU stakeholders to improve services?			
6	Do you have a digital inclusion strategy to enable to uptake of digital services by all segments of the population?			
7	Are new suggestions for engagement by citizens and business considered and leveraged where appropriate?			
8	Are you integrating digital and non-digital channels to enable stakeholder participation and gather opinion?			
9	Have you mapped the stakeholder environment in your LGU?			
10	Are you measuring in regular intervals citizen satisfaction with the LGU – its services, its quality of life?			



#### Tabuk City

EO No. 11-2020 was issued to create the Tabuk City Information and Communications Technology (ICT) Council to function as the primary planning and policy advisory body on development, promotion and application of national information and communications technology and e-commerce initiatives.

	04 Operating Model & Service Delivery	/		
		Yes	No	Unsure
1	Are you employing strategies to breakdown silo working?			
2	Are you regularly reviewing the state of suppliers?			
3	Do you have a portfolio of cross-departmental projects?			
4	Are you developing the skills of the LGU workforce in areas like agile project management, user experience, or digital business models?			
5	Are your service initiatives characterised by agility and focused on innovation?			
6	Are smart LGU pilot projects or demonstrators taking place?			
7	Are you reorganising departments and agencies in accordance with service delivery goals?			
8	Are you performing cost-benefit analysis for Smart LGU projects to determine an effective resource allocation?			
9	Are you engaging with other LGUs to learn lessons and exchange experiences?			
10	Do you prioritise shared architecture solutions and interoperability to break down barriers between departments?			



#### South Cotabato Province

The South Cotabato led the launched a domestic COVID 19 containment contact tracing app called South Cotabato COVID Contact Tracing System (SC-CCTS) which is now shared and used in the SOCCSKSARGEN region and to be to be showcased in UN summit for being interoperable and open.

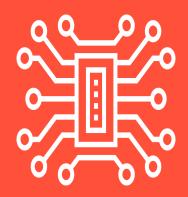
	05 Asset Management					
		Yes	No	Unsure		
1	Are there joint investment plans for the LGU wide deployment of connected assets with multipurpose sensors?					
2	Do you have a LGU wide asset management register of physical and digital assets is in place?					
3	Are you upgrading existing physical assets to capture data throughout the LGU?					
4	Do you have maintenance arrangements in place to take over the responsibility for assets developed by and/or managed by LGU stakeholders that leave the LGU?					
5	Do you know who owns the assets in your LGU?					
6	Are you using predictive methodologies to proactively manage LGU assets?					
7	Do you have LGU wide management of critical assets crucial to urban infrastructure operations?					
8	Do you have a public-private infrastructure pipeline in place?					
9	Is asset data opened across service providers to improve public services?					
10	Does real time asset data support service delivery?					



#### Mina Municipality, Iloilo

Mina utilizes the Mina Municipal Agriculture Information System – Farmers Agriculture Resource Management System (MAIS), an egovernment platform established to manage the information system, data management, and agricultural extension programs management in the locality.

	06 Data Strategy			
		Yes	No	Unsure
1	Are you managing your data?			
2	Are data analytics applied on combined data sets to acquire new insights support, service delivery, information sharing or the better utilization of resources?			
3	Are you using data from various sources to create a complete visual overlay of your LGU?			
4	Have data management standards and processes been implemented?			
5	Have you made interoperability key to your successful data strategy?			
6	Are you identifying opportunities to increase real-time data capture?			
7	Have you reached agreements with partners about data sharing, data privacy and data management policies?			
8	Do you continually monitor, review and develop data processes in an agile manner?			
9	Is your data used for predictive models to improve services?			
10	Are you using real-time data to respond to non-predictable events?			



#### Tabaco City

Tabaco has been gathering basic data about households in the area every two years since 2008 for their community-based monitoring system (CBMS). Using this data, Tabaco City was able to prioritize households that have low income and are in need of support.

	07 Access to Data			
		Yes	No	Unsure
1	Are you making LGU data openly available to the wider public?			
2	Are you operating a data platform for open data?			
3	Did you consider user-friendliness when designing the data portal?			
4	Do physical and virtual spaces exist to support LGU data communities?			
5	Do you have data sharing targets and performance measures?			
6	Did you engage with organisations inside and outside of government to overcome data sharing barriers and make access to data fully operational?			
7	Is all LGU data available through a single data hub, including data from government services and external stakeholders (such as utilities)?			
8	Is your data shared more widely across departments?			
9	Are your performance metrics accessible to the public?			
10	Is data published to agreed formats?			



#### South Cotabato Province

The Province has committed to make the public procurement process more efficient and transparent and the procurement data more useful, readable, and gender-sensitive, through its online and offline open contracting mechanisms.

	08 ICT Plan			
		Yes	No	Unsure
1	Does the existing ICT infrastructure support your smart ambitions?			
2	Are you providing LGU wide access to next generation broadband for both fixed and wireless provisions?			
3	Are connected assets deployed LGU wide?			
4	Are you continuously reviewing your ICT architecture?			
5	Do you have an immediate response mechanism to ICT system failure?			
6	Is your ICT capable of supporting the growing number of sensors in the LGU environment – either embedded in the built environment or as carried digital devices?			
7	Have you conducted an analysis of your existing ICT infrastructure?			
8	Is your LGU using standards based ICT equipment?			
9	Does your digital infrastructure allow real-time data to be generated?			
10	Are you making the location of the digital and communications infrastructure available for the benefit of the LGU?			



#### Cauayan City

In partnership with Smart Communications and PLDT, the city continuously expands its internet services through installation of fiber cables and provision of 5G services to the residents of the city.

	9 Standards						
		Yes	No	Unsure			
1	Have you considered using open standards?						
2	Are you selecting suppliers based on their willingness to adopt standards that you've selected?						
3	Do you exploit standards that foster cross department working and decision making?						
4	Are you using standards to create integral technology architectures?						
5	Are you using and are you encouraging other LGU stakeholders to adopt smart LGU vocabularies created by standards developing organisations (SDOs)?						
6	Have you identified the key areas for interoperability in your LGU?						
7	Have you engaged with your national SDO or one of the international SDOs about your smart development?						
8	Are you using standards to break down silo operations in government and industry?						
9	Have you identified bottlenecks that standards might help resolve?						
10	Are you aware of the different smart LGU initiatives undertaken by SDOs?						



#### Manila City

Manila City is among the 36 cities chosen by World Economic Forum to take part in G20 Global Smart Cities Alliance on Technology Governance. G20 prioritizes for transparency and privacy; safety, security and resiliency; interoperability and openness; operational and financial sustainability; and equity, inclusion and societal impact.

	10 Innovation Ecosystem					
		Yes	No	Unsure		
1	Is your LGU committed to innovation?					
2	Do you have an incubator space to harness new ideas and innovations?					
3	Are you investing in innovation to stimulate new ideas trough competitions, hackathons, etc.?					
4	Are you engaging with start-ups, SMEs, and academia located in your LGU?					
5	Are you empowering citizens to be part of this urban innovation movement?					
6	Are you taking calculated risks when implementing new solutions?					
7	Are you promoting the work of innovative data-driven start-ups to drive public sector reform?					
8	Have successful prototypes been rolled out LGUwide?					
9	Are the needs of the LGU at the heart of the innovation cycle?					
10	Are running event for like-minded people to network and develop ideas together?					



#### **Iloilo City**

The city and province of lloilo are eyeing to become innovation hubs by 2030 through the "Innovate Iloilo" program. "Innovate Iloilo" is a multistakeholder initiative which aims to not only to put Iloilo on the map as an innovation hub but also to foster local innovations.

	11 Performance Management			
		Yes	No	Unsure
1	Are you using an outcomes-focused performance metrics to monitor service solutions, processes, and staff?			
2	Do you know how mature your LGU is in terms of its governance and its sectorial system?			
3	Do you have a widely agreed measurement framework of key performance indicators (KPIs) in place?			
4	Are you aware of ISO 37120 indicators?			
5	Do you have established clear baselines for all benefits?			
6	Do you have established measurable success criteria for the benefits you are trying to achieve?			
7	Do you have wide stakeholder involvement in the LGU performance monitoring process?			
8	Do you assess 'quality of life'?			
9	Are you using the results of performance monitoring process to engage with other similar LGUs to exchange experiences and learn from success as well as failure?			
10	Is your performance monitoring process transparent?			



#### Arteche Municipality

The local government of Arteche recently signed a memorandum of agreement with SmartCT to advance and support the community's digital transition by exchanging knowledge and implementing Small but Smart Initiative, a systems and inclusive approach in smart development.

# Smart LGU Growth Map Model

Smart LGU Growth Map Model									
Points	0-22	23-44	45-66	66-88	89-121				
	INITIAL No or limited data strategy	OPPORTUNISTIC Growing Awareness of the value of data	REPLICABLE Application of a LGU wide data strategy	MANAGED  Data analytics integrated into LGU functions	OPTIMISED Full understanding of LGU data value				
1	No clear vision, targets, or priorities	focused on inputs and Internally driven vision and priorities; Goals and target	LGU vision established; Little LGU wide agreement on measures and targets; An action plan with targets and priorities exists	Clear vision with priorities and actions	Embedded vision; Recognised as leaders in smart cities and communities domain				
2	Not localised Climate Change (CC) and SDG	Localised CC & SDG vision and priorities strategy in place; Strategies only internal	CC and SDG projects are still in silos	Localised CC and SDG initatives	CC and SDG initiatives embedded and integrated				
3	No citizen engagement Poor service communication	Commitment to stakeholder engagement and cross-sectoral work	A number of tools to engage citizens are adopted	LGUwide collaboration between public and private sector stakeholders	Wide stakeholder involvement in LGU performance				
4	Services delivered in silos	Integrated service delivery strategy and roadmap in place; Services still in silos	Service integration patchy	Some integration across services; Real-time service oversight	Services widely integrated				
5	Aging infrastructure	Responsive asset management with a patchy asset register	Asset strategy embedded and shared with LGU stakeholders	Predictive asset management	Active sharing and use of assets and captured data				
6	Data used for delivery of particular service	Small scale pilots in place	Data-based solution pilots have been implemented	Opening up for public transparency; Forecasting exploiting quality data	Predictive analytics and visualization				
7	Issues with data quality	Some data sets are opened up and few open data pilots in place	Data programme in development	Data analytics projects in place	Open transparent accessible performance metrics				
8	No clear ICT plan	Limited awareness of use of ICT	ICT strategy in place	LGUwide deployment of connected assets	Continuous review of ICT architecture				
9	No use of standards	Limited use of standards	Implementation of	LGUwide application of	Leaders in standards and				

			scattered standards	international standards	protocols
10	No awareness of innovation culture in the LGU	Local innovation ecosystem is starting to cooperate with the LGU		LGU innovation hub is established	Innovation ecosystem is embedded in LGU domain
11	Performance reported in silos with no or limited measures in place		Performance programme in existence, but limited agreement on measures	Performance based business model with agreed performance targets, and available to public as part of the commitment to transparency	LGU performance monitoring process is transparent with stakeholder involvement



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