

Smart Data StrategyUnlocking the Potential of Data



Table of Contents

Smart Strategy Overall Approach	3
Smart Data Vision, Mission and Strategic Priorities Approach	4
Smart Data Vision and Mission	5
Development of the Smart Data Strategic Priorities	7
Smart Data Objectives and KPIs	10
Smart Data Projects and Initiatives	15
Prioritization of Initiatives and Projects	16
Appendix	23

2

Smart Data Strategy Approach

Steps

Step 1 :
Develop Vision,
Mission and
Strategic Priorities

Step 2 :
Develop Objectives
& supporting KPIs

Step 3:
Define supporting
Initiatives &
projects

Step 4:
Prioritize the
projects

Step 5:
Detail the
Implementation
Roadmap*

Inputs

- Smart Gov. National Plan
- International
 Benchmarks from UK,
 European Union,
 Sinaapore. Australia
- UAE National Vision 2021
- Smart Gov. National Plan
- UAE ICT Plan 2018
- UAE Innovation Strategy 2021
- Smart Data Project Charter

- Operating Model layers
- Current State
 Assessment
- International Benchmarks

Impact on Smart Data
Strateaic Priorities

- Rationale, objective, benefits, outcomes
- Risk, probability, impact and mitigation
- Indicative costs
- Timelines
- RACI matrix, FTE

Mission, Vision and Strategic Priorities

Sample Output



Objectives & KPIs

Bristogic Priority (SP)	"Efficient" 5P1 Improve officiency of government services through shading and received data	"Effective" 572 the date analytics to inform decision making	"Engagement" 570 directory terrorists by enabling saliphor of Open Date for public and commercial ase
Otgectives	Reduce displication of data i.e. create a single source of druth Improve sharing of relineant data between ministries	One clara analytics to lettere government decision making by: Anaspating flavar needs: Princing immediate solutionate owner! owner! needs	Encourage an extrapresential eco-eyetem around Open Data Encouragement by providing means for people to self-influen- uning Open Oriz
K94s	- Number of disselects on creat data system that have been assigned a sample primary covers? sometic Clarge 300 by year one and 100th y-p-p increase offset) - Number of disselects shared using smart data years/(larger 100 by year one and 100th y-by year pressed data.	Prequency of clinions is government, downered unique data emilities (Clinion 10 kg) year one and 100% year one safety) Ory increase after)	Number of staff ups making use of Open Data Clarget Staff by year one annotation of the Staff by Open or one of the Staff by Open Number of Ingigined users on Open Data postal Clarget 108 000 by year one and 50% yi

Mapping & breakdown of initiatives



Prioritization framework



Roadmap



* Presented in another document

Smart Data Vision, Mission and Strategic Priorities Approach



Smart Data Vision

Smart Gov. National plan Vision was leveraged to inform the Smart Data Vision

Mapping of the principles of the Smart Government National Plan Vision to the Smart Data Strategy

Smart Government Vision Principles

Deliver one-stop end-to-end services that meet peoples' expectations

Take action ahead of time by anticipating needs and requirements

Adjust and learn as services are provided and consumed

Smart Government personalized for you

Smart Government Vision

Smart Data Vision Principles

Integrate data across all of government to deliver one-stop end-to-end services

Leverage data analysis to anticipate needs and requirements

Use data to adjust and learn rapidly

Data driven Smart Government

Smart Data Vision

Smart Data Mission

Smart Gov. National plan Mission was leveraged to inform the Smart Data Mission

Mapping of the principles of the Smart Government National Plan Mission to the Smart Data Strategy

Smart Government Mission Principles

Provide services according to people's preference in a way that makes them feel special

Actively listen to people with the aim of continuous improvement

Think ahead of what people will need and how to best meet their expectations

Respond and quickly adapt to trends and requirements as they arise

Strive to gain the confidence and trust of the people

Making services smart for people's happiness

Smart Data Mission Principles

Provide people with **efficient and innovative services** through better use of data

Collect data to help **listen to people,** with the aim of continuous improvement

Predict people's demands and needs through data analysis to best serve them

Use data to **identify trends and requirements** as they arise

Open datasets to gain trust of people

Utilising Smart Data for Smart Services

Smart Data Mission

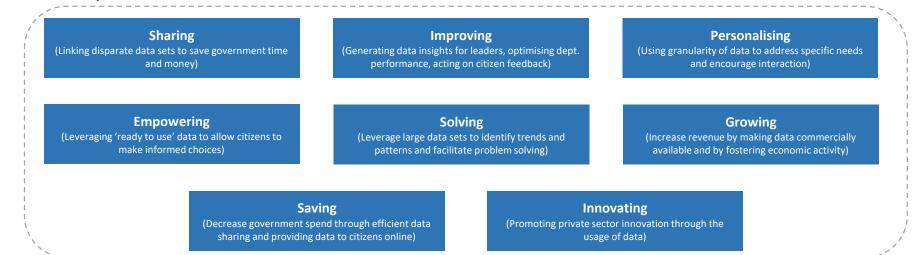
Development of the Smart Data Strategic Priorities

Smart Gov. National plan and best practice exemplars from international use cases helped to inform the Smart Data strategic priorities

Smart Government National Plan

		Vision	Mission		
	Smart Government personalized for you		Making services smart for peop	ole's happiness	
Strategic Pi	illar 1: People	Strategic Pillar 2: Government	Strategic Pillar 3: Knowledge	Strategic Pillar 4: I	Innovation
Strategic Objective (SO) 1: Improve Customer Satisfaction		SO2: Increase government efficiency	SO3: Increase generation & sharing of knowledge using ICT	SO 4: Increase ger innovatio	•

Common Themes from International Benchmarks

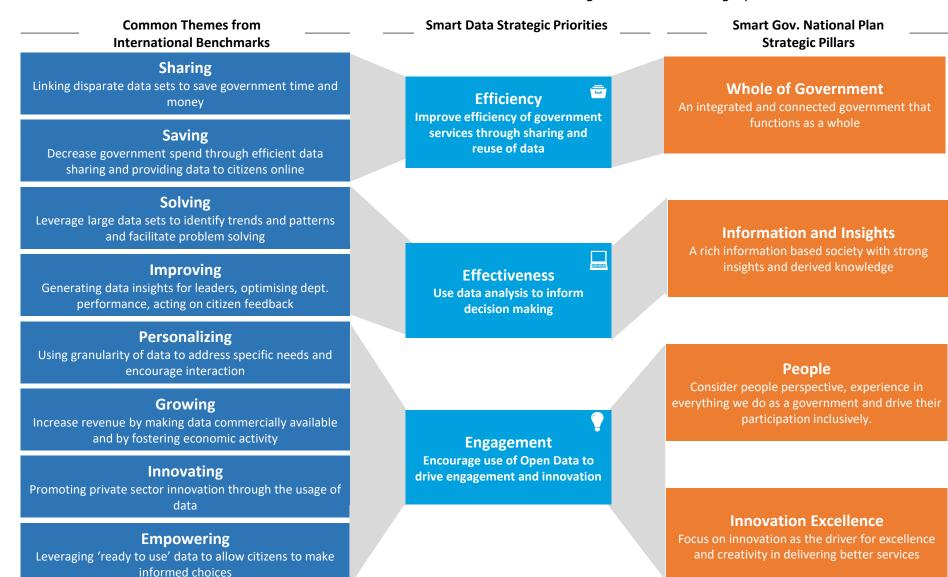






Smart Data Strategic Priorities

Common international themes when looked at in the UAE Smart Government context gave rise to 3 strategic priorities



Summary: Smart Data Mission, Vision and Priorities

For each of the Strategic Priorities supporting objectives were developed by assessing key national strategies and insights from consultations

Smart Government National Plan

	Vision		Mission		
	Smart Government personalized for you		Making services smart for peop	ole's happiness	
Strategic Pillar 1: Pec	pple	Strategic Pillar 2: Government	Strategic Pillar 3: Knowledge	Strategic Pillar 4: II	nnovation

Smart Data Strategy



Strategic Priorities 1: Efficiency
Improve efficiency of government services through sharing
and reuse of data

Strategic Priorities 2:
Effectiveness
Use data analysis to inform
decision making

Strategic Priorities 3: Engagement
Encourage use of Open Data to drive engagement and
innovation



Development of Smart Data Objectives & KPIs

For each of the Strategic Priorities supporting objectives were developed by assessing key national strategies and insights from consultations

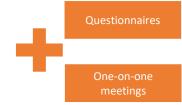












Engagement

Smart Government National Plan

"Sharing of best practice with gov't

ministries"

Innovation Strategy 2021

"Develop... standards & platforms for

local and gov't entities"

ICT Plan 2021

UAE National Vision 2021

UAE ICT Plan 2021

UAE Innovation Strategy 2021

Smart Data Project Charter

Efficiency



icy 🕒

"Reduction in processing time and cost"

Smart Government Nat Plan

"Develop a centralized Smart Government function" ICT Plan 2021

"Ensure compliance with the evolution of usage and technologies" ICT Plan 2021

Smart Data Objective 1
Create a single source of truth

Smart Data Objective 2
Improve sharing of
relevant data between
ministries

Effectiveness

"Focus on Smart Analytics as a Priority
Area"

Smart Government Nat Plan

"Principles of a Smart govt. are attentive, predictive and responsive" Smart Government Nat Plan

"Increase satisfaction in Government services"

Smart Government Nat Plan

Smart Data Objective 3

Using **data analysis** to

inform government

decision-making

"Share of 'knowledge workers' in the labor force"

UAE National Vision 2021

"Encourage entrepreneurship [& public/private] partnerships"
Innovation Strategy 2021

"Consider people perspective, experience in everything"

Smart Government Nat Plan

Smart Data Objective 4

Encourage an
entrepreneurial
ecosystem around Open
Data

Smart Data Objective 5

"Increase... number of ICT startups"

Smart Government National Plan

"Setup Innovation Incubators"

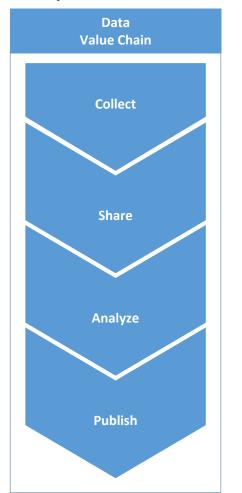
Innovation Strategy 2021

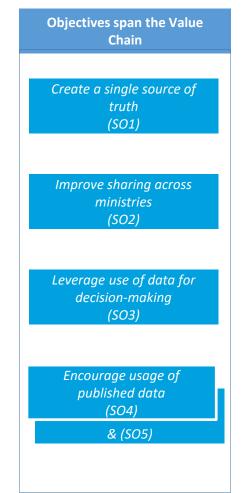
Enable engagement by providing means for people to self-inform using Open Data

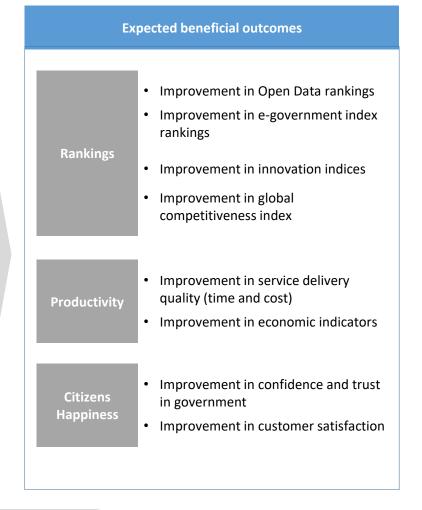


Development of Smart Data Objectives & KPIs

Objectives identified for the Smart Data Priorities strengthen every aspect of the a data value chain and is expected to result in several beneficial outcomes







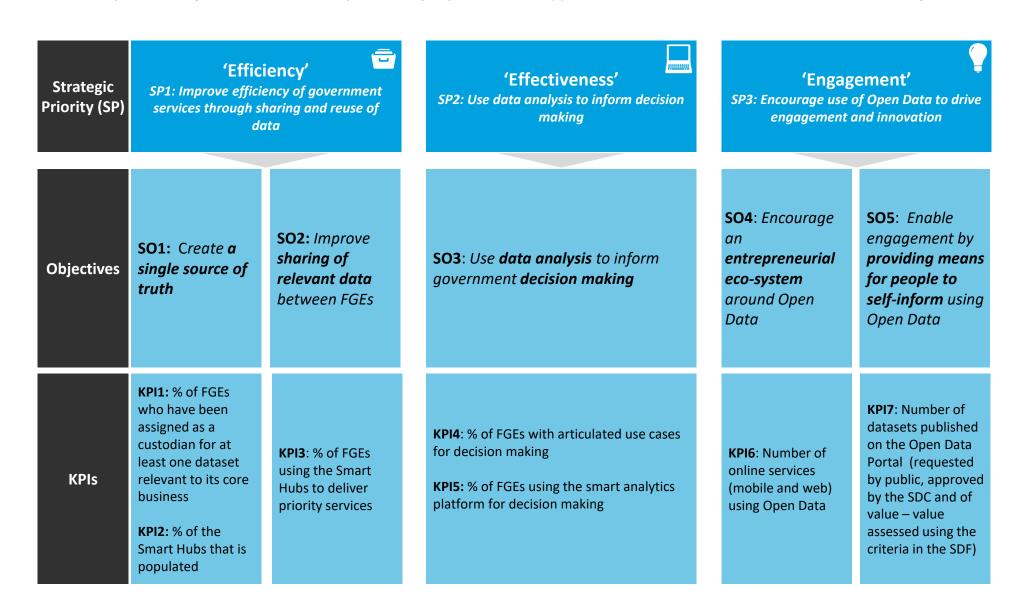
Objectives were identified to strengthen each aspect of the value chain

Strengthening the entire data value chain will result in beneficial outcomes in line with the national vision



Smart Data Objectives & KPIs

For each of the Strategic Priorities, we identified a set of objectives that support them, and how these could be measured (through KPIs)





KPIs Targets

Description and targets for the KPIs for the next 3 years

VDI.	KPI Description		Targets*	
KPI			Year 2	Year 3
KPI1: % of FGEs who have been assigned as a custodian for at least one dataset relevant to its core business	 KPI will promote buy in and integration of datasets from all FGEs into the National Smart Data System. 	100%	-	-
KPI2: % of the smart hubs that is populated	 KPI measures the completion of Smart Hubs by checking the datasets are available on the system. This is an average of all define Smart Hubs. 	25%	70%	100%
KPI3 : % of FGEs using the Smart Hubs to deliver priority services	 KPI will assess whether the published datasets are being used by the FGEs to deliver priority services. 	25%	70%	100%
KPI4 : % of FGEs with articulated use cases for decision making	KPI will promote FGE participation in the definition of the analytics platform.	100%	-	-
KPI5 : % of FGEs using the smart analytics platform for decision making	 KPI will measure the ongoing use of the smart analytics platform by the FGEs once it has been setup 	25%	70%	100%
KPI6 : Number of online services (mobile and web) using Open Data	 KPI measures number of services which use the APIs on the Open Data platform and are active. (Definition of active is at least one access per week) 	8	16	24
KPI7 : Number of datasets published on the Open Data Portal (requested by public, approved by the SDC and of value – value assessed using the criteria in the SDF)	 KPI will measure the publishing of datasets which have value and have been requested through an active consultation with the public. 	550	1100	1650
Note: * Targets are initial values and not yet final				

1

Operating model (OM) framework for the Smart Data Strategy

The Operating Model framework and the current state assessment were leveraged to define the Smart Data future target state

OM elements	Processes	Infrastructure & Tools	Talent & Culture
Key Questions	 What standards are required to enable the strategy to be implemented? How will the continued success of the program be ensured and risks actively controlled? 	 What technology is needed to provide to support the strategy? What type of architecture is required? 	 What job roles are needed to manage the flow of data? What training (knowledge/ skills) are required? What mechanisms are needed to drive a culture of data in FGE? What means are needed to drive Open Data use and innovation in the society
Current State*	 Only 33% have a Big Data strategy Only 40% have Open Data strategies Only 30% have documented data publishing standards and specifications within a policy 	 Only 22% have unstructured data; remaining use structured/semi-structured data 67% are beginners in data platforms using only the relational type 	 Most have data analytics departments but majority are staffed with only data administrators/analysts, not the technical and functional skills required Only 22% have CIOs 90% publish basic volume of Open Data but do not update regularly; 70% do not engage with data consumers to understand/ evaluate requirements 72% use data analytics in critical decisions only
Target State / Expected Outcome	Well-defined standards that covers all the aspects of the smart data implementation	 Actionable technological architecture Systems that integrate seamlessly with the strategic principles 	 Data management and analysis capability across the federal government Availability of guidelines to support recruitment needs in ministries An active use of Open and Smart Data A culture of data driven behavior

^{*} Figures are extracted from the Data and Open Data survey results having participants from 8 FGEs, 4 Abu Dhabi Government entities and 2 Dubai Government entities

Link between the different layers of strategy

Strate	gic Priorities	Effic	ciency	Effectiveness	Engag	gement
Strateg	cic Objectives	Create a single source of truth	Improve sharing of relevant data between FGEs	Using data analysis to inform government decision-making	Encourage an entrepreneurial ecosystem around Open Data	Enable engagement by providing means for people to self- inform using Open Data
Processes	Smart Data Standards					
ructure & Dols National Smart Data	National Smart Data System (NSDS)					
Infrastructure Tools DDP ¹ Smart Do	Smart Analytics					
Infras ODP ¹	Unified Open Data Portal					
Talent & Culture Centres for Smart & Open Data	National Smart Data Resource Centre (NSDRC)					
Talent & Culture Centres for Sn Open Dat	UAE Open Data Centre of Excellence					

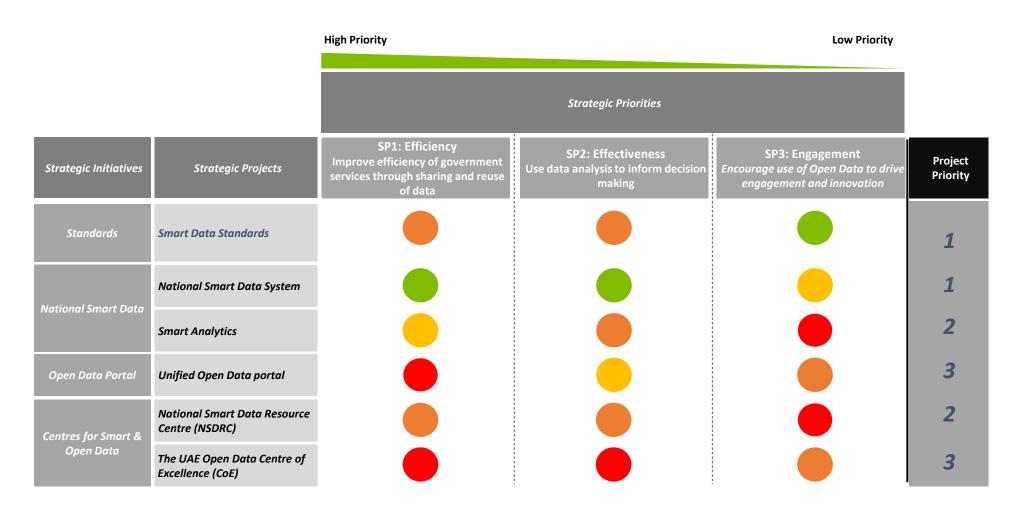
Notes: 1. ODP – Open Data Portal





Prioritization of Projects

Projects were prioritised by mapping them across strategic priorities and assess their impact on the strategic priorities defined previously



Development of Smart Data Initiatives & Projects

Standards

Initiative	Rationale	Summary of Underlying Project(s)	Rationale for UAE	International Benchmarks
			As-Is	Examples
Standards	 Creating a model that serves to address all regulatory implications of Smart Government's use of data Development of guidelines to ensure seamless end-to-end data handling including sharing of data across government entities and the public 	Smart Data Standards The project will ensure that the data value chain is guided by an efficient regulatory environment and will provide the necessary guidelines to produce good quality, reliable and interoperable data sets. These will include guiding principles of quality and standards of data sets, of their security and protection at different points of the infrastructure/system holding them, and of data management throughout the different levels of operations through the data value chain.	Currently, there are no existing guidelines around data publication within FGEs and with the public	France: The Government has developed a Government Open Data Handbook that details guidelines on good practices for publishing and reuse of government data. In addition, the document has been tailored to the needs of different ministries by highlighting examples of data that can be released by specific ministries.

Development of Smart Data Initiatives & Projects

Open Data Portal

Initiative	Rationale	Summary of Underlying Project(s)	Rationale for UAE	International Benchmarks
			As-Is	Examples
Open Data Portal	Enhancements to the existing government.ae: • Creating a unified hub for accessing data from multiple ministries • Providing access to the hub via mobile application • Creating tools for businesses and people to facilitate analysis of data	Unified Open Data Portal: Create/enhance the existing portal to become a data hub that will enable the government to extensively share data to the public. The portal will provide data exploration tools to perform data analysis by end users. It will also include a feedback mechanism to assess performance and to understand end-user requirements.	 Currently FGEs have an Open Data tab on their website. Moreover, Government.ae platform provides an access to an aggregated Open Data portal. The portals provide a certain amount of data sets; but do not have a regular mechanism to update information and do not offer a seamless experience to citizens and businesses who want to reuse data 	UK: The UK Open Data portal has more than 23,000 datasets available for the public Australia: Australian Open Data portal has more than 5,000 datasets available for the public Singapore: Data.gov.sg portal has published 8,800 data sets from 60 government ministries and agencies.



Development of Smart Data Initiatives & Projects

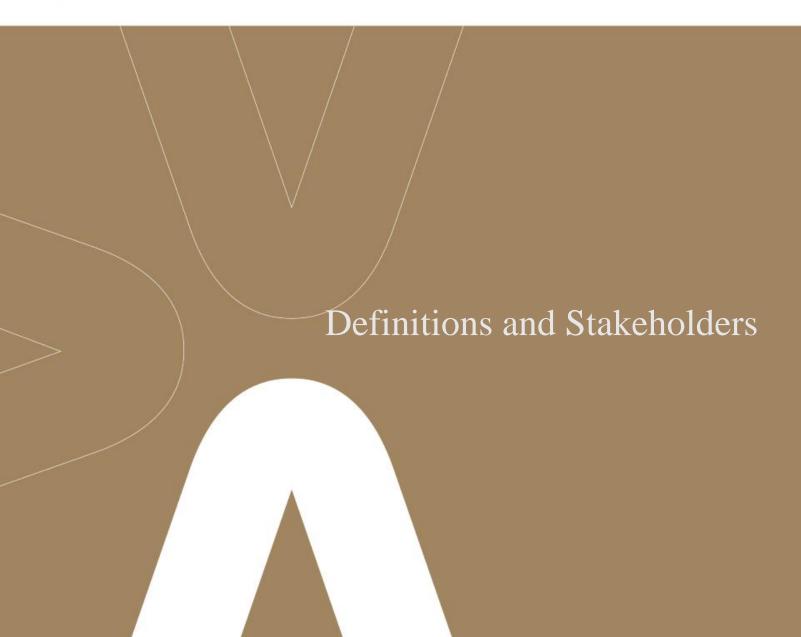
Centres for Smart & Open Data

Initiative	Rationale	Summary of Underlying Project(s)	Rationale for UAE	International Benchmarks
			As-Is	Examples *
Creation of new centres to drive the systemic use of data and data analysis in UAE: • Building the required capabilities and talent within the Federal Government to drive insights from data and extract larger benefits	National Smart Data Resource Centre (NSDRC): The Centre will assist FGEs, through trainings, guidance, and development programs, to drive their Smart & Open Data projects and will be in charge of using data analysis to inform policy development and enhance service delivery.	 Limited number of entities have data specialists working to leverage big data analysis. The planned Federal CIO Model, that will provide ICT talent to FGEs might incorporate NSDRC 	UK: The Behavioral Insights team is composed of data scientists helped to save millions of pounds by leveraging Big Data analytics in healthcare, transport and multiple other sectors. Australia: The whole of Government Data Analytics Centre of Excellence has been created to develop tools and platforms that make better use of data analytics to support better analysis of data trends, inform policy development and enhance understanding and competency across government agencies	
	from it Raising awareness among the general public (citizens, businesses, NGOs, education & research institutes) about data, data analysis, and their respective benefits	UAE Open Data CoE The centre will be focusing on raising awareness and interest in data among the UAE public, on enhancing collaboration between public and private entities to develop skillsets; to enhance data R&D, and encourage data innovation and corresponding economic benefits	The existing Centre of Digital Innovation (CoDI) can incorporate the pool of data talent within the Federal Govenrment.	Singapore: IDA has set up a Business Analytics Centre of Excellence to develop local companies their analytics capabilities which has attracted a lot of interest from the private sector IDA has also launched a training program with special courses to ensure a ready supply of skills in data analytics and science

Appendix







Smart, Shared and Open Data definitions in the context of this project

All the data that government entities have access to either from government or private sources

Smart Data

Data that is either Shared Data or Open Data. It is called Smart because it is part of the UAE Smart Gov. National Plan and allows the government to meet Vision 2021 goals

Shared Data

Data shared primarily between government entities for the purpose of making government services more efficient and decisions more effective

Open Data

Data shared to the public to allow for greater public engagement and increased innovation

We prioritized the main stakeholders according to two main criteria: Level of impact by the Smart Data Strategy and level of oversight required for successful implementation of the Strategy

	Federal Guides Federal Oversight and sponsorship	Local Guides
Strategic	 Prime Minister's Office mGovernment Higher Committee Emirates Competitiveness Council 	 Local Oversight and experience Dubai Open Data Committee Abu Dhabi Systems and Information Center Dubai Smart Government Department Dubai Smart City Committee
	One-on-one meetings to keep up-to-date on project and be abreast of federal initiatives	One-on-one meetings to be abreast of local initiatives
	Federal Champions	Local Champions
	Data & Open Data Strategy Supporters	Open Data Strategy Supporters
Impacted	 Ministry Of Labor Ministry Of Interior Ministry Of Health Ministry of Education Etisalat * Du* Ministry of Finance 	 Roads & Transport Authority Marketing Dubai Abu Dhabi Water and Abu Dhabi Education council Electricity Authority Department of Economic Dubai Tourism & Commerce Development-Dubai
	Survey Questionnaires on Data and Open data	Survey Questionnaires on Open data and Big Data

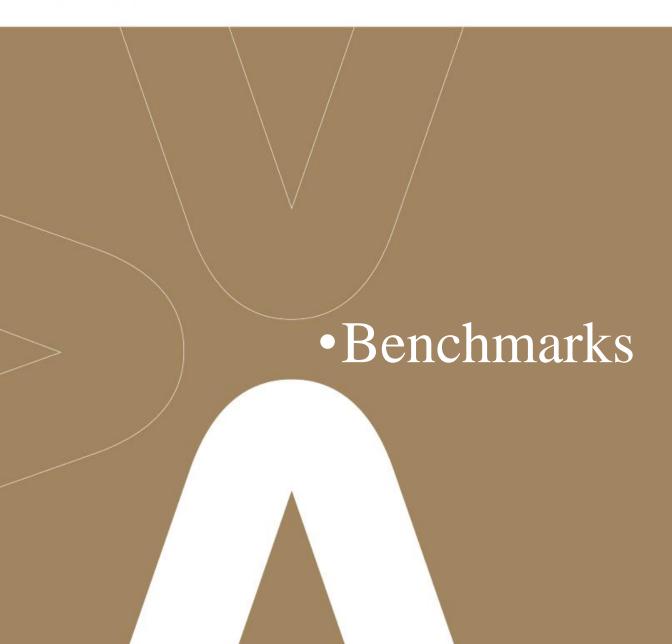
Federal

Local

^{*} Private entities so survey might be modified for them







'Common themes' across government Data strategies (1/2)

Looking at a range of Public Sector Big and/or Open Data strategies we have identified a set of eight common themes across markets

Themes	Description	Examples
Sharing	In most countries, the public sector is made up of thousands of different organizations holding various data sets, often with duplication — finding ways to share and link this data together has the potential to save time and efforts for government institutions.	 UK: DVLA captures the photograph and structure digitally from the Identity and Passport Service when applying for a driving license.
Improving	Big data analysis serving as a tool for helping government organisation to understand better how they work and generate insights that leaders can act on. This could be rom analysing and optimising the performance of a specific department to gathering and acting on feedback from citizens on service delivery.	 In the UK, NHS publishing MRSA infection rates in all hospitals on data.gov.uk in "league tables" for worst hospitals led to bring down infection rates from 5,000 p.a to 1,200 p.a.
Personalising	The granularity in big data opens up new possibilities for personalising services. It is most useful when the known data relates to a users' needs and the personalisation is done in a way that is specific for the transaction being undertaken.	 The Midata project works with businesses to give consumers better access to the electronic personal data that companies hold. Giving people greater access to electronic records of their past buying and spending habits can help them to make better buying choices.
Empowering	Opening up "ready to use", free, large government data sets to increase transparency of government, build trust and empowering citizens to make more informed decisions.	 One of Mastodon C's projects looked at GPs' prescription data and demonstrated that, for example, the NHS could have saved more than £200 million a year if the generic version of statins had been prescribed rather than the patented version.
Solving	Unify and correlate large data sets for problem solving. Large, multi dimensional data sets can be used to identify previously hidden patterns and correlations — e.g., new insights on the underlying dynamics of a population. Data correlations with observed outcomes allows for an auditable, scientific basis for policy decision making.	 The Livehoods Project presents a new methodology for studying the dynamics, hidden structure, and character of a city on a large scale using social media and machine learning (such as tweets and check-ins).

'Common themes' across government Big Data strategies (2/2)

Looking at a range of Public Sector Big and/or Open Data strategies we have identified a set of eight common themes across markets

Themes	Description	Examples
Innovating	Opening large government data sets brings about new business opportunities at various levels of the value chain (technology, service, etc.) and in various sectors (real estate, media etc.). Number of successful private sectors examples and emergence of "data as a service" business models	 E.g.: Open data distribute "start up" initiatives Uber, Garmin, The Weather Channel, Brightscope etc The infomediary sector in Spain (i.e., companies that sell on top of big data) generate above €500m annually
Saving (Cost)	Efficient sharing of select big data sets can significantly reduce the transactional costs and redundant expenditures across government agencies. In addition, providing data to citizens on line in a searchable format had a direct impact in reducing the cost of servicing	 Bristol City Council estimated that it decreased its cost of service by 15% per transaction by introducing their open data catalogue San Francisco: \$1m savings p.a. with access to real time transit data (22% fewer SF311 calls)
Growing (Revenues)	Some countries have opted to change for commercial usage of data. Governments are also benefiting from big/open data to increase tax income (indirectly through economic activity)	 China's Open Data trading portal with various depending on data set Spain's Judicial Documentation center

The Australian Public Service Big Data Strategy

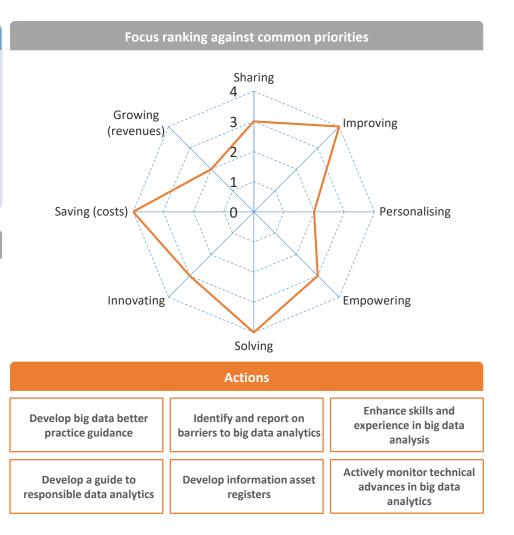


Improved understanding through enhanced data-analytics capability - August 2013: the strategy aims to assist agencies in achieving productivity gains, through better service delivery and policy development while ensuring the privacy of individuals remains protected

Vision/Mission

The Australian Government will use big data analytics to enhance services, deliver new services and provide better policy advice, while incorporating best practice privacy protections and leveraging existing ICT investments. The Australian Government will be a world leader in the use of big data analytics to drive efficiency, collaboration and innovation in the public sector

Service Delivery including personalization Evidence based policy development Statistics Business opportunities/ innovation Skill development Productivity/ Cost improvement



The UK Open Data White Paper

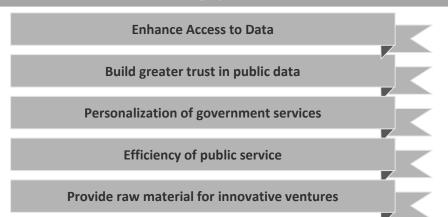


Unleashing the Potential - June 2012: Transparency is at the heart of the government agenda; opening up will empower citizens, foster innovation and reform public services

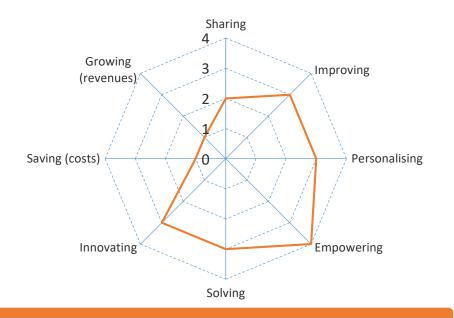
Minister's Word

"We are currently co-chairing the Open Government Partnership of 55 governments; the theme of our chairmanship is 'Transparency Drives Prosperity' – demonstrating the value of open governance to economic growth, inclusive development and improved citizen engagement and empowerment."

Strategic priorities



Focus ranking against common priorities



Actions

More Open Data; Better access to public data; Opening up access to research

Changing the culture in public sector

Strengthening rights to data; Regulating data

Strengthening data usability

Open policy making; Privacy impact assessments

Your access to your data; Breaking down the barriers

A Strategy for UK Data Capability – Seizing the Opportunity



Working in partnership with business and academia, the government has developed a shared vision for the UK's data capability, with the aim of making the UK a world leader in extracting insight and value from data for the benefit of citizens and consumers, business and academia, the public and the private sectors

Vision/Mission

The UK is a world leader in dealing with the volume, velocity and variety of data created and analyzed every day – extracting insight and value for the benefit of citizens and consumers, business and academia, the public and the private sector through:

- A strong skills base, able to manage, analyze, interpret and communicate data
- · A strategic plan for our data infrastructure across the country
- World-leading research and development, pushing frontiers and driving innovation in data science and analytics
- Ensuring that data can be accessed and shared securely, as appropriate

This is underpinned by a strong policy framework which protects and empowers citizens and supports innovation and growth – with government an exemplar of best practice and with science as a key driver of this capability.

Sharing 4 Improving 2 Saving (costs) Personalising Empowering

Focus ranking against common priorities

Strategic priorities

Skilled Workforce & Data Confident Citizens

Infrastructure, software and collaborative R&D

Sharing and linking data securely and appropriately

Data Capability Actions

Solving

Secure a pipeline of talent & enhance gov. data capabilities

Drive awareness, support,
and access to einfrastructure for
businesses across six key
sectors

Bolster data as a career

Promote the UK data storage market overseas

Support R&D collaboration and work on a national network of centres in big data analytics Promote Open Data and guidance and advice on the rights and responsibilities of data users

Singapore's IDA's Initiatives in Data & Analytics



IDA seeks to create a vibrant Data & Analytics ecosystem in Singapore and position Singapore strategically as an international Data & Analytics Hub

Singapore's opportunity in Data & Analytics

Local and foreign enterprises will be able to leverage on Singapore's Data & Analytics (D&A) capabilities to apply analytics strategically, to guide business strategy and planning, as well as tactically, to optimize day-to-day business processes. Effective use of analytics will enable enterprises to remain agile and competitive in dynamic market environments, and to maximize productivity.

Strategic priorities

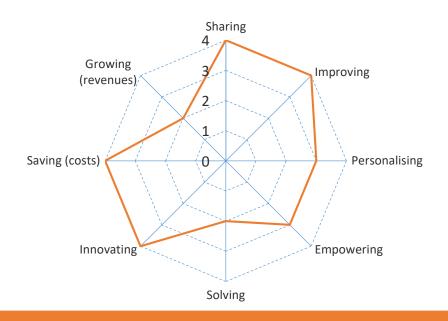
Develop capabilities to be positioned as a D&A hub

Innovative application of Data & Analytics

Sectorial economic competitiveness through D&A R&I

Develop supporting platforms and enablers for D&A

Focus ranking against common priorities



Thrust Actions

Industry development

- Develop innovative analytics & cloud computing products & services
- Drive regional business development

Manpower development

- Enable professional conversion
- Build Business Analytics & Cloud Computing talent and capacity

Government & Social Business Analytics (BA) Programs; BA Shared Services

SaaS Enablement; Standards Development; Data Protection Regulatory Framework

European Commission: Towards a thriving data-driven economy



The European Commission's Communication to The European Parliament, The Council, The European Economic And Social Committee and The Committee Of The Regions, 'Towards a thriving data-driven economy' – July 2014: Data is at the centre of the future knowledge economy and society

Towards a thriving data-driven EU economy

A prominent feature of a data-driven economy will be an ecosystem of different types of players interacting in a Digital Single Market, leading to more business opportunities and an increased availability of knowledge and capital, in particular for SMEs, as well as more effectively stimulating relevant research and innovation.

Strategic priorities

Improve competitiveness, quality of public service & citizen's life

Enabling technologies, underlying infrastructures and skills, particularly to the benefit of SMEs

Share, use and develop its public data resources and research data infrastructure

Public R&I – focus on related bottlenecks

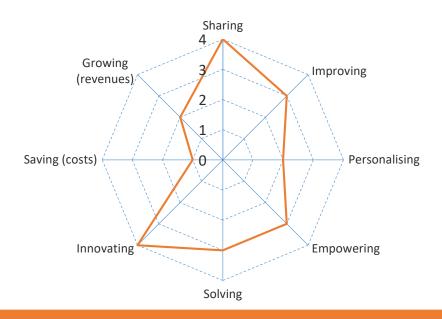
Relevant, data-friendly policies and legal framework

Reform of EU data protection

Digitization of public administration and services

Bring the results of data technologies to the market

Focus ranking against common priorities



A set of initial actions

Community Building: PPP on data; Digital Entrepreneurship; development of skill base; Data market monitoring; Sectorial priorities for R&I

Fostering Open Data policies; Data handling tools; & New open standards Enabling infrastructure for a data-driven economy

Assessing regulatory issues







Summary of survey results

Please refer to detailed survey results for full breakdown

Smart Data Objectives

Current State Assessment: Survey Questionnaires Results

Implications for the Future



Efficiency

Smart Data Objective 1
Create a single source of

truth

Smart Data Objective 2
Improve sharing of
relevant data between
ministries

- 33% have a Big Data strategy identifying key business goals and challenges
- 33% have well-defined processes for collecting & ensuring quality of Big Data
- 40% have Open Data strategies identifying key business goals and challenges
- 39% have defined data lifecycle management & archival policies
- 56% share data with other organizations
- But 61% do not have data sharing policies guiding the sharing process

- Very low ordinance of Big Data and Open Data strategies
- More widespread adoption of these strategies across entities, in addition to well-defined processes for collection, lifecycle management and quality assurance of data, is recommended
- Data sharing exists between entities but could be extensively improved by the adoption of improved data sharing policies in addition to nurturing a culture of utilizing existing Open Data published by other entities

ctiveness

Smart Data Objective 3
Using data analysis to
inform government

decision-making

- 22% extensively use data analytics
- 56% have limited usage of data analytics in everyday decisions
- 72% use data analytics in critical decisions only
- 78% have no defined data analytics policy despite extensive use of BI tools

- Policies need to mandate the use of data analytics
- BI tools exist, but they need to be extensively used to leverage data in all decision making processes



gement

Smart Data Objective 4

Encourage an
entrepreneurial
ecosystem around Open
Data

Smart Data Objective 5

Enable engagement by providing means for people to self-inform using Open Data

- 90% publish basic volume of Open Data
- 40% update published Open Data annually; 30% update quarterly
- 22% of the organizations anonymize data before holding it in databases
- 30% have documented data publishing standards & specifications within a policy
- 50% have unclear or inexistent processes to guide the development and production of Open Data and to ensure the quality assurance of Open Data
- 60% are users of Open Data published by other organizations
- 70% do not engage with data consumers to understand/evaluate requirements

- A basic volume of Open Data is published
- But processes need to be developed & adopted mandating the regular update of data
- Data quality standards and specifications have to be defined by data owners and leveraged by all
- A culture of actively leveraging Open Data in all entities and in the entrepreneurial ecosystem should be instituted





