GEOSPATIAL DATA MANAGEMENT
A collaborative approach

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COLLABORATIVE APPROACH FOR GEOSPATIAL DATA

MALAYSIAN CONTEXT

Moving forward Eleventh Malaysia Plan, 2016-2020

In the Eleventh Plan, the Government will become more citizen centric and focus on enhancing productivity and efficiency of the public service.

Focus area A Enhancing service delivery with citizens at the centre

Strategy A3
- **Leveraging data to enhance outcomes and lower costs Proliferating open data among agencies**
- **Encouraging cross-agency data sharing**
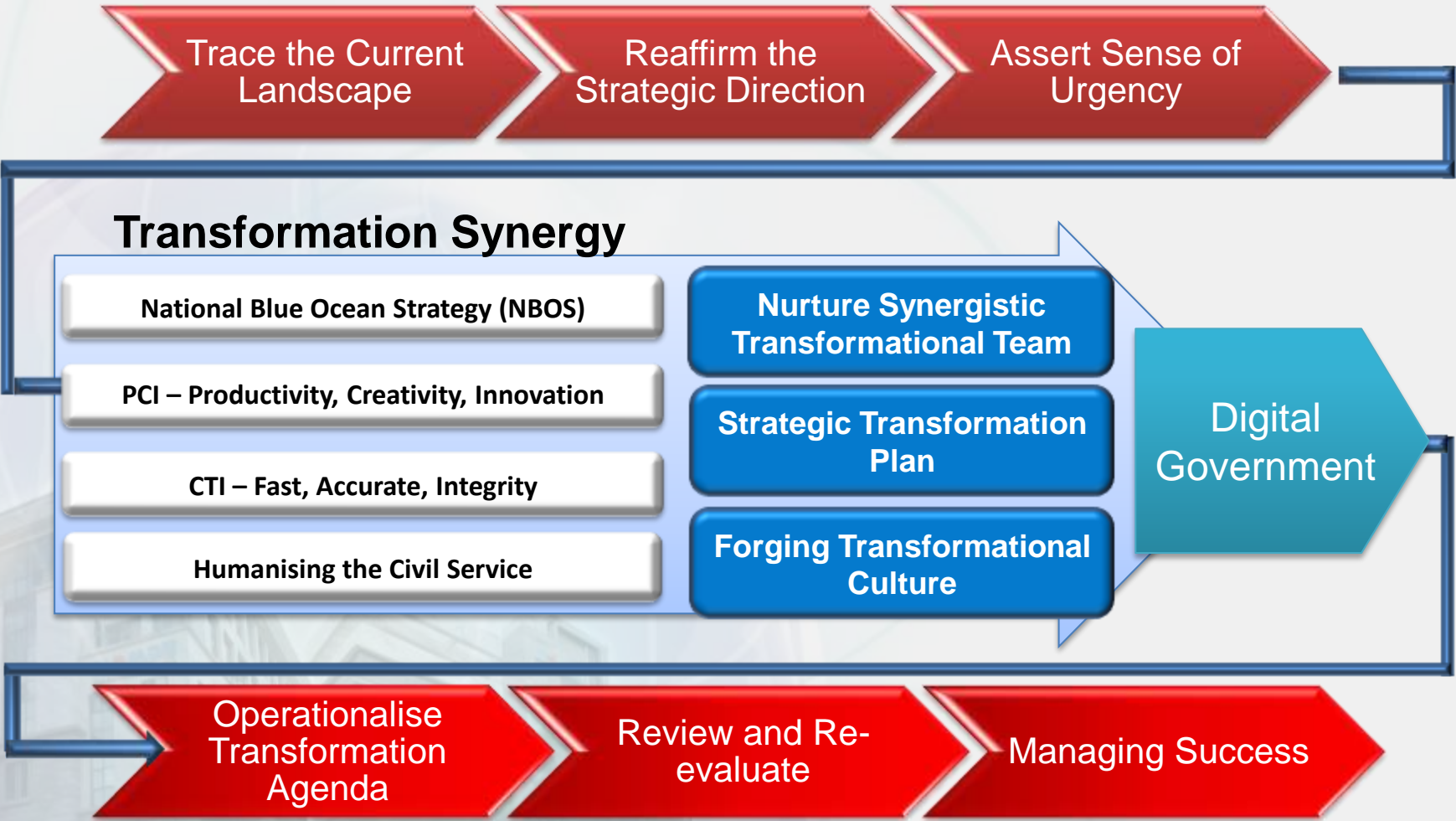- **Leveraging big data analytics**

STRATEGIC FRAMEWORK:

REFORM INITIATIVES

Trace the Current Landscape → Reaffirm the Strategic Direction → Assert Sense of Urgency

Transformation Synergy

- National Blue Ocean Strategy (NBOS)
- PCI – Productivity, Creativity, Innovation
- CTI – Fast, Accurate, Integrity
- Humanising the Civil Service

- Nurture Synergistic Transformational Team
- Strategic Transformation Plan
- Forging Transformational Culture

Digital Government
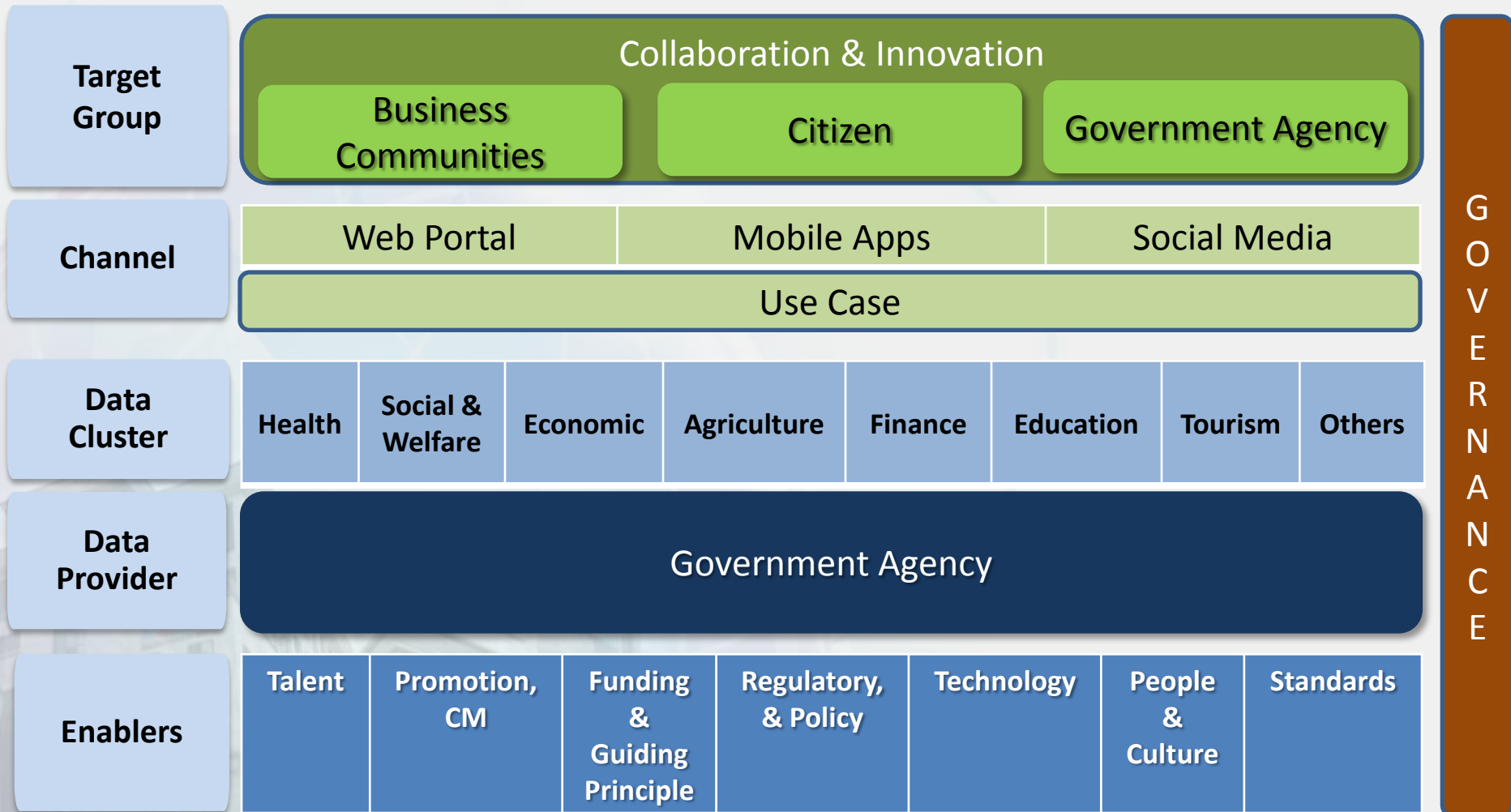
Operationalise Transformation Agenda → Review and Re-evaluate → Managing Success

PUBLIC SECTOR OPEN DATA FRAMEWORK

Towards Open Government through Transparency, Participation and Collaboration by 2020

Target Group	**Collaboration & Innovation** — Business Communities / Citizen / Government Agency	**G O V E R N A N C E**
Channel	Web Portal / Mobile Apps / Social Media — Use Case	
Data Cluster	Health / Social & Welfare / Economic / Agriculture / Finance / Education / Tourism / Others	
Data Provider	Government Agency	
Enablers	Talent / Promotion, CM / Funding & Guiding Principle / Regulatory, & Policy / Technology / People & Culture / Standards	

Public Sector Central Data Exchange

Leveraging data from various sources provides a good insights of the locations that are potentially beneficial to businesses
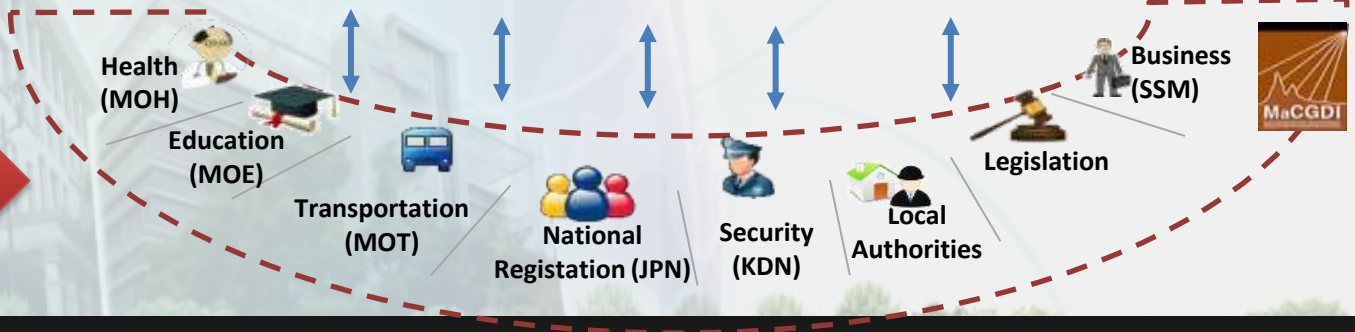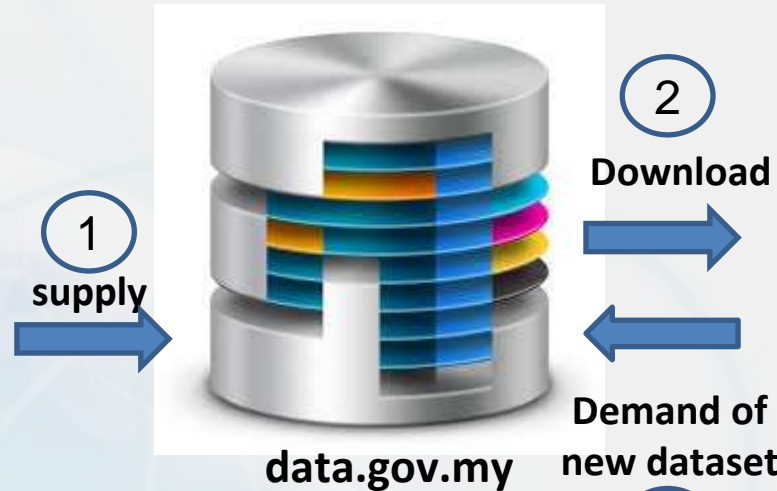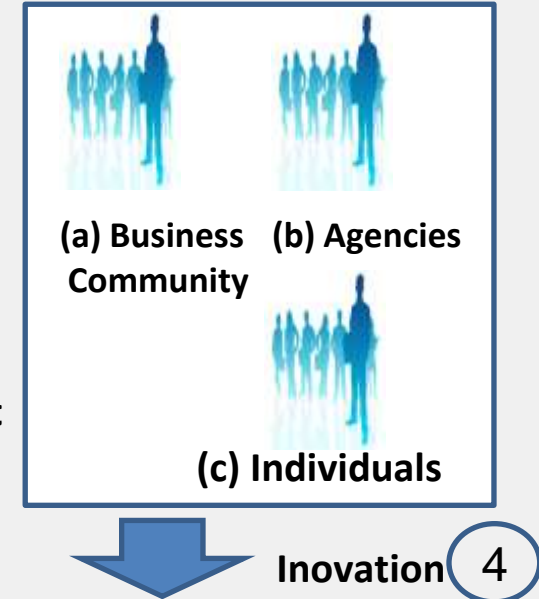
User

Public | Business | Government Agencies

Delivery Channel

Online services | Call center | Counter services

Public Sector CDX

- Data Integration
- Data Matching
- Data Profile
- Data Standard
- Data Analytics
- Routing

Agency / Data Source

- Health (MOH)
- Education (MOE)
- Transportation (MOT)
- National Registation (JPN)
- Security (KDN)
- Local Authorities
- Legislation
- Business (SSM)
- MaCGDI

Public Sector Open Data

Cluster (Public Sector)

- Transportation
- Agriculture
- Education
- Health
- Social & Welfare
- Economy
- Finance
- Tourism
  - .
  - .

User

1 supply

2 Download

data.gov.my

Demand of new dataset

3

(a) Business Community   (b) Agencies

(c) Individuals

Inovation 4

"Open data is data that can be freely used, reused and redistributed by anyone"

USE CASES (UC)			
UC1	UC2	.....	UCn

Citizen/Public
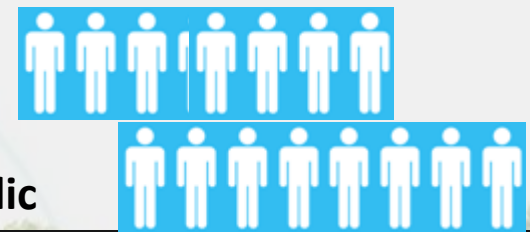
GEOSPATIAL VALUE PROPOSITIONS

Governance

Business

Infrastructure
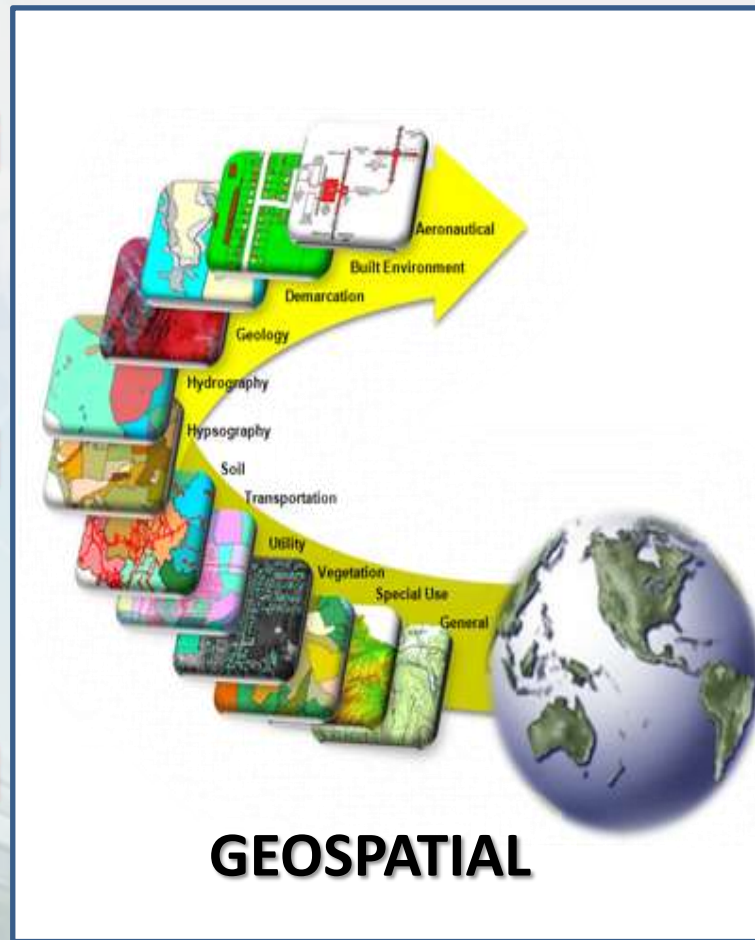
GEOSPATIAL

Public Safety

Utilities

Agriculture

GEOSPATIAL BIG DATA ANALYTICS and IoT

Internet of Things (IoT) aplications using Geospatial Analaytics

 - with data coming from sensors and mobile devices these days, the potential for geocoding is getting bigger
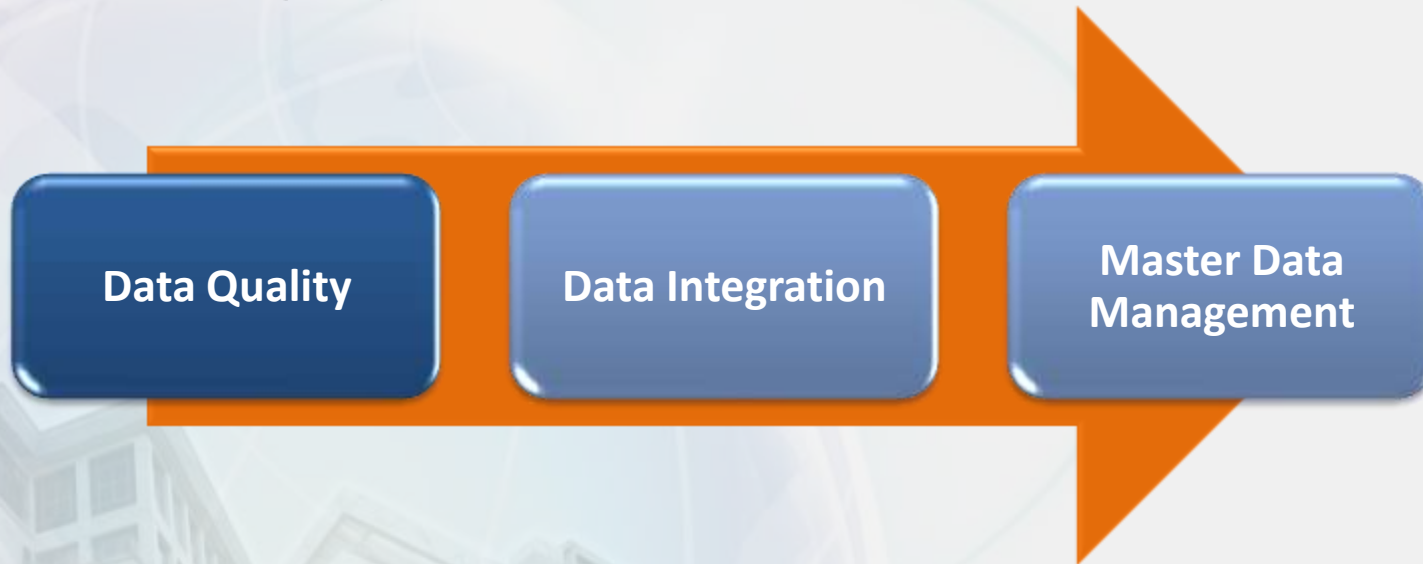
USE CASES
- Smart City/ Effective Local Authority
- Sustainable Environmental Management
- Disaster Management and Emergency Response

Geospatial Data Management

Managing geospatial data as a capital asset is critical to our Nation's ability to be more effective, while minimizing expense.

| Data Quality | Data Integration | Master Data Management |

CONTRIBUTION OF GEOSPATIAL

GLOBAL EXPERIENCE

CANADA

- The total contribution of geospatial to the Canadian GDP through productivity improvement was estimated at **$20.7 billion** or 1.1% of the Canadian GDP in 2013

- Estimated impact of open geospatial data to the Canadian economy - **$ 695 million** in productivity improvement to the GDP

Source : McKinsey Global Institute

AUSTRALIA

> Spatial information sector contributed between **$6.4 billion and $12.6 billion** to the australian gross domestic product (GDP)

> Restrictions on access to spatial data reduced productivity in some economic sectors by between **5% and 15%.**

> With open access to spatial data the Australian GDP could have been about **7% higher** in 2006-2007

A 2008 report prepared for the CRCSI & ANZLIC by ACIL Tasman

NEW ZEALAND

> Spatial information added at least **$1.2 billion**, or about **0.6% of GDP**, to the New Zealand economy through productivity gains

> A 2009 study sponsored by Land Information New Zealand (LINZ), the Department of Conservation (DOC) and the Ministry for Economic Development (MED)

The 32 counties of Ireland

Produced by
Irish-Genealogy-Toolkit.com

> ➤ the geospatial information industry directly contributed **€69.3-million** (Gross Added Value) to the Irish economy in 2012

> ➤ estimated economic value of annual time savings through the use of geospatial information is **€ 279 million** or about **0.6 %** of the Irish GDP.

A study commissioned by Ordnance Survey Ireland (OSi)

USA

> The geospatial services industry in the United States generates annual revenues of $75 billion

> The economic impact of the geospatial services industry on government, business, and consumers is estimated to be **$1.6 trillion** in revenues (greater efficacy) and **$1.4 trillion** (about 8.7% of the U.S. GDP) in cost savings (greater efficiency).

A report by the Boston Consulting Group (BCG) published in June 2012

CONCLUSION

IMPERATIVES

1. National Level Governance Framework

2. Geospatial Data Management Enabling Environment

3. Sustainable Collaborative Mechanism

CONCLUSION

Major growth potential in integrated geospatial - integrating location services into various industries and public services

To enable the geospatial sector to grow, the geospatial community needs to act <u>collaboratively</u> under <u>strategic governance</u>

Thank You

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