



ConsultingWhere

Maximising the value of location information



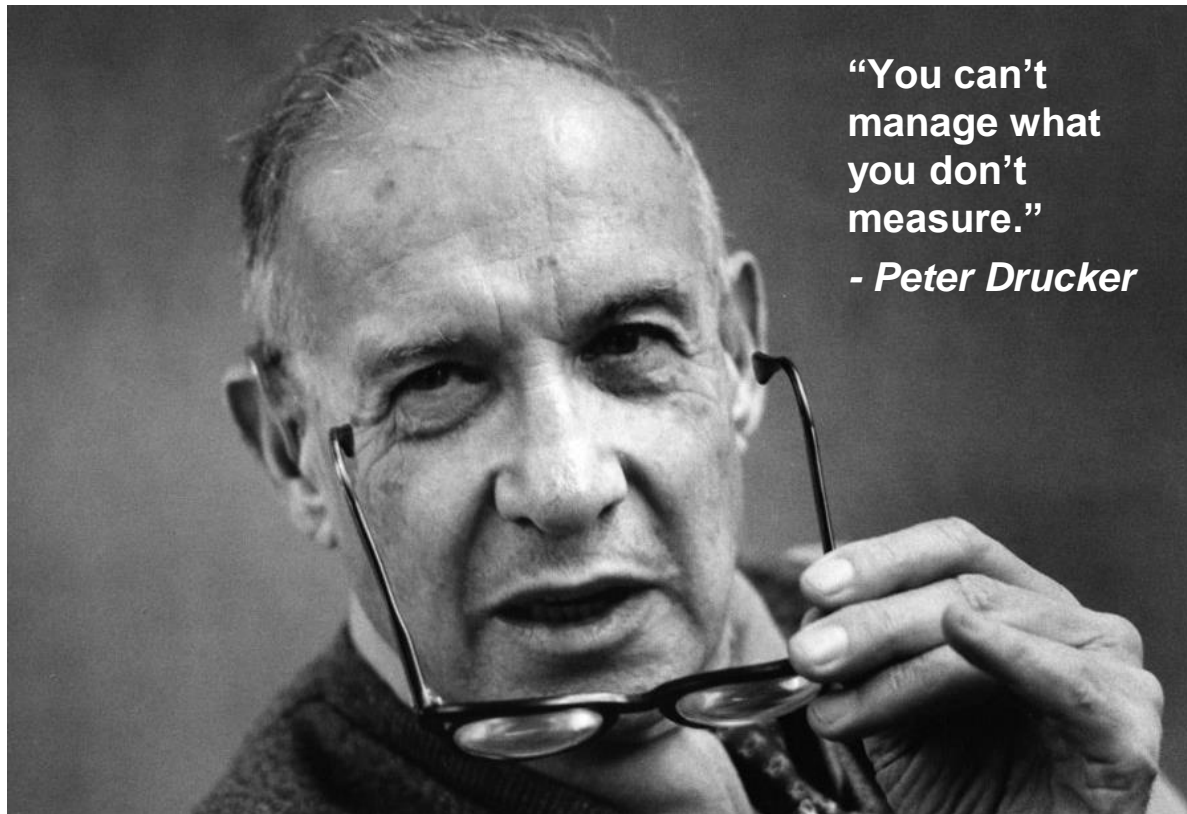
IGIF Webinar

Andrew Coote
ConsultingWhere

24th February 2022

www.consultingwhere.com

Geospatial in Policy and Decision Making



Source: <https://www.thefamouspeople.com/profiles/peter-drucker-132.php>

Fourth Industrial Revolution: Information Age

“The **Information Age** is a period beginning in the late 20th century, characterized by the **digital transformation** from traditional industry, to an economy based on **data and communications** becoming the driving force of **social evolution.**”



Source: Forbes

Infrastructures



Road Transport



Shipping



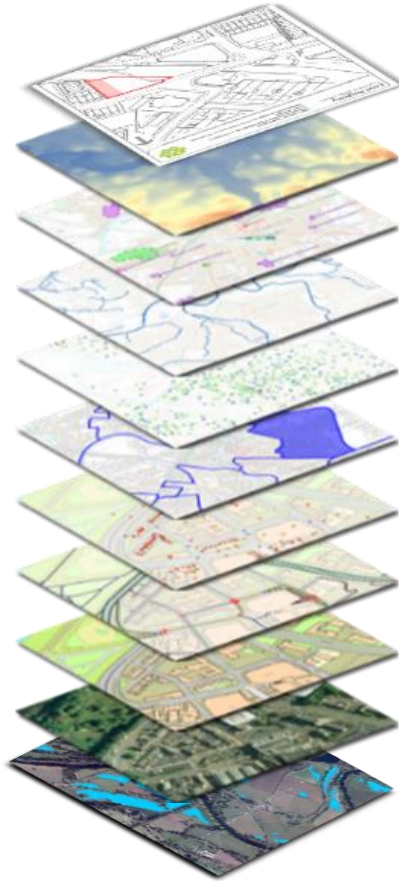
Information

Geospatial is a Key part of a National Information Infrastructure

Infrastructural Data

Fundamental Data Themes

All themes are assumed to cover from top of highest mountain to bottom of deepest ocean trench

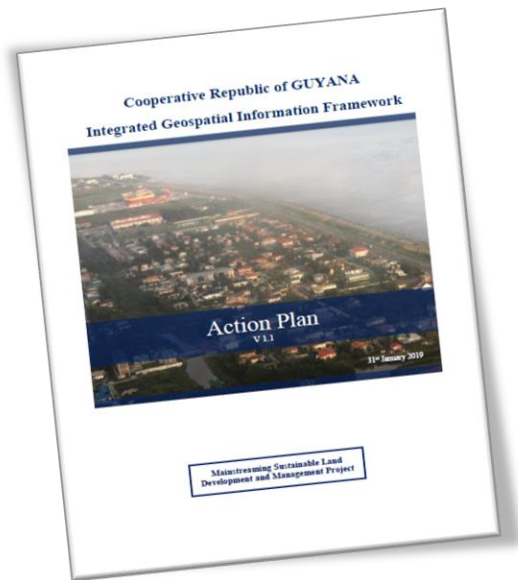


Geodetic Reference Frame
Geographical Names
Addresses
Functional Area
Settlements
Cadastral Parcels
Transport Networks
Elevation/Depth
Population Distribution
Land Cover/Use
Geology/Soils
Physical Infrastructure
Imagery
Water

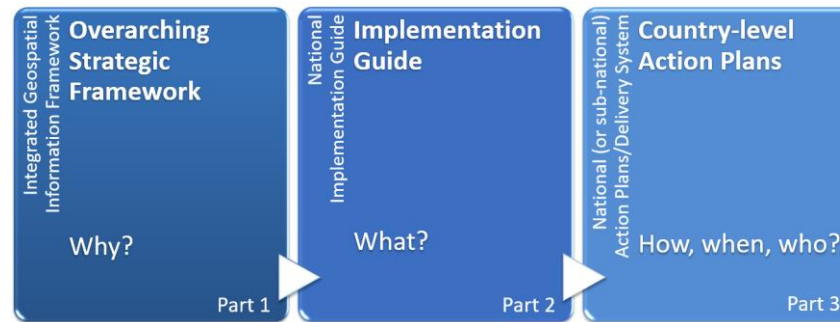
Source: https://ggim.un.org/documents/E-C20-2018-7-Add_1-Global-fundamental-geospatial-data-themes.pdf

Integrated Geospatial Information Framework

From Strategy to Action Plan

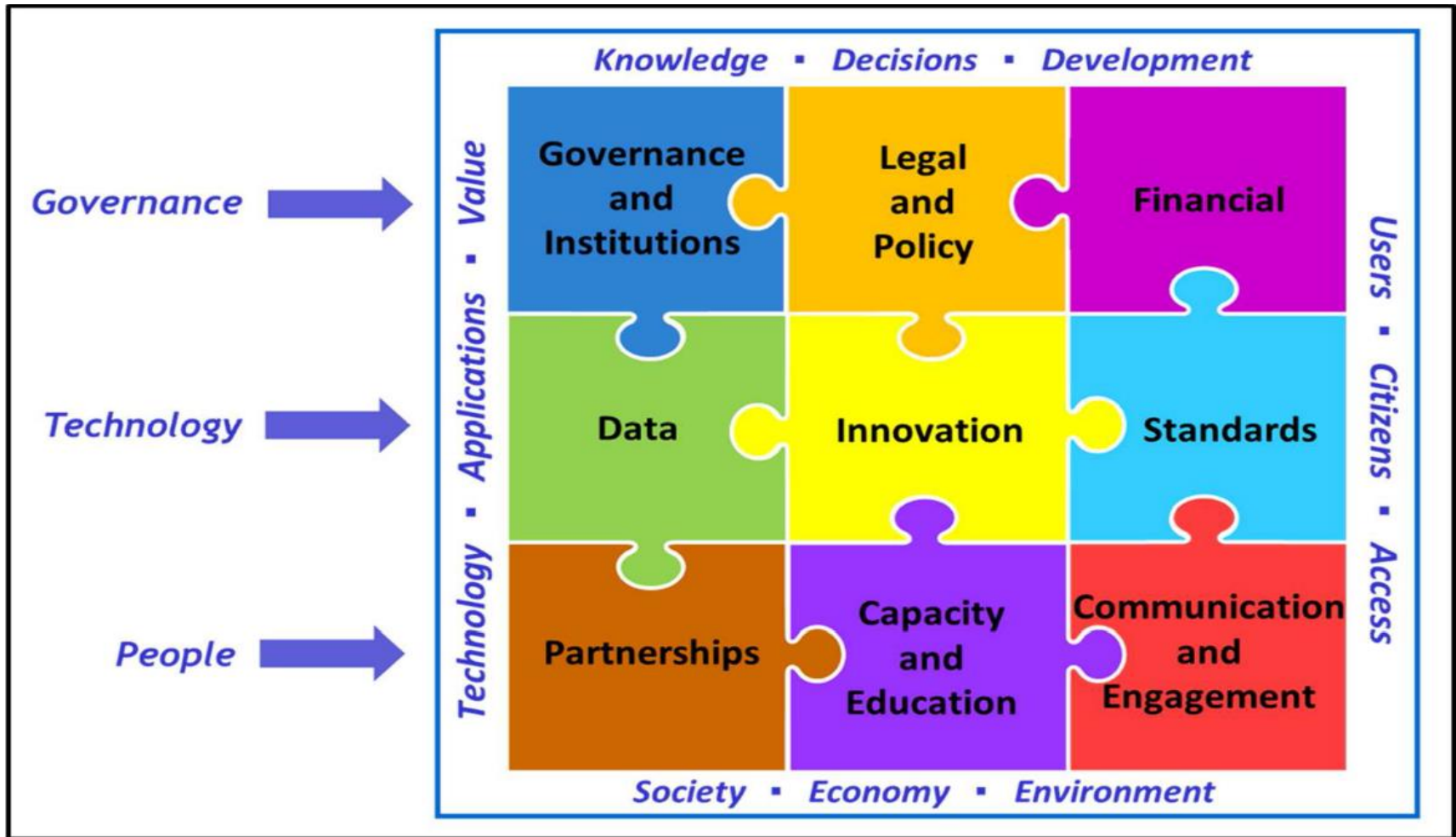


IGIF Action Plan - Guyana

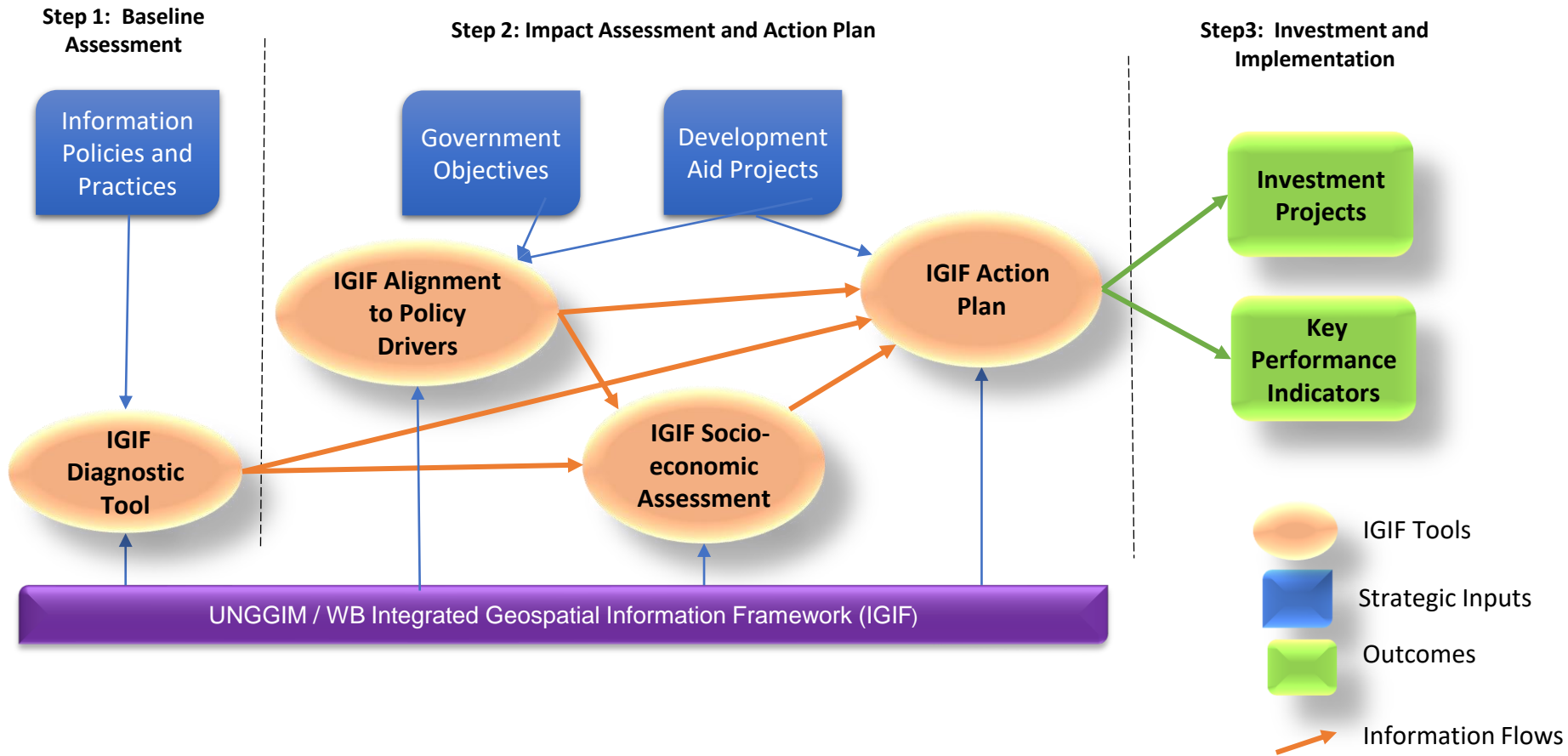


- Part 1: **Overarching Strategic Framework** – **WHY** geospatial information needs to be strengthened.
- Part 2: **Implementation Guide** – **WHAT** types of actions can be undertaken to strengthen geospatial information management
- Part 3: **Country-level Action Plan** – **HOW** the actions will be carried out, **WHEN** and by **WHOM**.

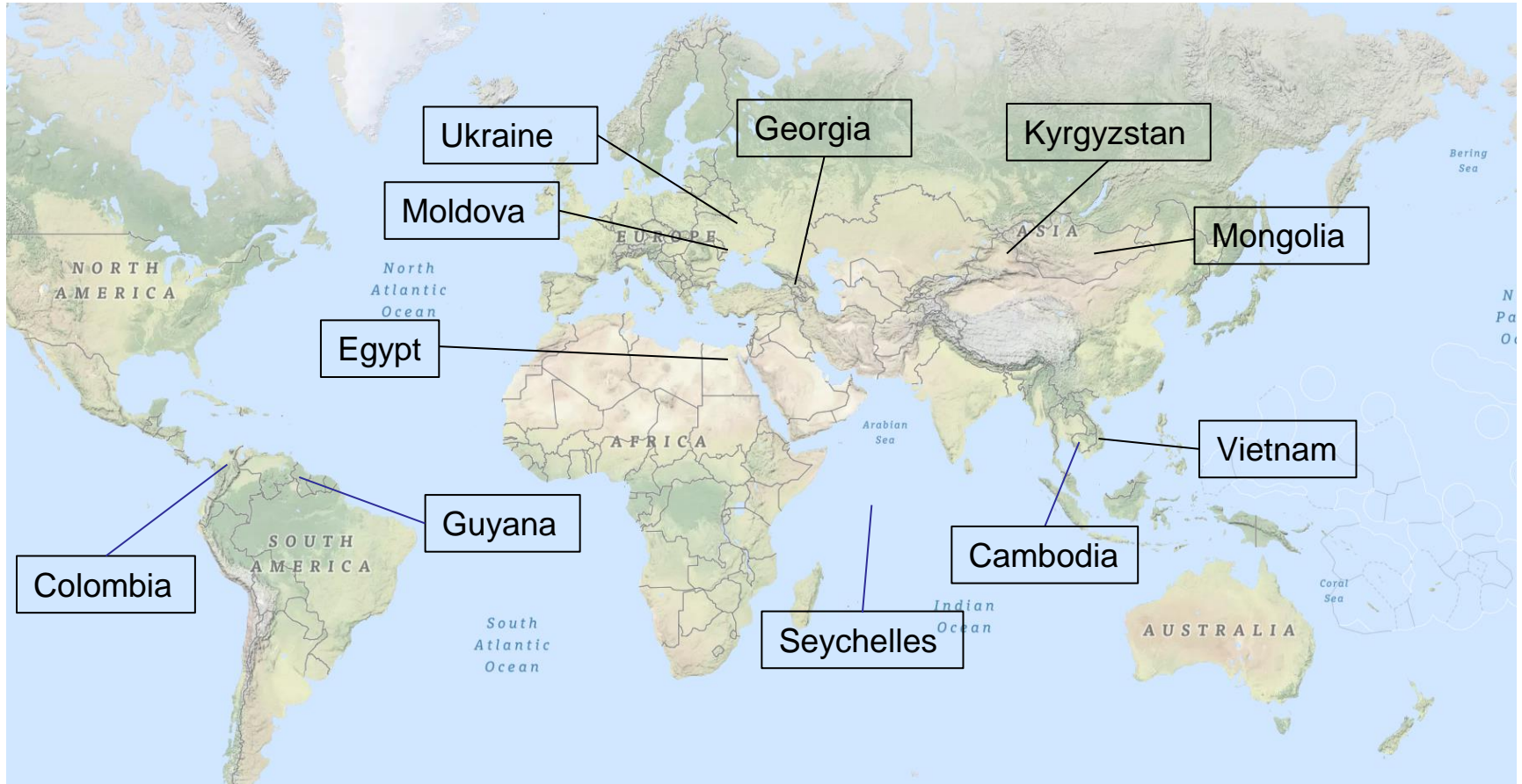
United Nations: IGIF



World Bank IGIF Methodology



Recent World Bank IGIF Methodology Projects



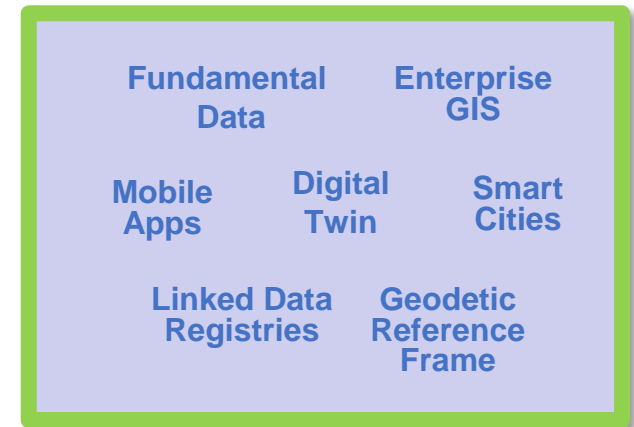
Source: World Bank

Putting IGIF in Context

IGIF (Framework)



NSDI (Products and Services)



Systems,
Infrastructures,
Software Applications,
Platforms

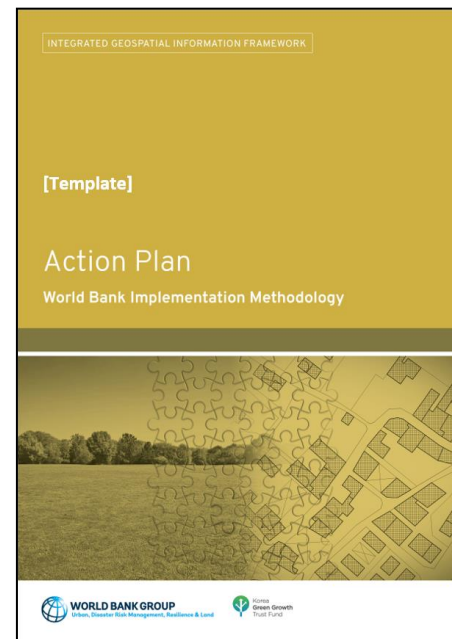
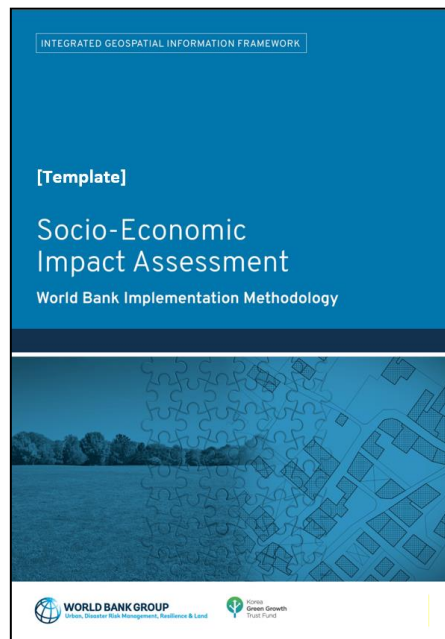
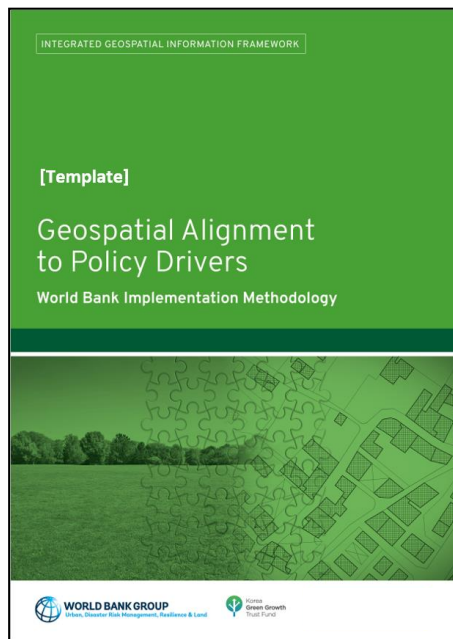
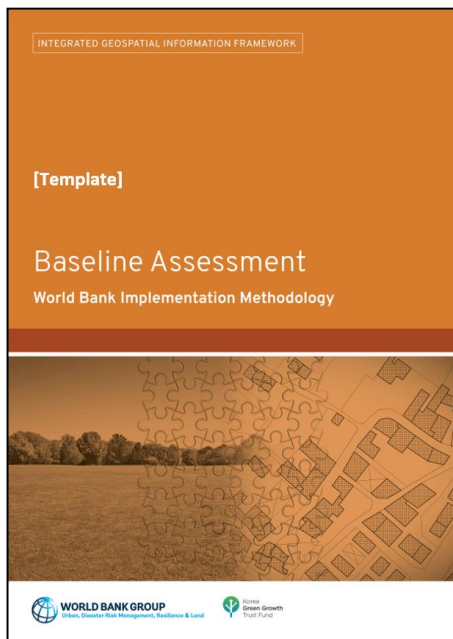
Practical Tips on using IGIF

- Credentials as a joint effort of UN and World Bank adds weight to its recognition.
- Treat it as guidance not set of rules
 - Implementation shows its immense practical value as a framework, but it is not as a “cook book”
- It can be applied in a wide range of scenarios:
 - Land, Marine, Geodesy, Statistics
 - Relevant to public and private sector organisations.
 - Cities (or ports) are often more tractable environments to “pilot” its application and demonstrate quick wins
- IGIF guides need to be regarded as “living documents”
 - they will benefit from enhancement as more implementations are completed

The Wider Geospatial Ecosystem

- Implementation is all about people
- The wider focus that IGIF and other UN GGIM initiatives bring is also to be welcomed:
 - Marine integration
 - Earth Observation
 - Geo-statistics
- Multi-disciplinary approach needed
 - More dialogue with the full range of end-users
 - Engage economists to help craft the case for investment
 - Data sharing often hampered by a culture that knowledge is power, and security concerns lead to data access being restricted
 - More accepting of non-conventional data sources
- Improving location literacy
 - Decision makers
 - Citizens
 - Ourselves !

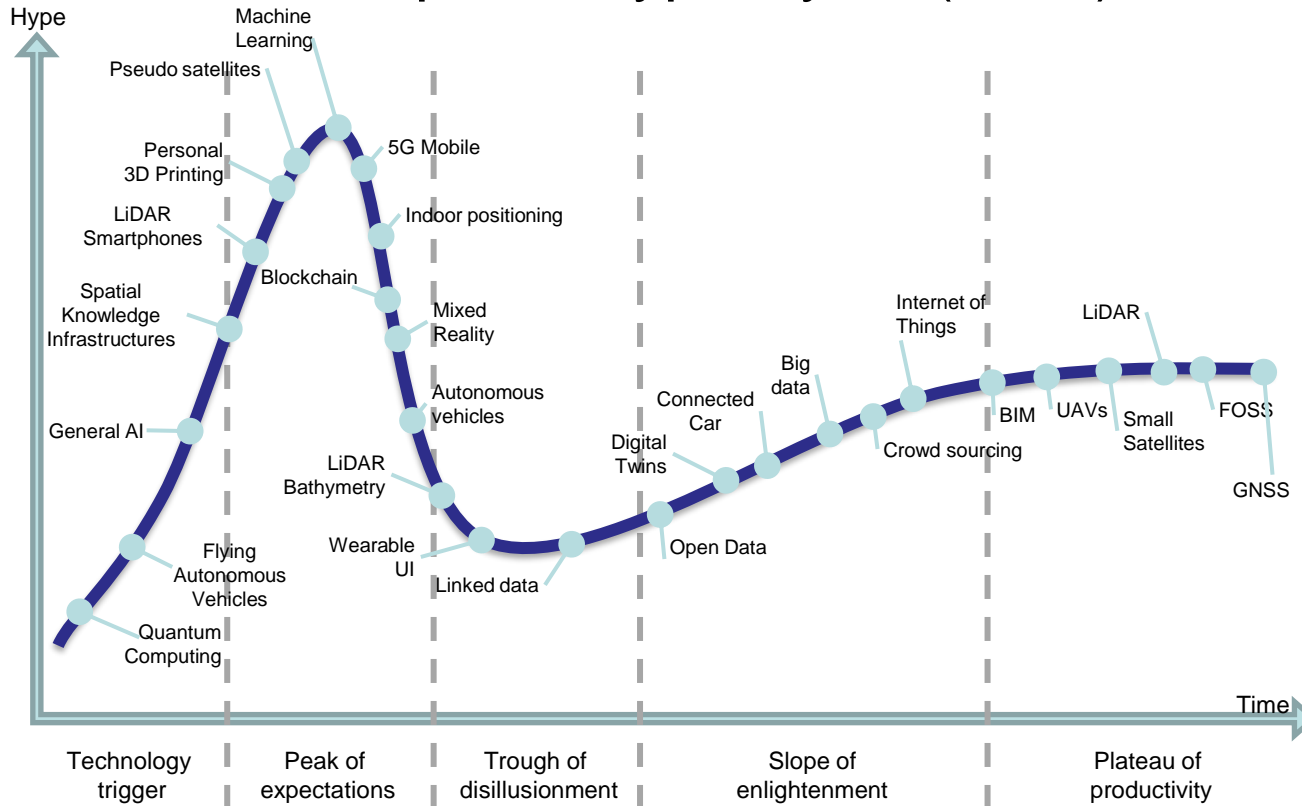
World Bank Methodology Templates



Economic Impacts

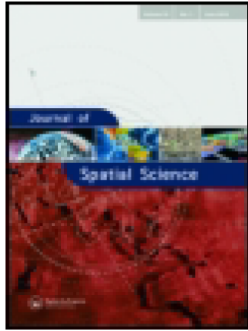
Implementation Costs are falling

Geospatial Hype Cycle (2021)



Source: ConsultingWhere, with acknowledgements to Gartner research

Smart working – changes to ways of work substitute costs rather than adding to them



Journal of Spatial Science



ISSN: 1449-8596 (Print) 1836-5655 (Online) Journal homepage: <http://www.tandfonline.com/loi/tjss20>

A marine spatial data infrastructure in New Zealand: a systematic review on the cost-benefits

Edward Griffin, Andy Coote & Joep Crompvoets

To cite this article: Edward Griffin, Andy Coote & Joep Crompvoets (2017): A marine spatial data infrastructure in New Zealand: a systematic review on the cost-benefits, Journal of Spatial Science, DOI: [10.1080/14498596.2017.1372227](https://doi.org/10.1080/14498596.2017.1372227)

To link to this article: <http://dx.doi.org/10.1080/14498596.2017.1372227>

Geo-economics - Environmental Benefits

- Repository of circa 4000 studies of economic value studies
- Collaborative effort by many countries , curated by Canadian Government
- 467 entries recovered by query using Marine keyword
- Example Studies:
 - i) The Economic Benefits of Achieving Good Environmental Status in the Finnish Marine Waters of the Baltic Sea.
 - ii) The Willingness to Pay for Removing Microplastics in the Ocean - The Case of Seoul Metropolitan Area, South Korea

Source: EVRI: <https://www.evri.ca/>



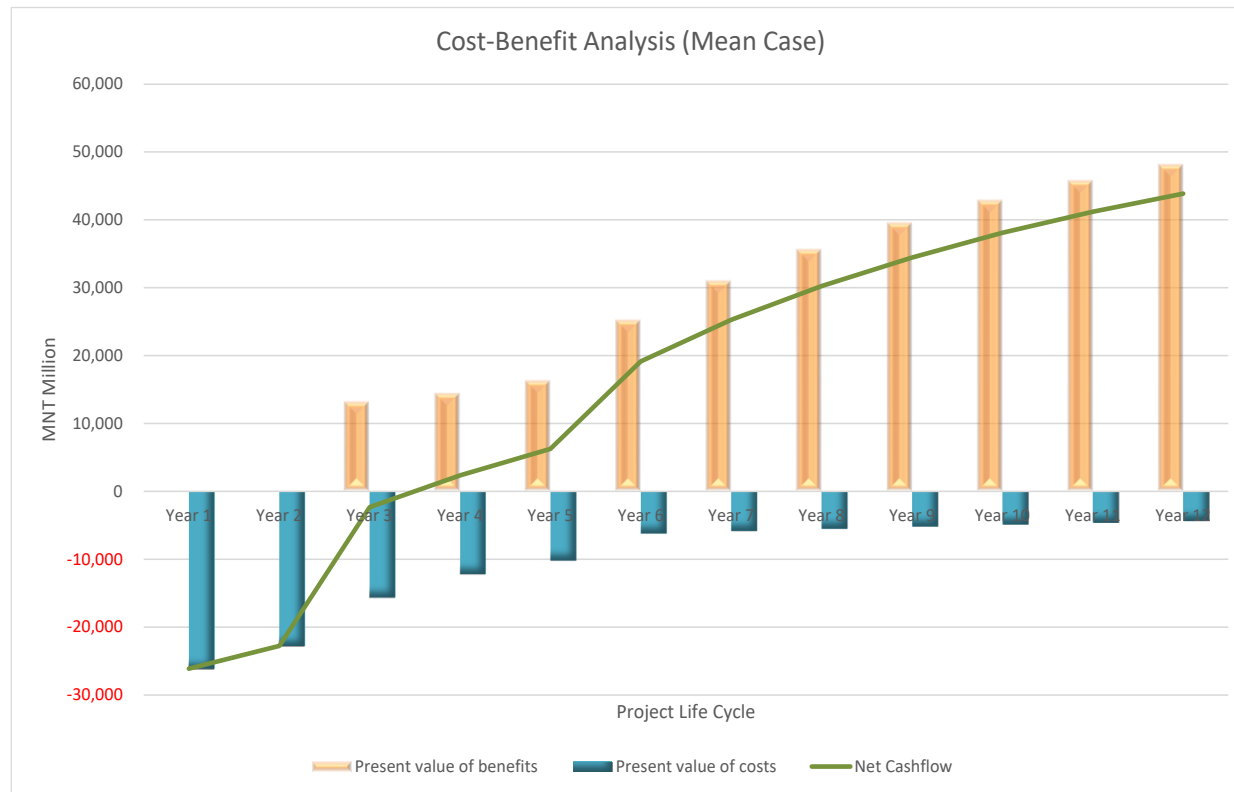
The screenshot shows the EVRI website homepage. At the top left is the EVRI logo, a globe with a grid, followed by the text "EVRI Environmental Valuation Reference Inventory". Below the logo is a navigation bar with "Home" and "About EVRI" links. Underneath the navigation bar are links for "How to use EVRI" and "Log in | Register". The main content area features a "Welcome to the EVRI website." heading, followed by a paragraph describing the site as a searchable storehouse of empirical studies. To the right of this text is a magnifying glass icon over a globe. Below the text is an "Important note to all users" section, which explains that studies with a wide geographical scope will now be available via the "Global/Regional Scope" search category. At the bottom of the page is a large image of a dam in a green landscape, with a "Learn more about EVRI" button overlaid on the bottom left of the image.

Cost-Benefit Analysis: IGIF Mongolia

Net Present Value (NPV): 189.7 billion MNT (USD 66.1 Million)

Benefit-cost ratio (BCR): 2.5

Based on analysis of a sample of 20% of identified use cases



Value Proposition for Decision Makers

- Better Geospatial Information can:
 - Improve productivity in public and private sectors
 - Increase data sales by providing new and better market insights
 - Add an extra dimension to the evidence supporting decision making
 - Create new jobs across many sectors of the economy
 - Facilitate better risk mitigation and management relating to disasters
 - Help to save the planet
- The Case for Action is not only strategic but is supported by evidence of quantifiable economic impacts



Thank You for listening

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