

Geospatial Knowledge at the Heart of Tomorrow's Global Digital Society

John Kedar

19th July 2022

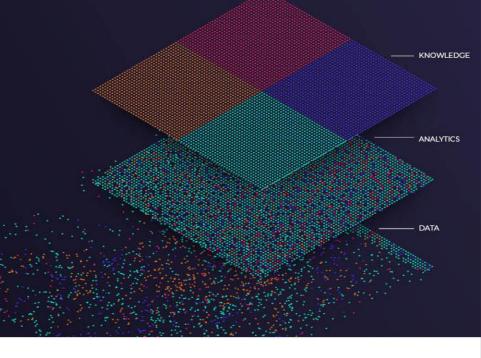






PROJECT

Advancing Role of Geospatial Knowledge in World Economy, Society and Environment



Partners

Jointly Organized by









































Phase 2























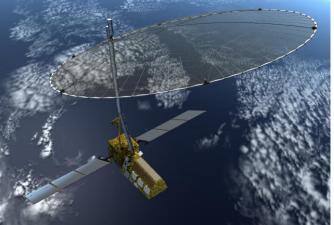




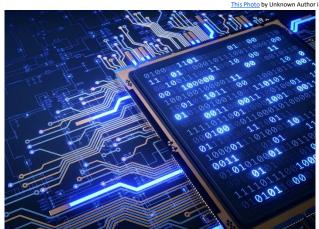


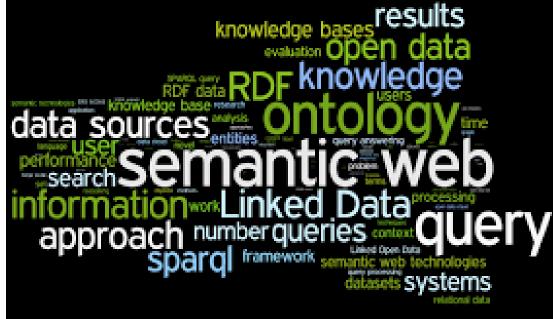
Why a new concept? The geospatial world is changing



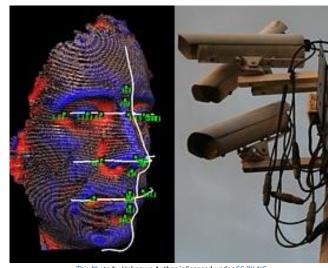


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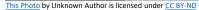


https://doi.org/10.5281/zenodo.3229400

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Why a new concept? Users are changing





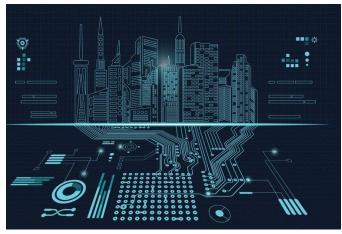






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Why a new concept? Geospatial is changing





Alphabet

facebook









"These companies do not recognise a 'geospatial sector', it is just data, analytics and user interfaces in which location plays a greater or lesser part. Innovative geospatially enabled businesses are the norm and set high user expectations." GKI White Paper

























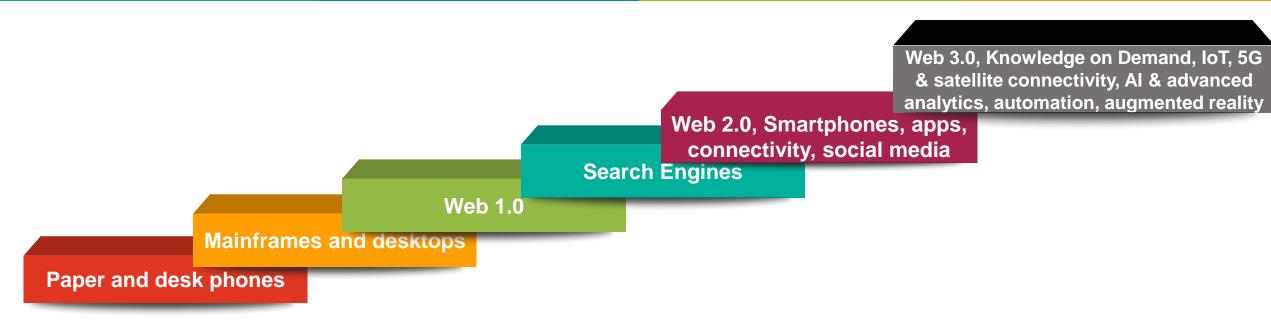
Why a new vision? Expectations are changing



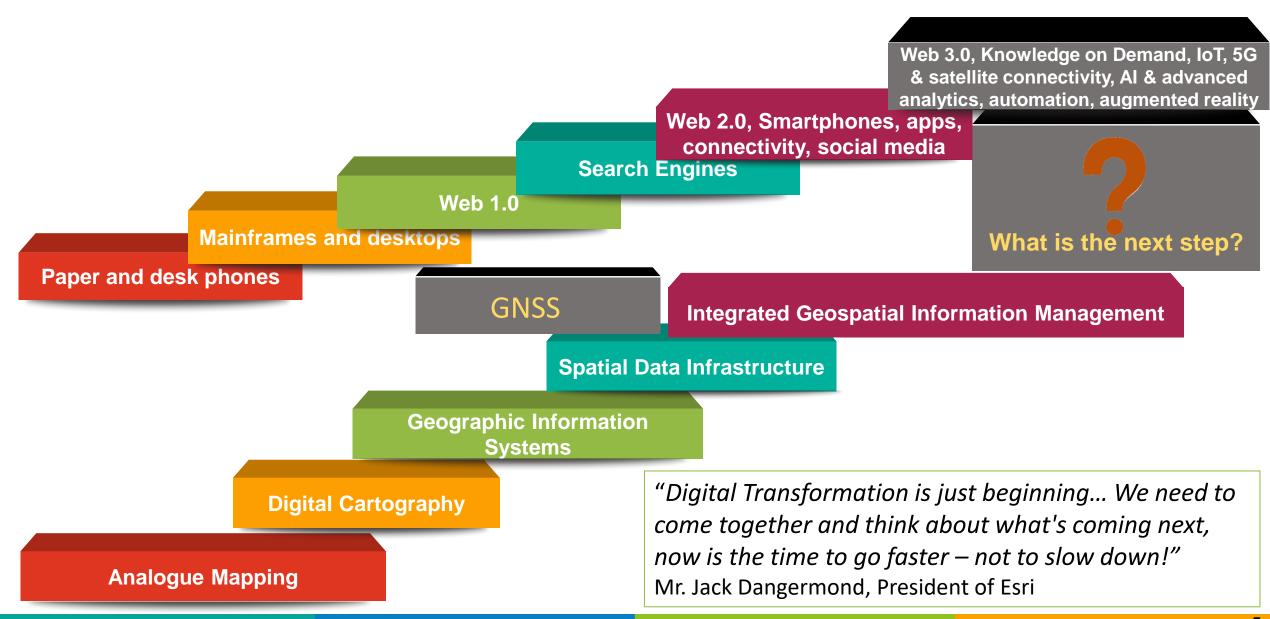
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Value

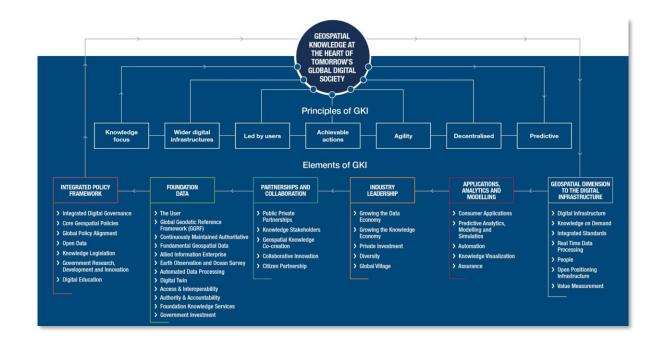
The digital road



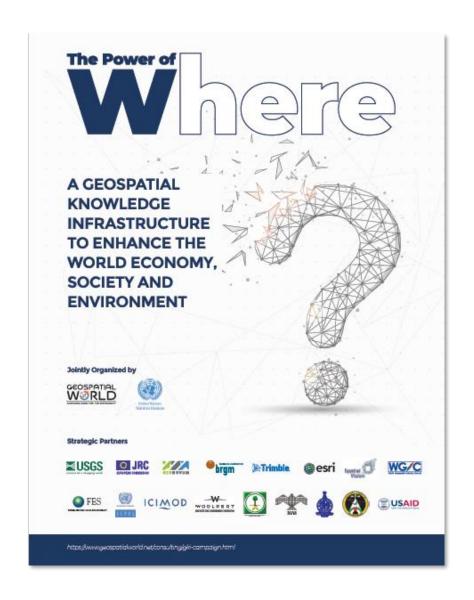
The geospatial road



GKI White Paper



https://www.geospatialworld.net/gw-assets/pdf/GKI-White-Paper.pdf



Tomorrow's geospatial knowledge infrastructure (GKI)

Vision

Geospatial Knowledge at the heart of tomorrow's global digital society.

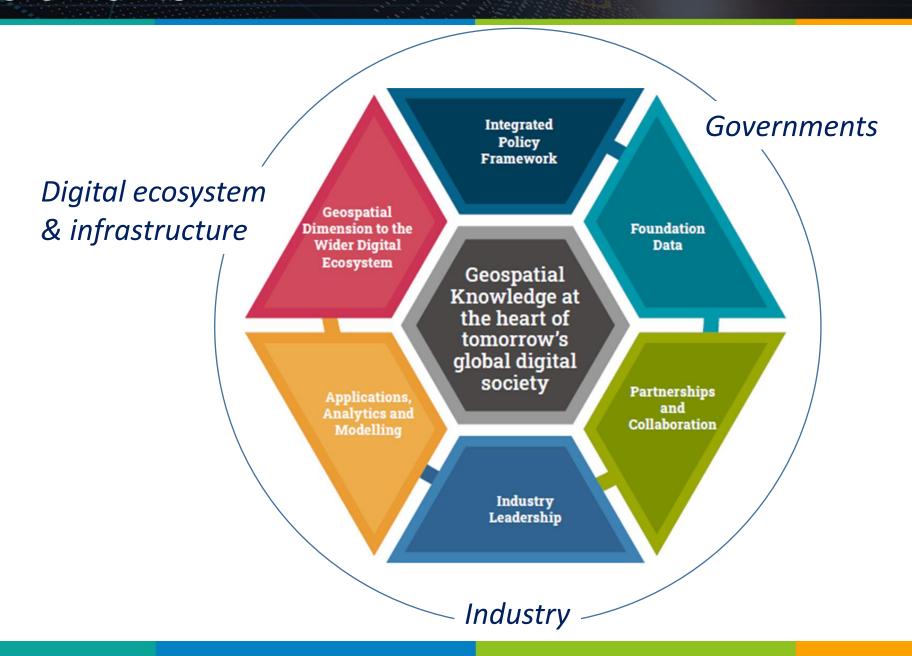
Definition

A Geospatial Knowledge Infrastructure provides a blueprint to integrate digital economies, societies and citizens with geospatial approaches, data and technologies and in so doing deliver the location-based knowledge, services and automation expected in the 4IR age.

Geospatial knowledge infrastructure principles

- 1. Geospatial technology should integrate with established and emerging wider digital infrastructures to be a **single digital ecosystem**.
- 2. Knowledge is the focus. Humans and machines seek knowledge, not data, to make decisions.
- 3. Predictive. Be it in milliseconds or years, geospatial moves from insight to foresight.
- 4. Be **led by users**, based on the knowledge needed, not data and applications available.
- **5.** Take achievable actions now and then scale; success cannot be achieved overnight.
- **6. Agility is inbuilt**. Innovative, dynamic and agile solutions are far better able to respond to global challenges, technology change and people's expectations in a rapidly developing world.
- **7. Decentralized**. The web is naturally decentralized, with data and application value-chains becoming more complex across wider ranges of partnerships.
- **8. Collaborative**. To more quickly meet societies' global sustainability challenges, including the digital divide.

GKI elements



GKI Project Year 2 User Industry Focus



Energy Transition



Transport & Infrastructure



Autonomous Driving



Land Administration



Logistics and Supply Chain



Cities



Public Safety and Security



Agriculture

Integrated policy framework

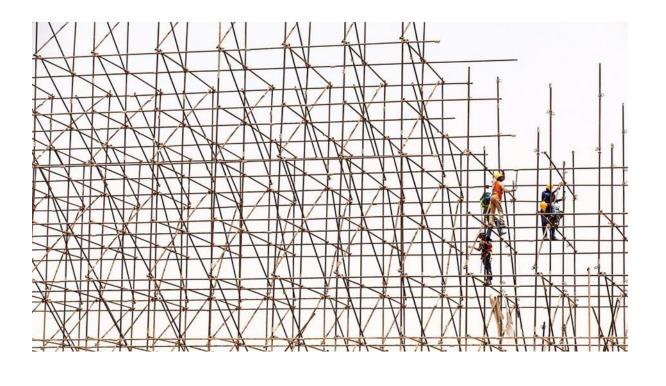




- Improved, integrated, evidence-based government policies and services.
- Established frameworks that maximise the benefits of geospatial knowledge to nations.
- A digital infrastructure and economy.
- Resilient nations prepared for crisis.

Foundation data





- Foundation data as part of a national digital infrastructure.
- Foundation data that utilises 4IR technologies to meet user requirements for continuously updated data.

Partnerships and collaboration





- Widespread cross-sector geospatial knowledge engagement.
- Industry-government geospatial knowledge and foundation data partnerships.
- Diverse ideas innovative industry.

Industry leadership

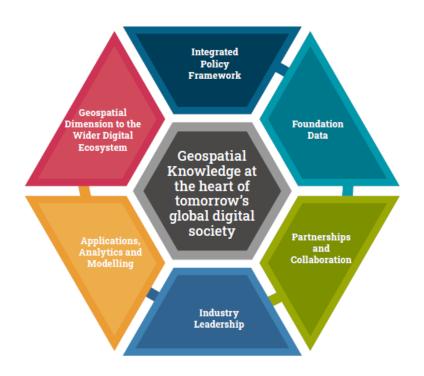




Photo: https://www.geoworks.sg/

- Increased use of geospatial capabilities across all industry sectors.
- Industry able to meet the exacting requirements of foundation data agencies and at year-on-year lowering prices.
- Recognising that the industry geospatial knowledge ecosystem is broad and growing, professional associations will grow into this space.

Applications, Analytics & Modelling





- Widespread use of geospatial tools, data and knowledge within consumer applications.
- Geospatial knowledge that provides prediction and foresight, not hindsight.
- Trust in geospatial derived knowledge for the human or automated use it is to be put.

Geospatial dimension to the wider digital ecosystem

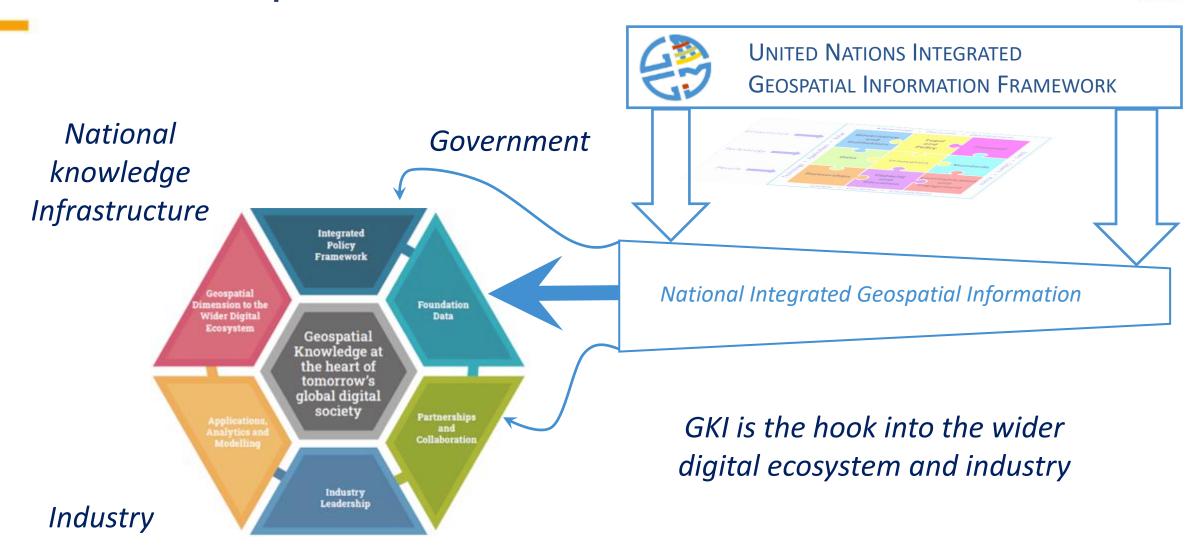




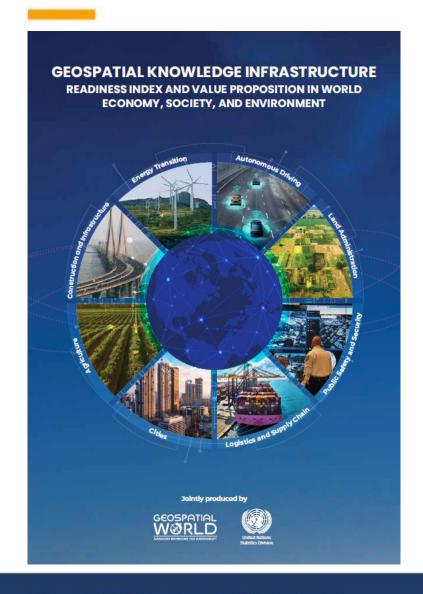
- From individual companies to global institutions, location becomes a fundamental attribute within data and information, and a core element of data infrastructures and business processes.
- Geospatial technologies and standards are seamlessly integrated into web, business and government systems and enterprises.

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Relationship between GKI and UN IGIF



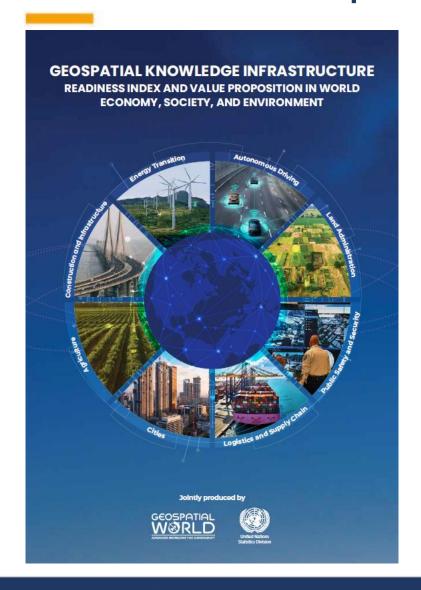
2022 GKI Report – published today





https://www.geospatialworld.net/consulting/gki-phase-2/report.html

2022 GKI Report – Readiness Index



GEOSPATIAL DIMENSION TO DIGITAL INFRASTRUCTURE

Digital Readiness, Standards, Spatial Data Access, Institutional Capacity, Capacity Building

- Core Geospatial Policies
- Enabling Policies
- Geospatial Mandate in Sectoral Policies
- UN-IGIF Adoption

- Industry Capacity
- Innovation Promotion Programs
- Industry Networks

- International Partnership
- Geospatial Collaborations

- Stages of Technology Architecture
- User Adoption
- 4IR Adoption

INTEGRATED POLICY FRAMEWORK

INDUSTRY LEADERSHIP PARTNERSHIPS AND COLLABORATIONS

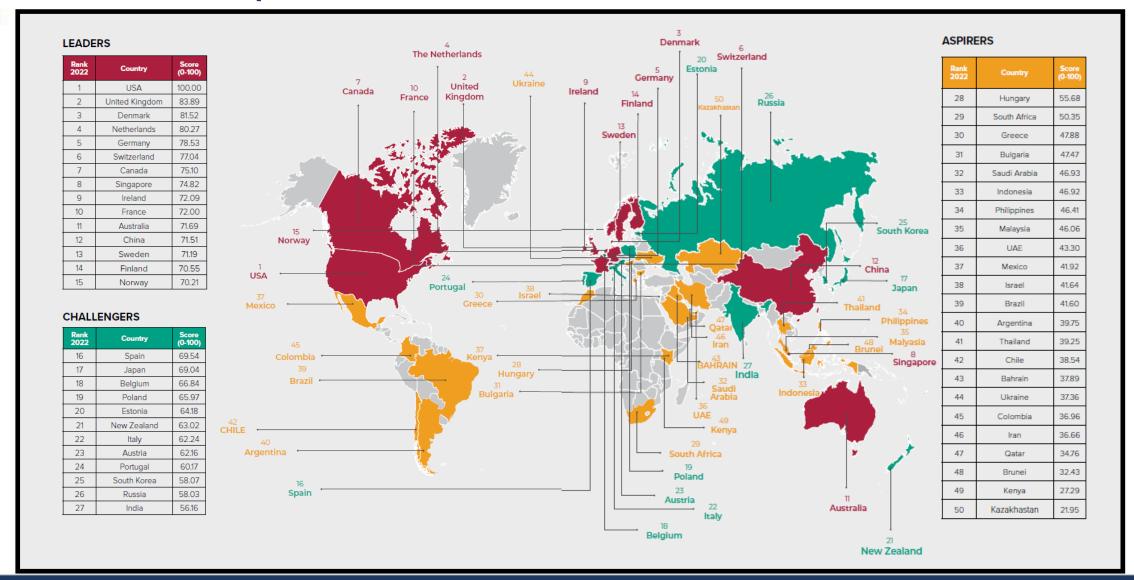
APPLICATION, ANALYTICS

& MODELLING

FOUNDATION DATA

Fundamental Themes, Positioning Infrastructure, Open & Linked Data, Earth Observation Infrastructure

2022 GKI Report – Readiness Index



Geospatial Knowledge at the heart of tomorrow's Public Safety and Security

A Journey

To find out more:

https://geospatialmedia.net/gki-campaign.html

GKI White Paper

<u>https://www.geospatialworld.net/gw-assets/pdf/GKI-White-Paper.pdf</u>

Phase 2 Report

https://www.geospatialworld.net/consulting/gki-phase-2/report.html

