

geospatial technology – driving economic and societal development

20th June, Kuala Lumpur

Sanjay Kumar

Founder & CEO, Geospatial Media and Communications

Founder & CEO, World Geospatial Industry Council

Board Member, Radiant Earth Foundation

Board Member, Open Geospatial Consortium

Member, US National Geospatial Advisory Committee

Council Member, International Society for Digital Earth

Maps are not just driving
apps today!

they are driving
economies and societies
too!!

Artificial
Intelligence

Big Data

Internet of
Things

Geospatial
Location

Fourth Industrial Revolution

GEOSPATIAL INDUSTRY IN DIGITAL ECOSYSTEM

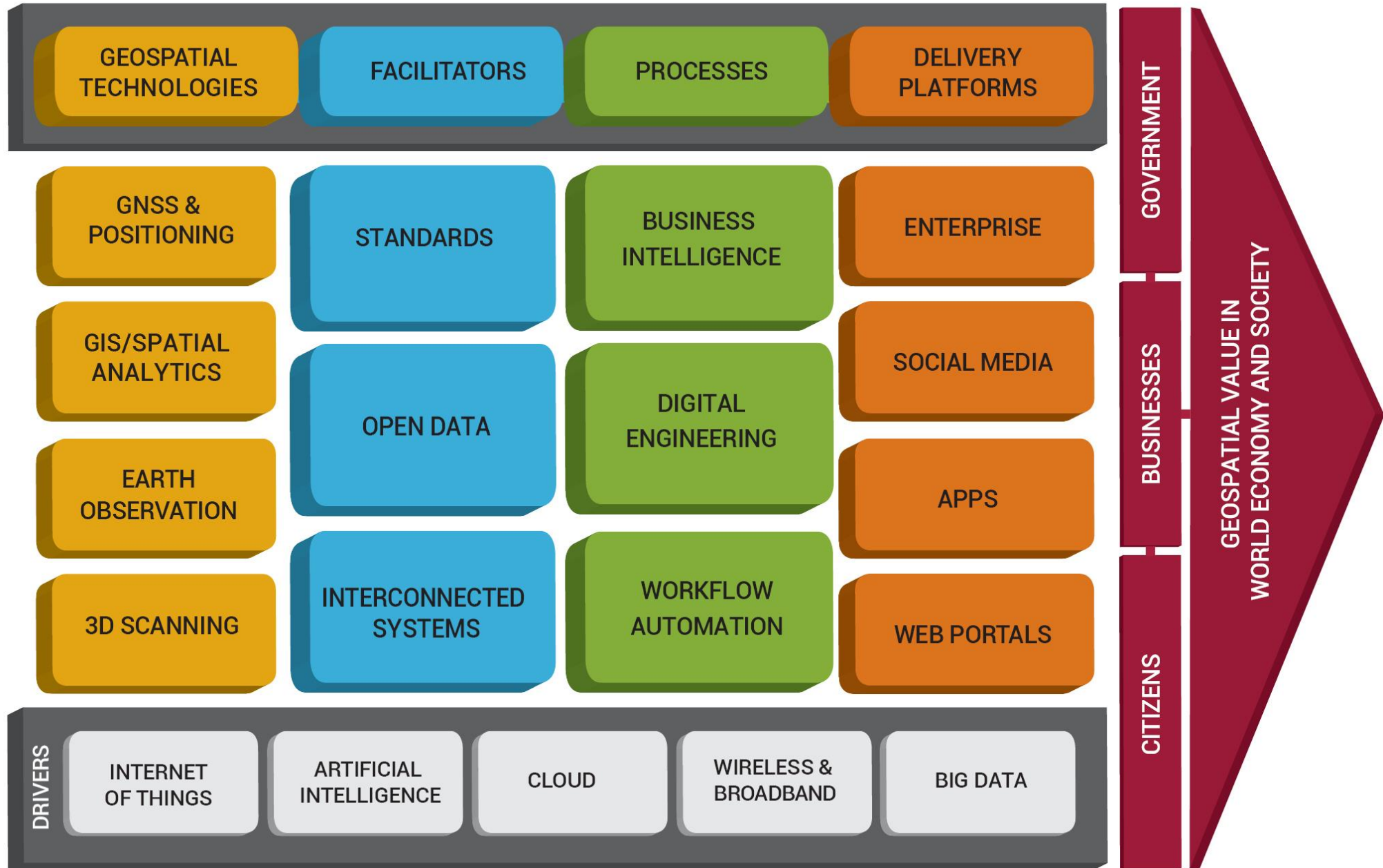
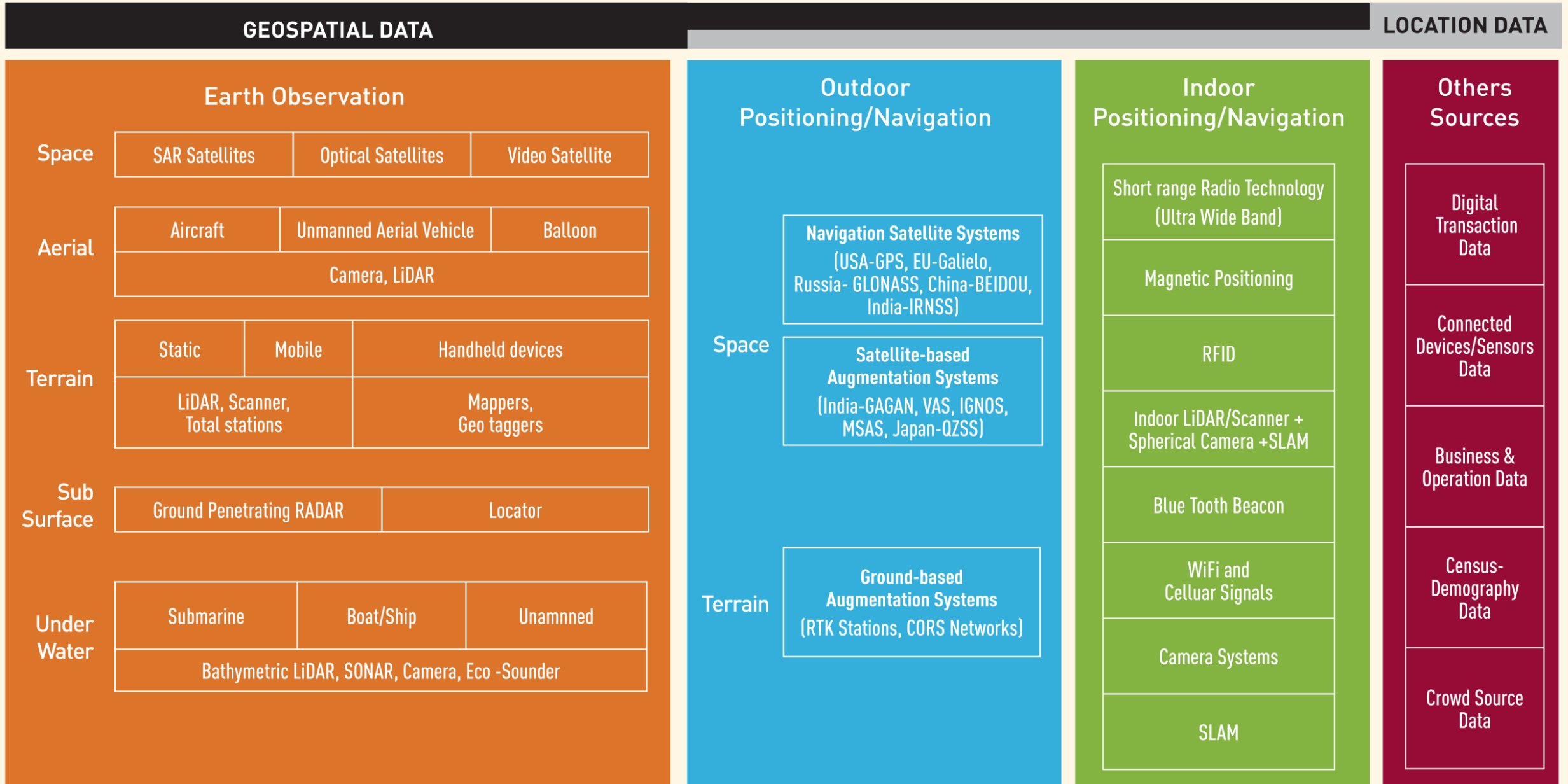


Figure 1.2 — Geospatial Industry Data Sources





Geospatial Analytics will Eat the World and You Won't Even Know It

Forbes



The World Economy Runs on GPS

Bloomberg BusinessWeek

Space-technology-based data is important for in situ monitoring, and reliable geospatial information for sustainable development policy-making, programming and project operations

United Nations

Geospatial Value in Smart Society

Location Analytics & Business Intelligence Market

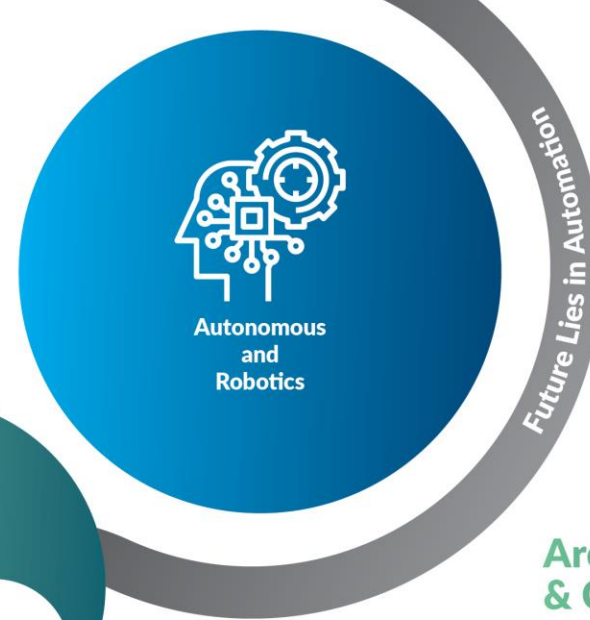
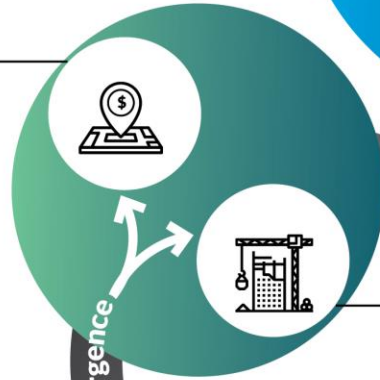
- Navigation
- Real Estate
- Autonomous Mobility
- BFSI
- Smart City
- Hospitality
- E-commerce
- Fleet Management
- Healthcare
- Retail
- Media & Advertising

Professional User Domains

- Agriculture
- Urban Planning
- Defense & Intelligence
- Municipalities
- Utilities
- Natural Resources
- Climate & Environment
- Public Safety
- Disaster management

Commercial Companies

- Technologies
 - GNSS & Positioning
 - GIS/Spatial Analytics
 - Earth Observation
 - 3D Scanning
- Map Content
- Solutions
- Services



Architecture, Engineering & Construction Market

- Transport Infrastructure
 - Airports
 - Ports
 - Railways
 - Road
- Industrial Infrastructure
- Buildings Infrastructure

National Geospatial Agencies

- National Mapping
- Earth Observation/Space
- Spatial Data Infrastructure
- Land and Cadastre
- Geological Survey
- Statistical and Census

Thematic Mapping

- Forest Cover
- Water Resources
- Meteorological Department
- Soil Cover
- Land Use and Land Cover
- Hydrography

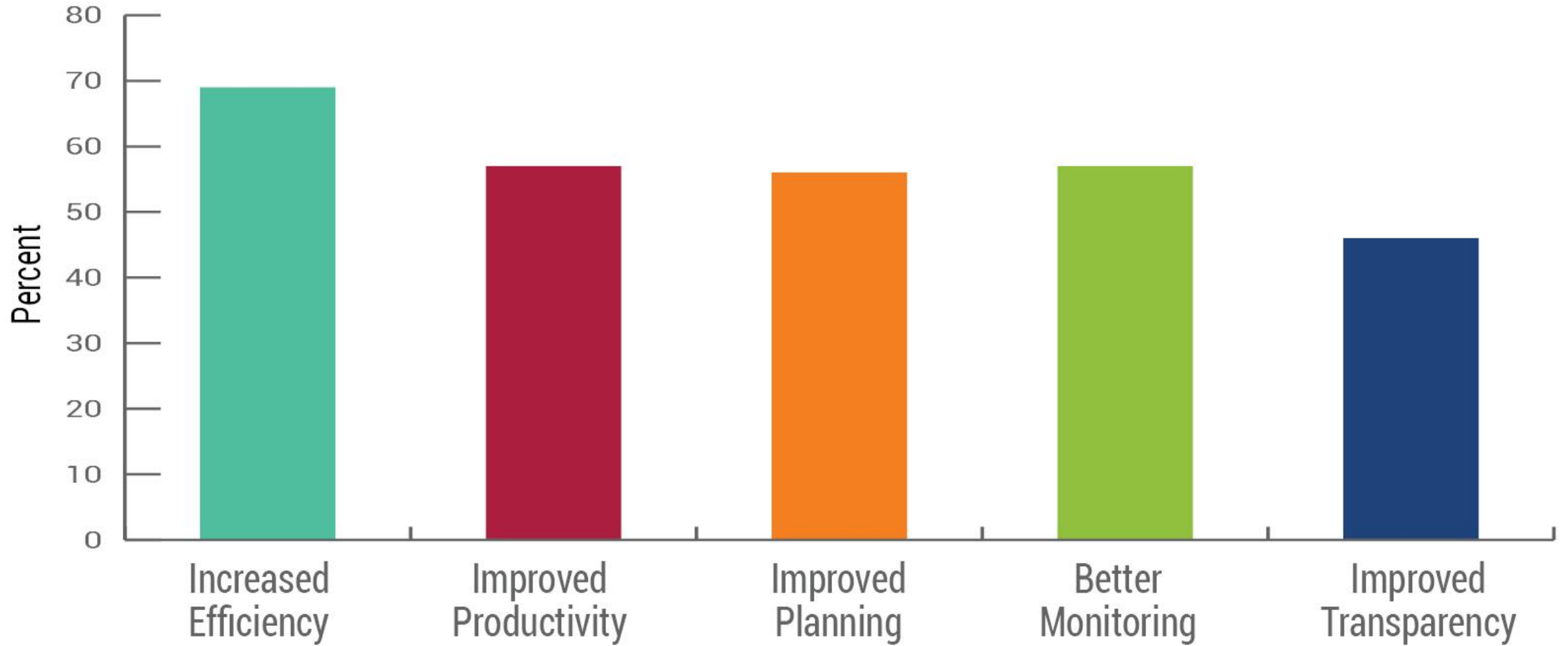


Professional Geospatial Market

Convergence

Future Lies in Automation

BENEFITS and VALUE



ECONOMIC IMPACT OF GEOSPATIAL SERVICES

CONSUMER BENEFITS



Consumers value digital maps at up to

US\$105 PER USER
resulting in total benefits of
US\$347 BILLION PER YEAR.



Digital maps reduce travel time by

12% ON AVERAGE.
The value of time saved is
US\$264 BILLION
based on local wage rates.



Consumers save more than
21 BILLION HOURS
per year The value of time saved is
US\$283 BILLION.

BUSINESS BENEFITS



Geospatial services industry
generated revenue of approximately

US\$400 BILLION IN 2016.



Geospatial services productivity
impact in sectors representing

75% OF GLOBAL GDP.



Digital maps have supported over
US\$1 TRILLION
of yearly sales for businesses.

SOCIETAL BENEFITS



CO2 emissions from vehicles
could be reduced by

1,686 MILLION MT
efficient trips, reduced congestions.



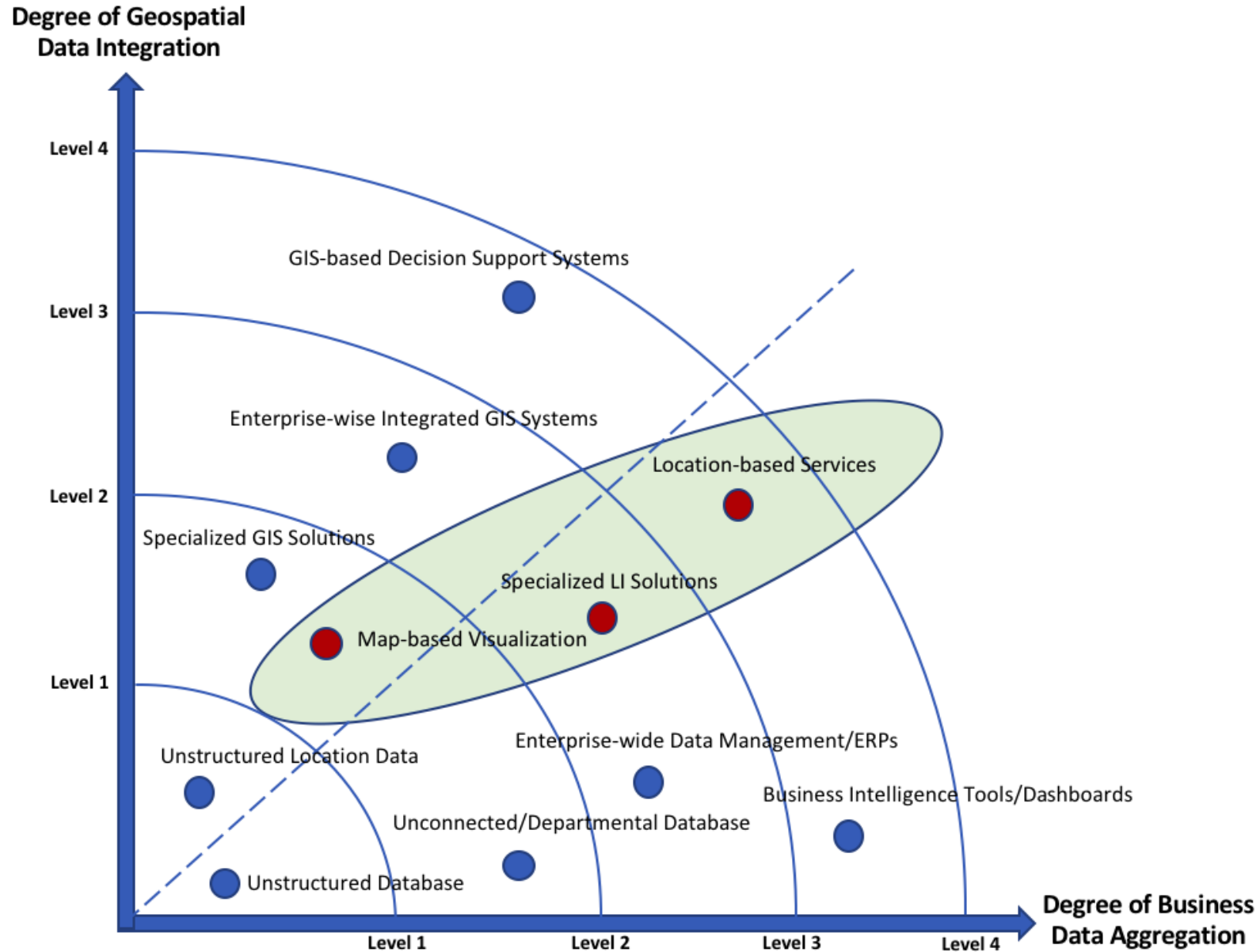
Potential employment directly
linked to digital maps of over

4 MILLION JOBS GLOBALLY.

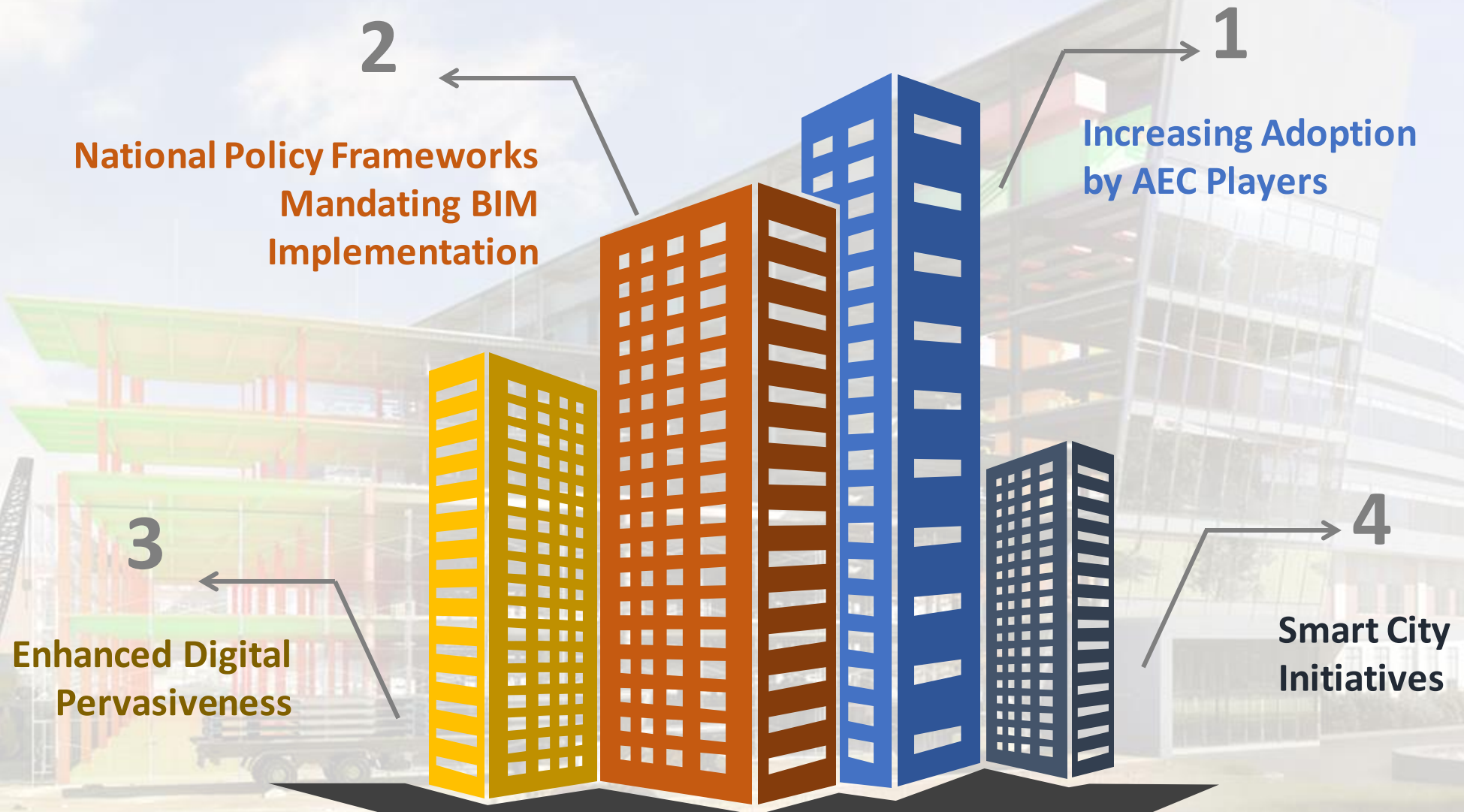


Emergency response times
DECREASED BY 20%
resulting in more lives saved.

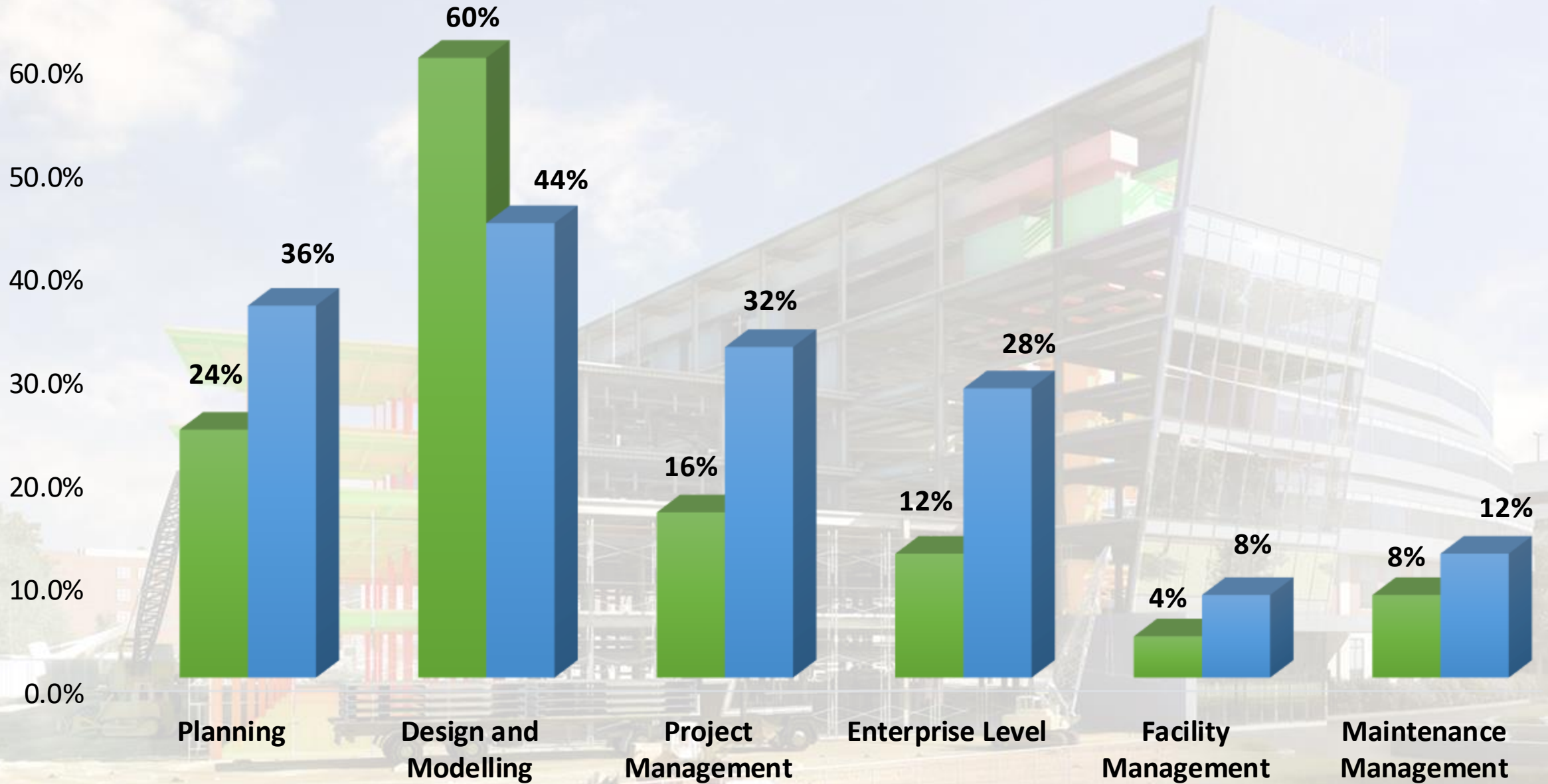
Geospatial and Business Intelligence Spectrum



Geospatial and BIM Adoption Enablers

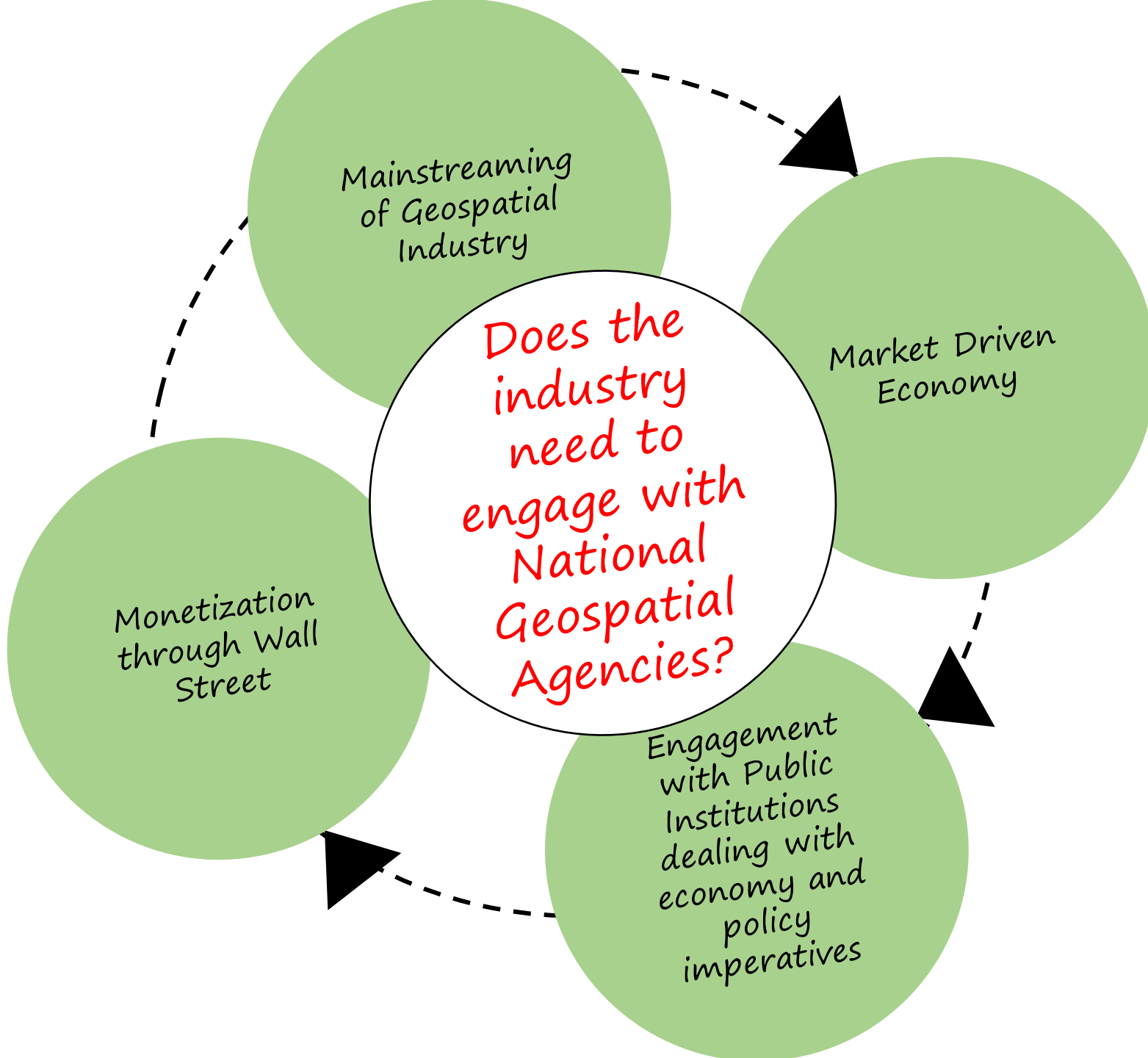


Geospatial+BIM Integration in Construction Workflow

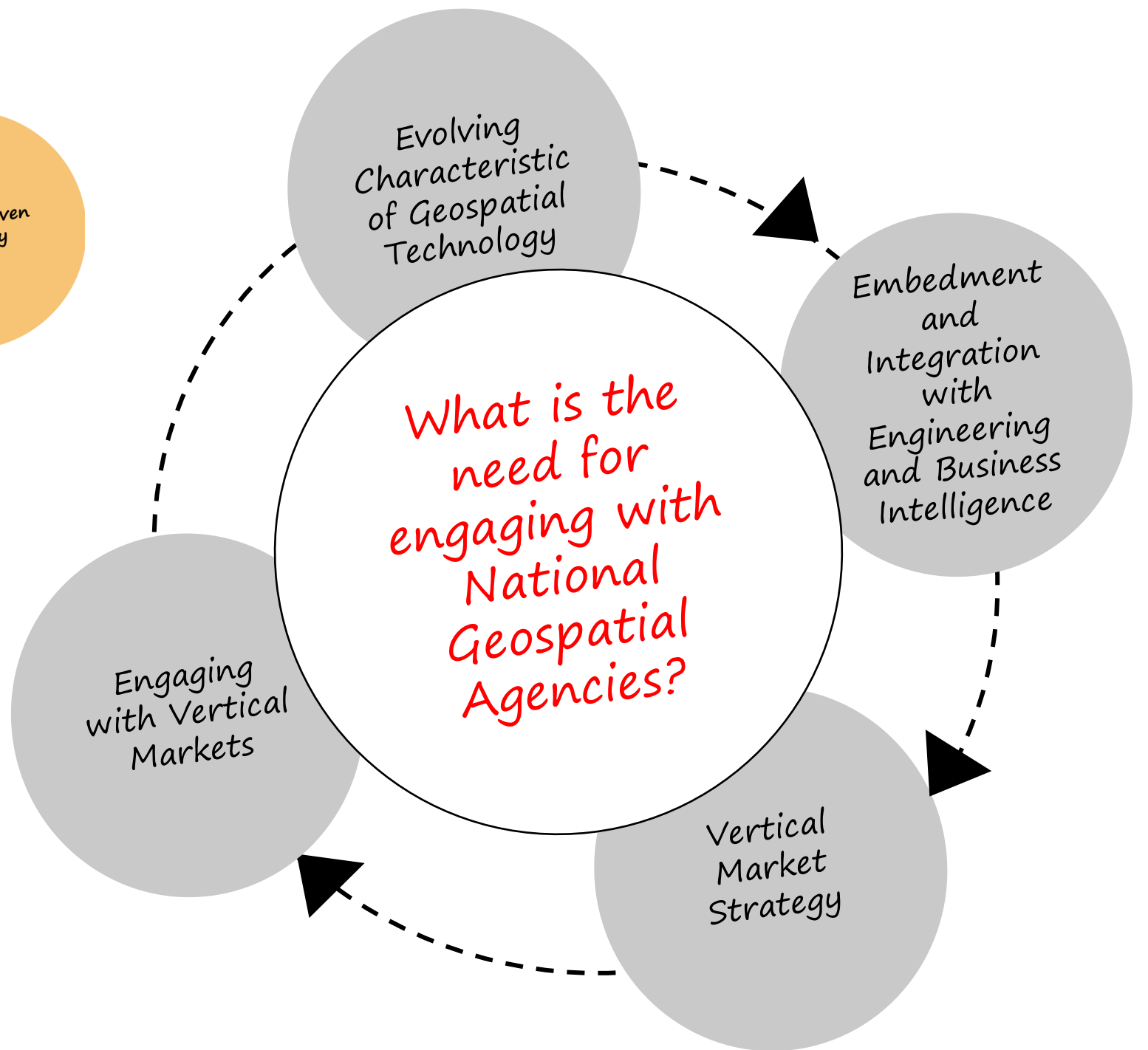
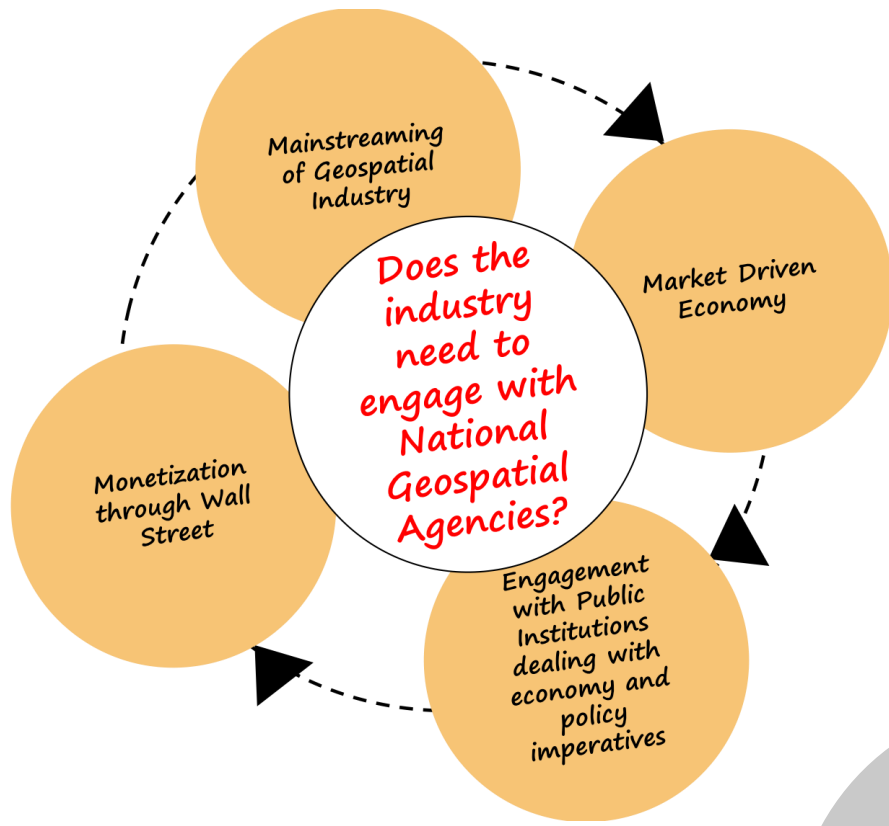


*Evolving role of National
Geospatial Agencies
and
Integrated Geospatial
Information Framework*

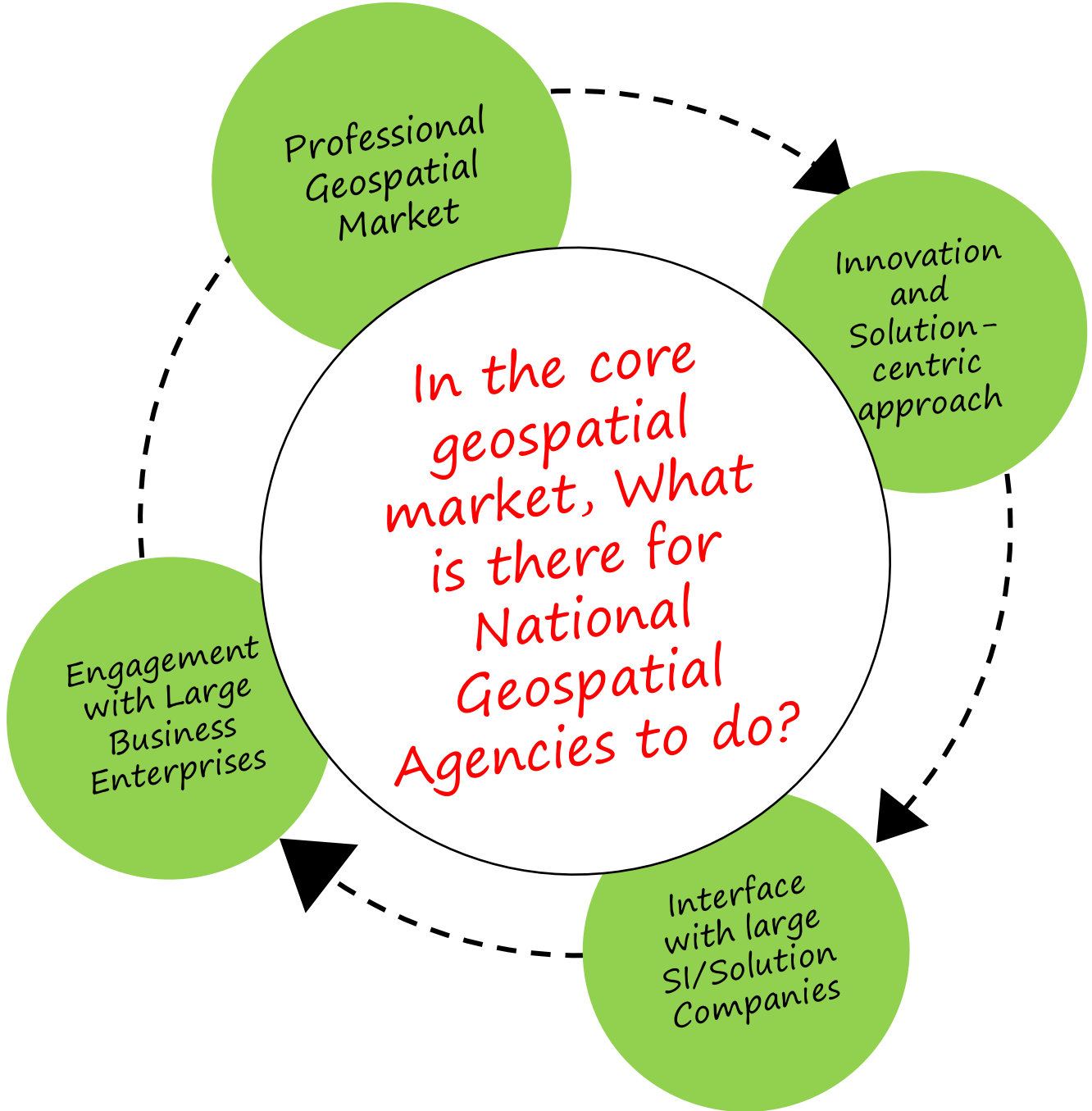
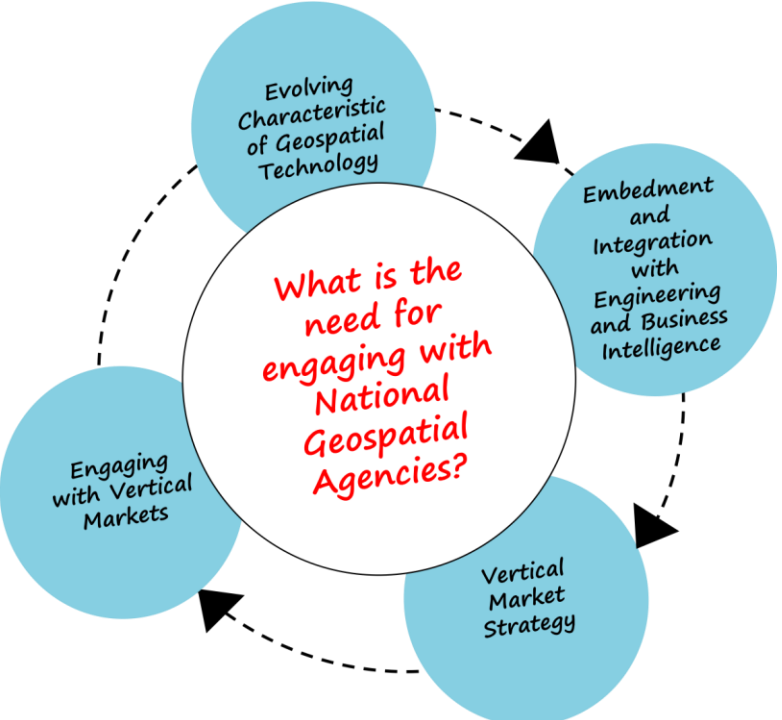
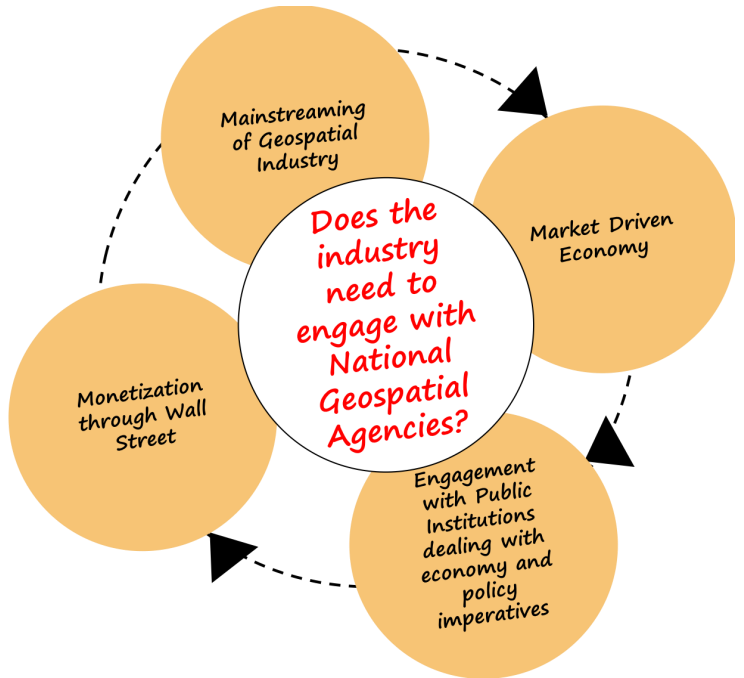
CHANGING GEOSPATIAL ECOSYSTEM



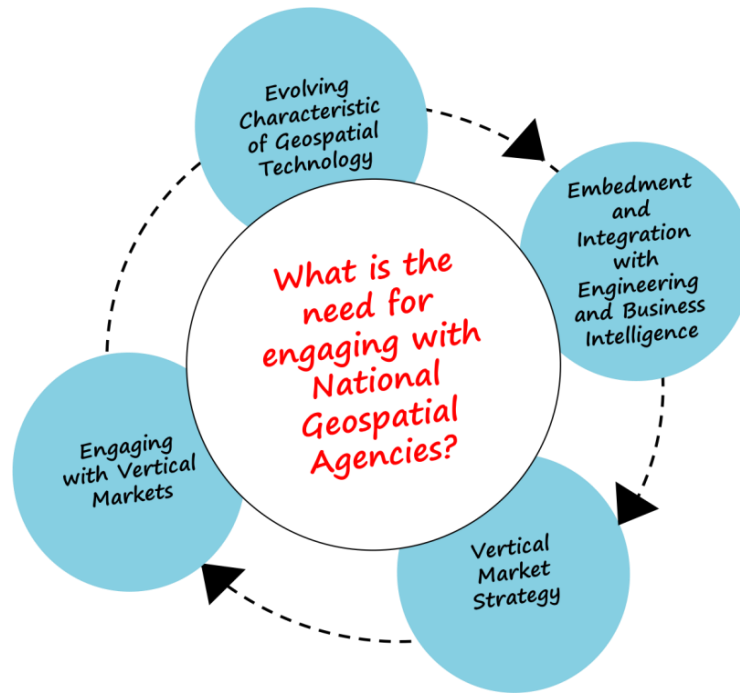
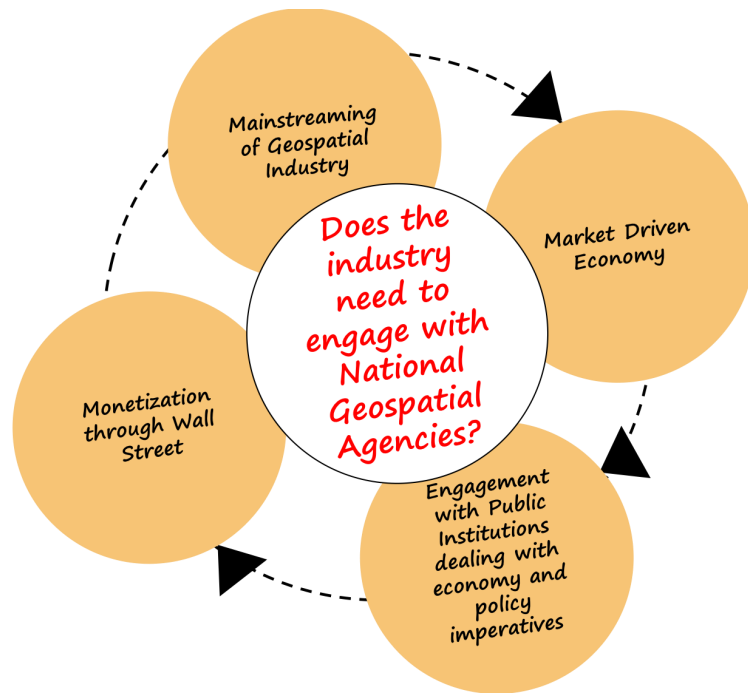
CHANGING GEOSPATIAL ECOSYSTEM



CHANGING GEOSPATIAL ECOSYSTEM

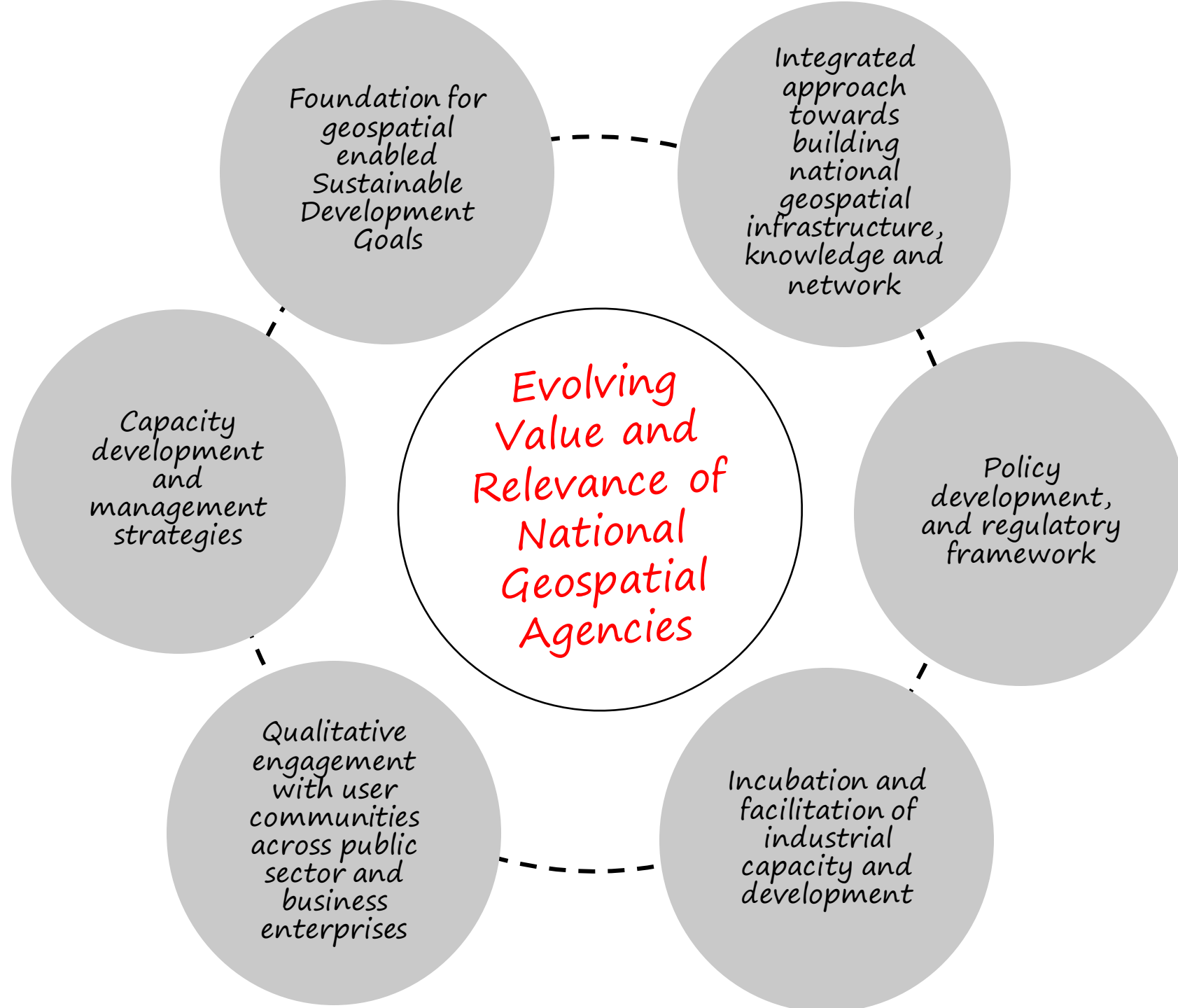


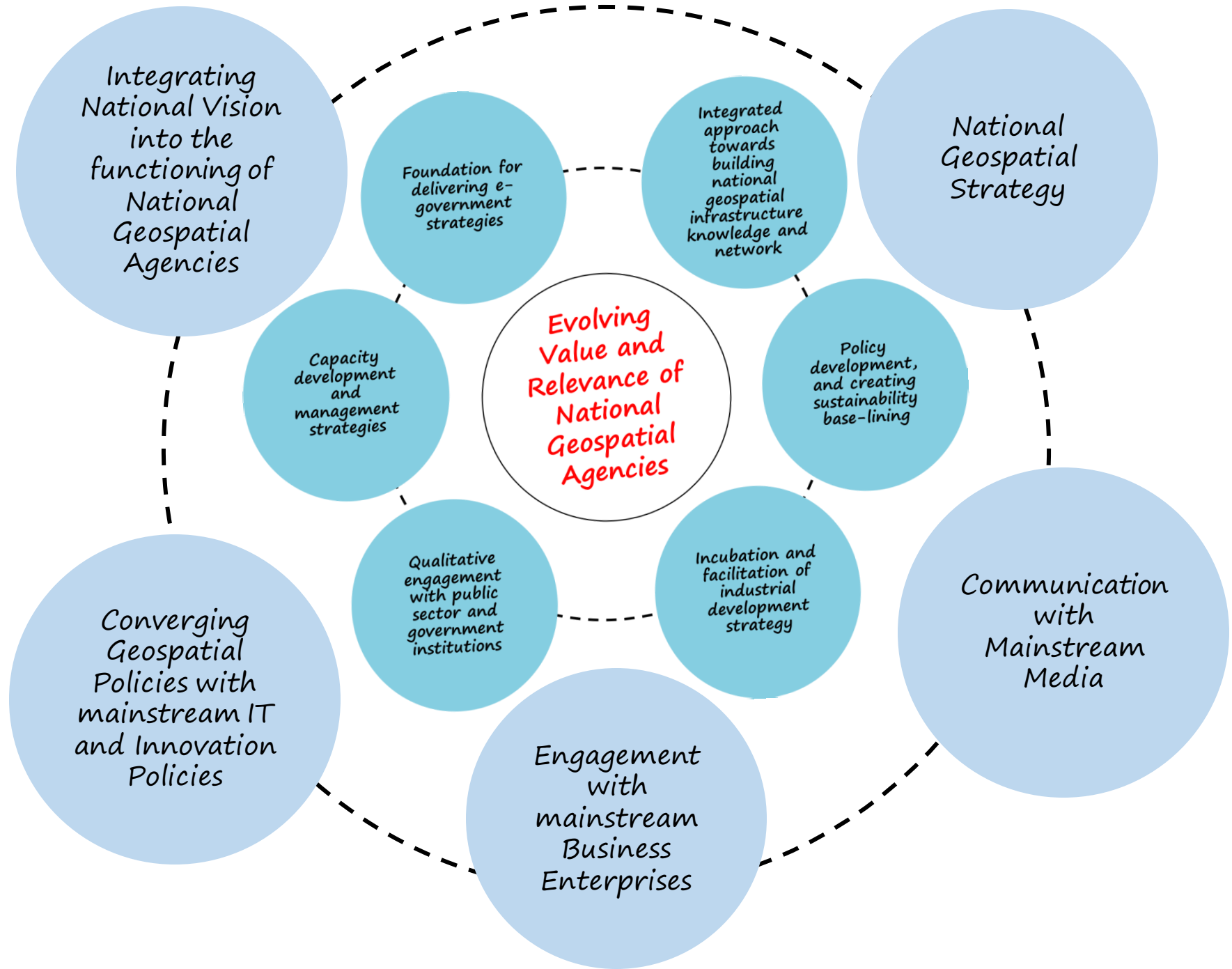
The question has been raised....



In this changing geospatial ecosystem,

What is the role of National Geospatial Agencies?







what makes it happen!!!





‘being open’ comes with discipline of evaluating ideas and innovating feasibilities of incorporating, and in many cases adapting, those ideas in workable mode.

A large red speech bubble graphic with a white border and a small downward-pointing triangle at the bottom center. The text "thank you" is centered inside the bubble in a white, lowercase, sans-serif font.

thank you