

# Geospatial Big Data

Getting Big Value  
from Big Data

Geo-Informatics and Space Technology  
Development Agency (Public  
Organization)

[www.gistda.or.th](http://www.gistda.or.th)



# 80% +

## of Big Data

is **Geospatial Big Data**

due to the vast networks of GNSS, satellites, cell towers, IoT, etc.






# Geospatial Big Data & Analytics

Geospatial big data refers to spatial data sets exceeding capacity of current computing systems. A significant portion of big data is actually geospatial data, and the size of such data is growing rapidly at least by 20% every year.

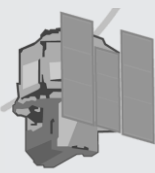
### Satellite Constellation



**20+**  
Active Satellites

**1.6** Satellite Image  
Tera Byte per day

Thaichote



### GNSS




**245+**  
IGS Cors  
Reference Stations

GPS


### Real-time Sensor

Automatic Identification System/ VMS

**EVERY MINUTE**



**1,000+**  
Weather, Hydrological & Air Quality Stations



### Crowdsourcing

## Citizens as a Sensors

Everywhere & Every time

Social networks


**VGI**

GIS FOR THE MASSES!



Volunteered Geographic Information

### Other more ...

-  UAVs / Drones
-  Mobile Mapping System (MMS)
-  CCTV
-  Car Tracking / Logistic
-  Cellular Tower
-  Coastal Radar Station

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**“Value-Centric”**  
Start from the value

Business  
Process



# Analytics

# Geospatial Big Values

Engineering  
Process

# Geospatial Big Data

**“Data-Centric”**  
Start from the data



# Actionable Intelligence Policy

Enable platform to efficiently generate high value (i.e. policy) for the right people in the right place at the right time through the intelligence analytics across the multiple dimensions of data and technology



- Intelligence**
- Innovation
  - Insight
  - Efficiency
  - No redundancy
  - Equality

## Value Creation Policy

- Actionable**
- Traceable
  - Alignment
  - Relevance
  - Clarity
  - Practical