

GEOIntelligence Asia, 14-15 June 2012

Plenary Session 1 – **Geotech: Essential Requirement of Modern Warfare**

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Gartner Top 10 Strategic Technologies for 2012



- **Next-Generation Analytics**
- Big Data
- **Contextual and Social User Experience**
- Internet of Things
- **Media Tablets and Beyond**
- **Mobile-Centric Applications and Interfaces**
- App Stores and Marketplaces
- Extreme Low-Energy Servers
- **In-Memory Computing**
- **Cloud Computing**

Gartner®

Key Themes for Defense

- The Need for Multi-Intelligence Data Fusion
- Geospatial Information Integration Chain
- Data Management, Filtering & Enhancement
- Mobile Solutions for the Warfighter
- Modern Systems Architecture



We live in a Highly Interconnected World, one that is constantly growing AND speeding up...

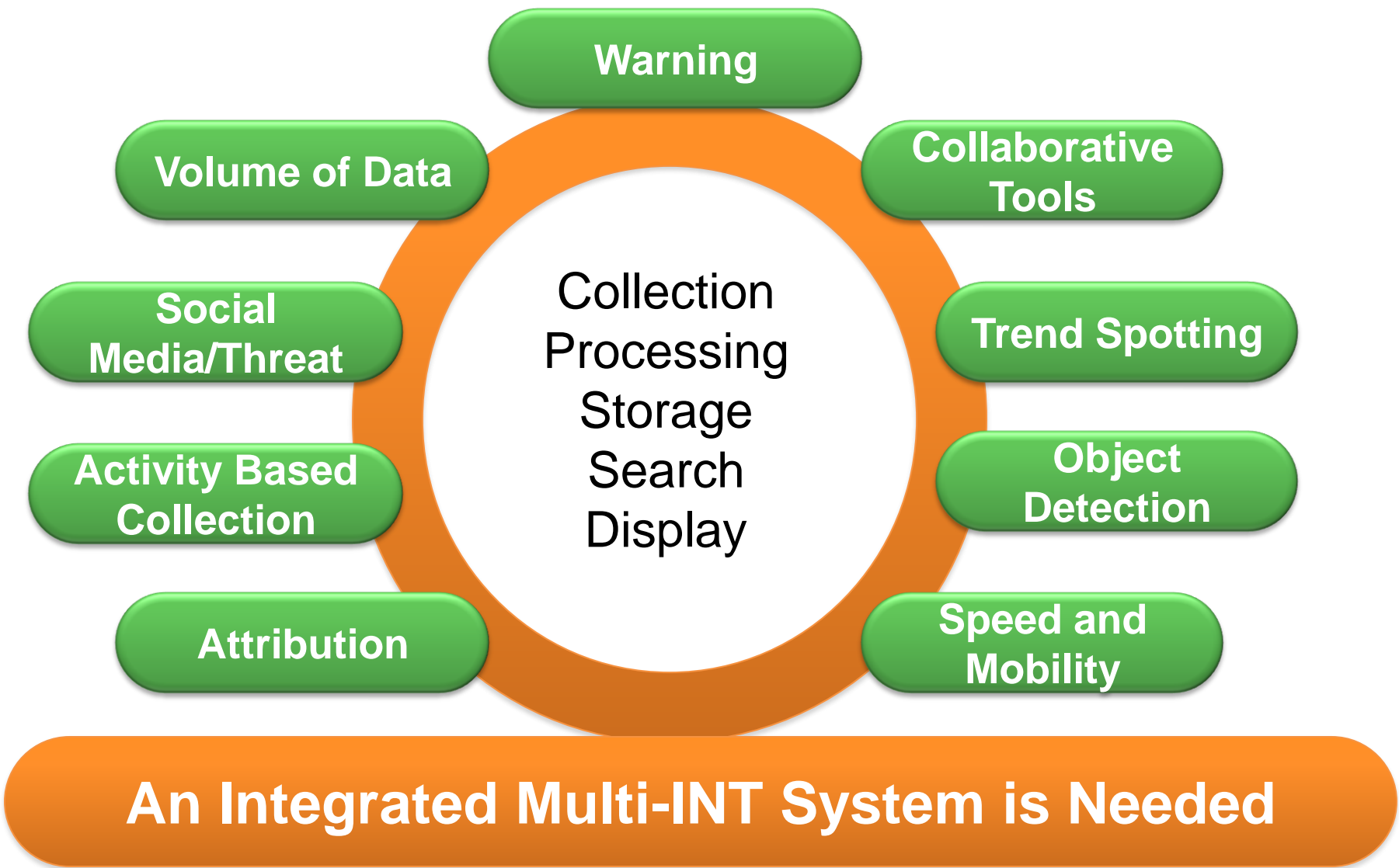
Competition for Resources

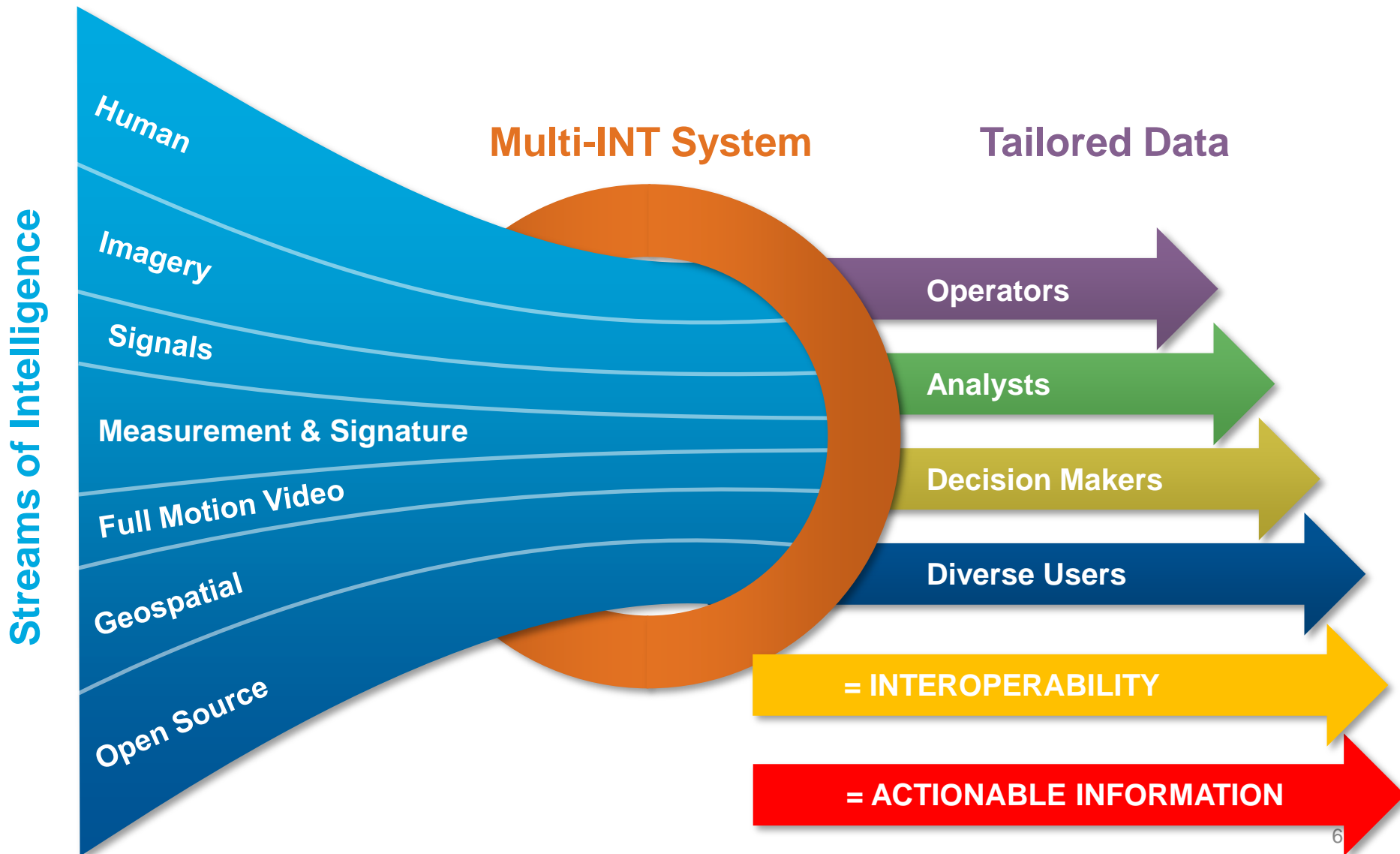
Increasing Rate of Change

Social Networks or Social Threats?

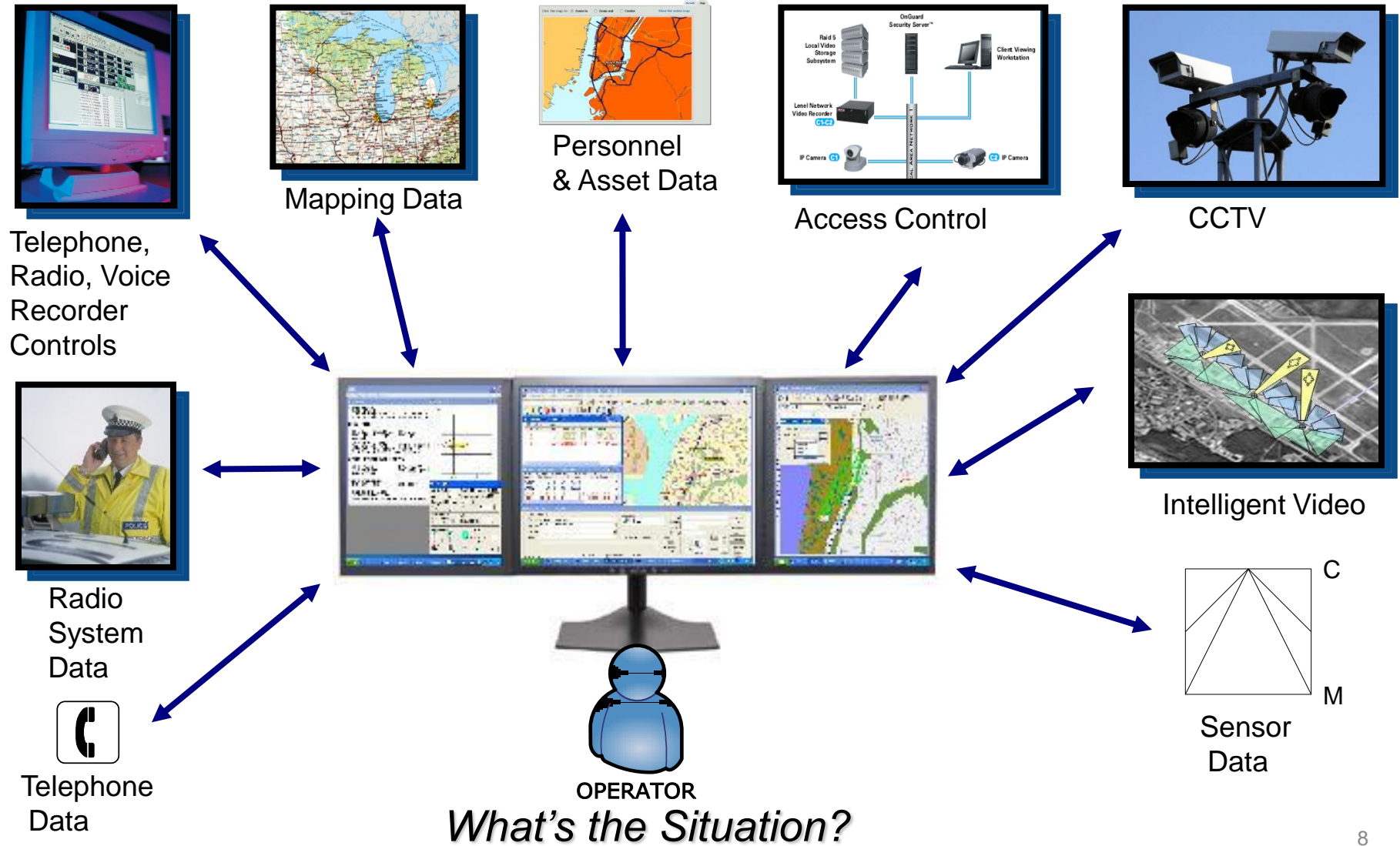
Partnerships and Information Sharing

Intelligence Challenges



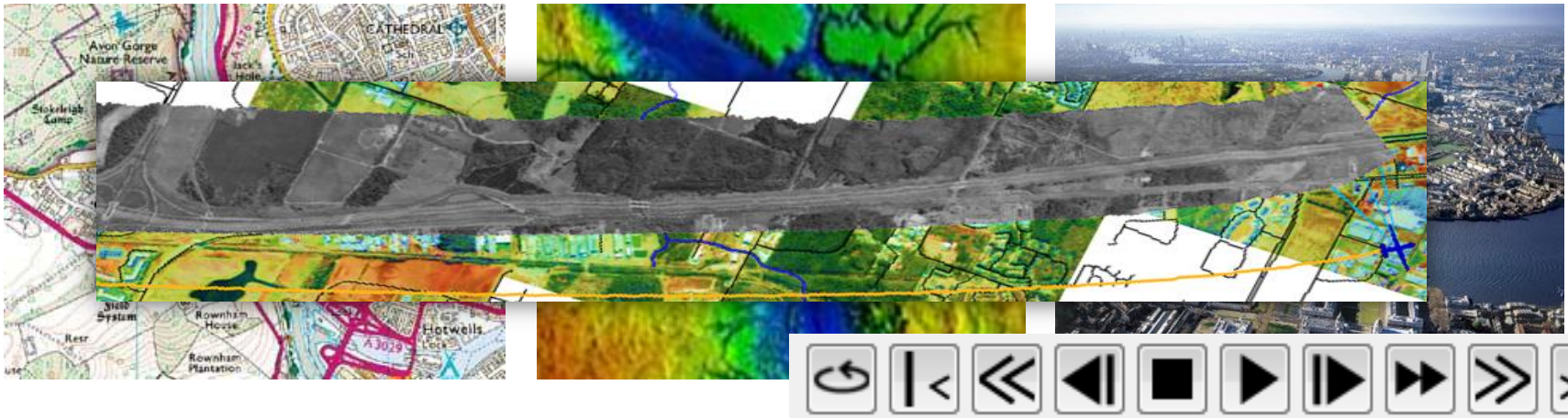


Sensor Integration – Force/Base Protection



Full Motion Video Exploitation (MVE)

Integration of Live Video Streams, Intel and Geospatial data sources

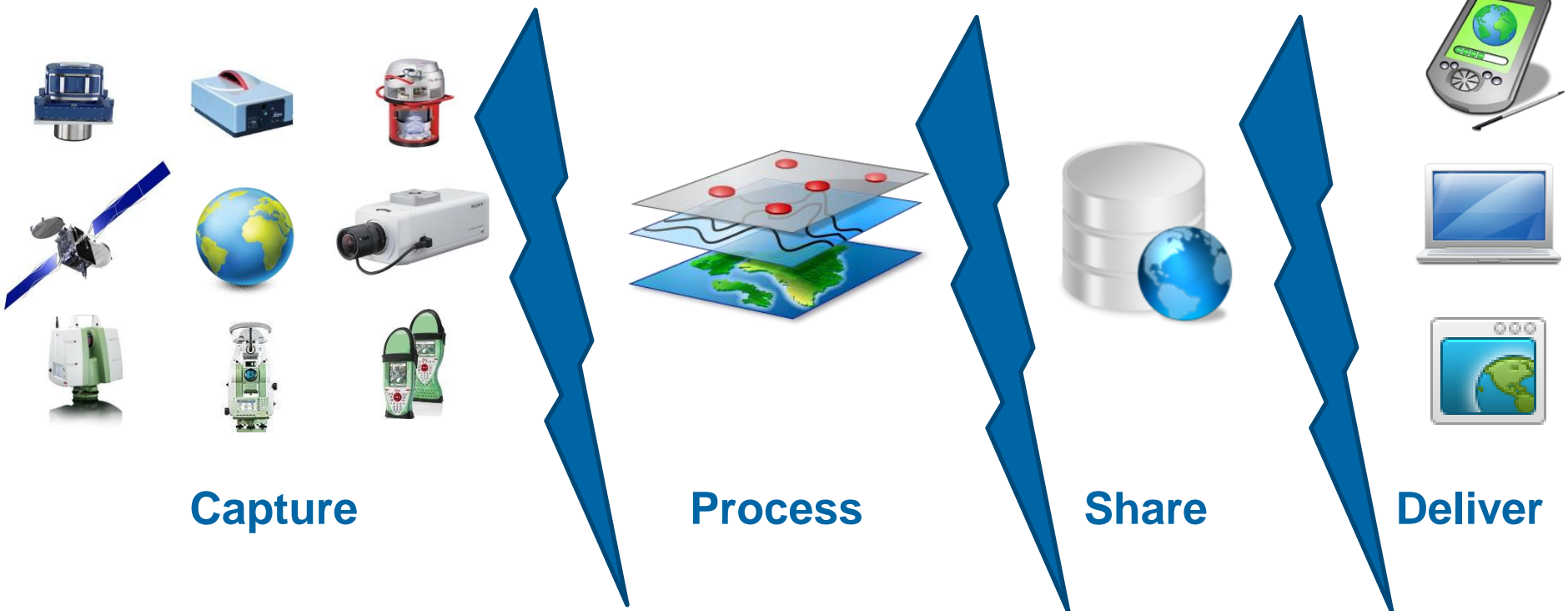


- Integration of all types of geospatial data
 - Full Motion Video
 - Raster maps
 - Terrain products
 - Satellite imagery and aerial photography
 - HUMINT, SIGINT, Social Media
- Visualize, analyse, replay and archive with tracking graphics
- Catalogue video & metadata with geospatial references for search & retrieval
- Interfaces to 3rd party video servers for live stream analysis
- Generation of electronic reports and Intel products

See On Intergraph Booth

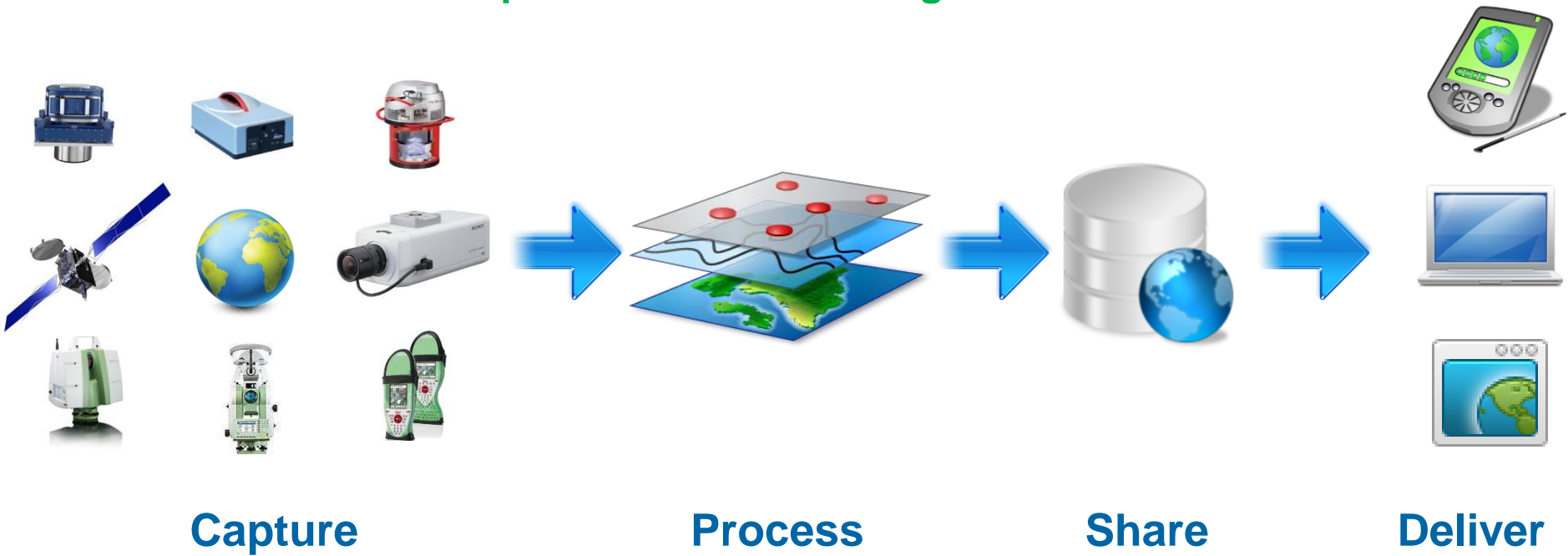


<< Geospatial Information Processing Silos >>





<< Geospatial Information Integration Chain >>



Data & Services Management: Cloud Computing

- What's being offered in the cloud
 - **Infrastructure as a Service (IaaS)** e.g. Amazon Elastic Compute Cloud (EC2)
 - **Platform as a Service (PaaS)** e.g. Windows Azure
 - **Software as a Service (SaaS)** e.g. Bing Maps, Google Docs, Microsoft Office Live, SFDC
- **Public Clouds and Private Clouds**
 - **Public Clouds are not for everyone: Regulatory, Security and Legal issues**
- **Many products run “in the cloud” today, or can take advantage of cloud infrastructure**
- We are doing SaaS projects today: GeoMedia Smart Client in Central Europe, GeoMedia on Amazon in Denmark (Maps and Apps)
- **Many software tools are now “cloud ready”**
- **Not just for Data anymore, entire Enterprise Workflows and Services can be run this way**



Data Filtering & Enhancement

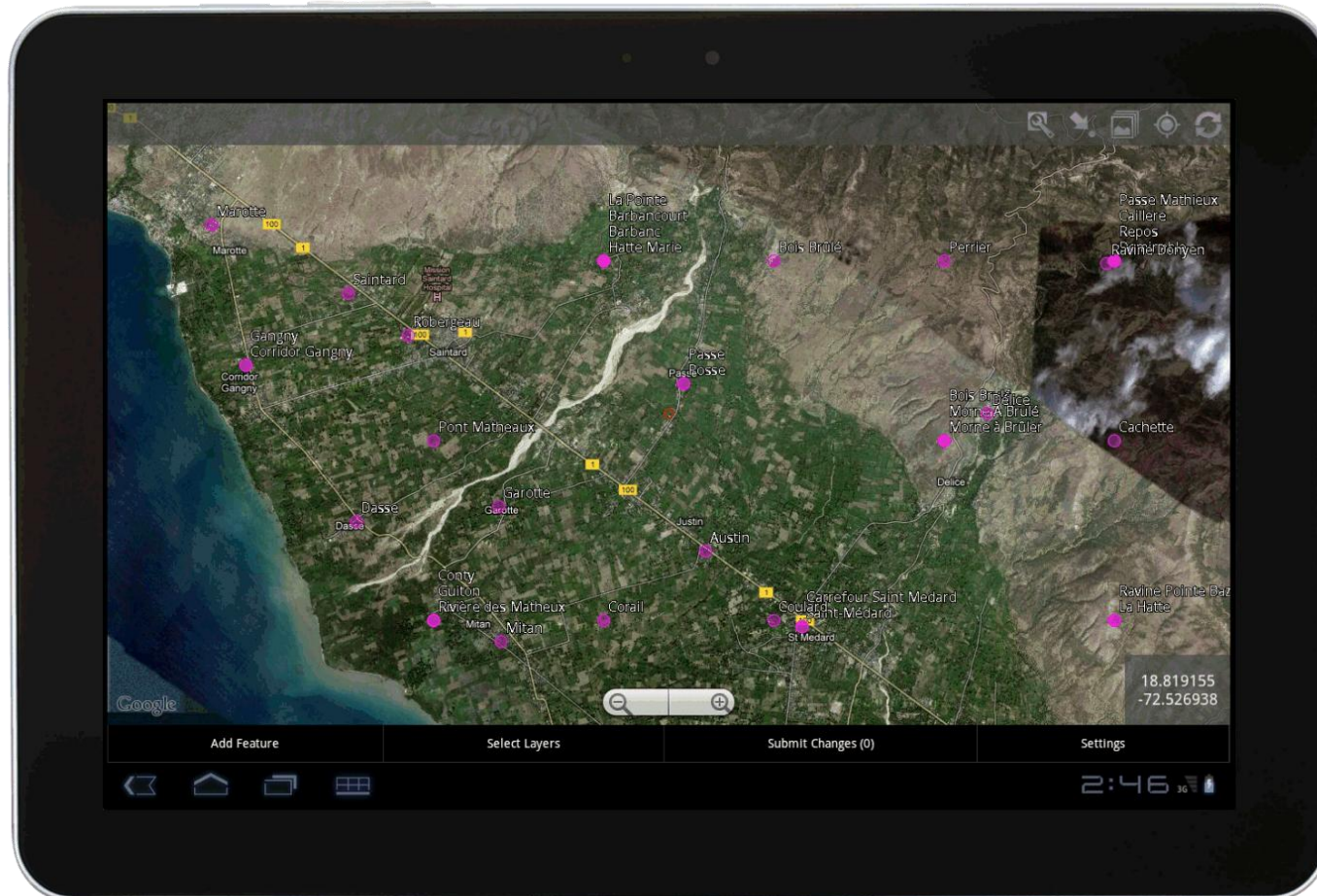
New “Dehazing” technology provides improved image clarity



Mobile Solutions: Enabling The Tip of the Spear



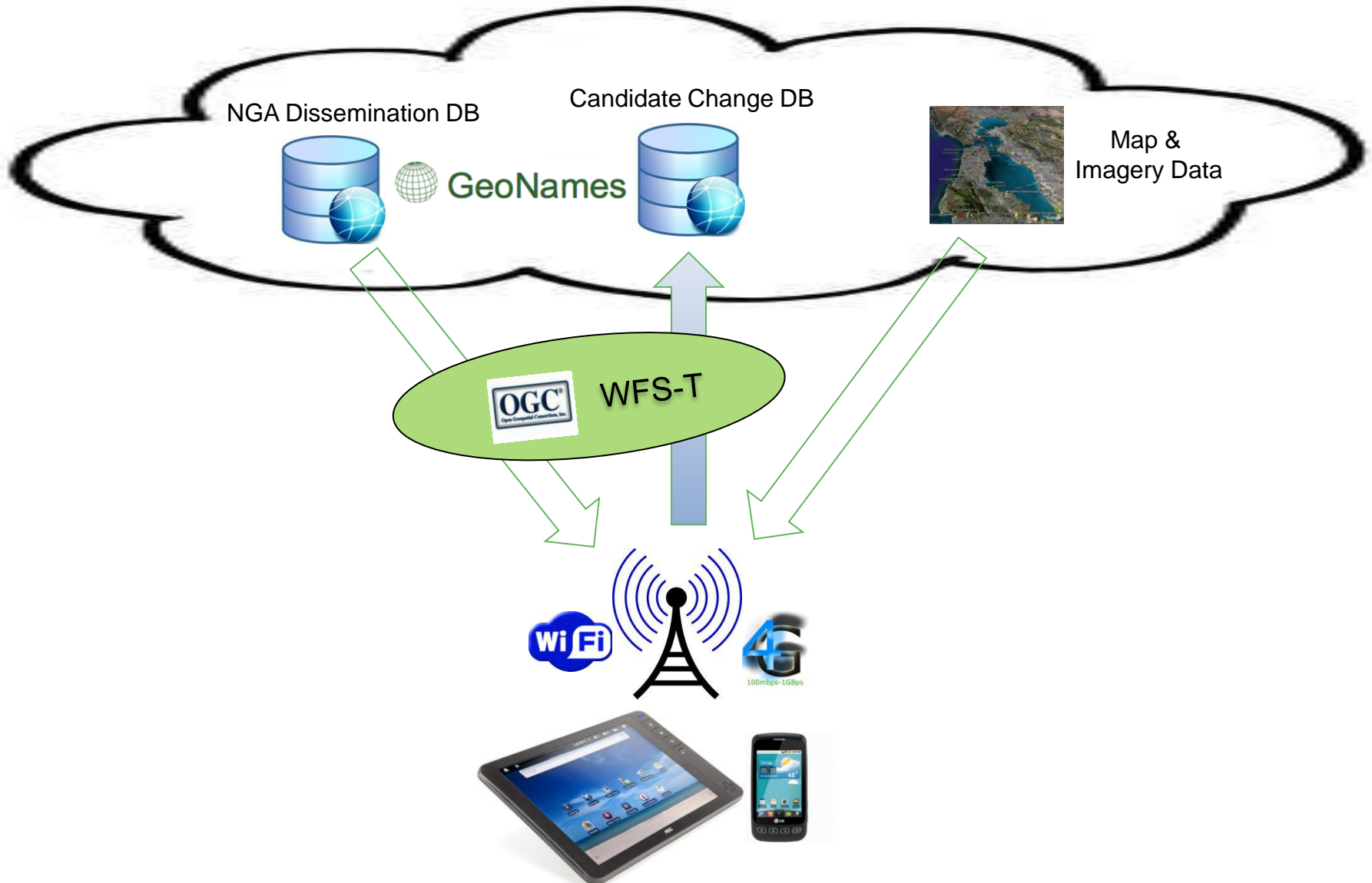
GeoNames - Mobile App for the Warfighter



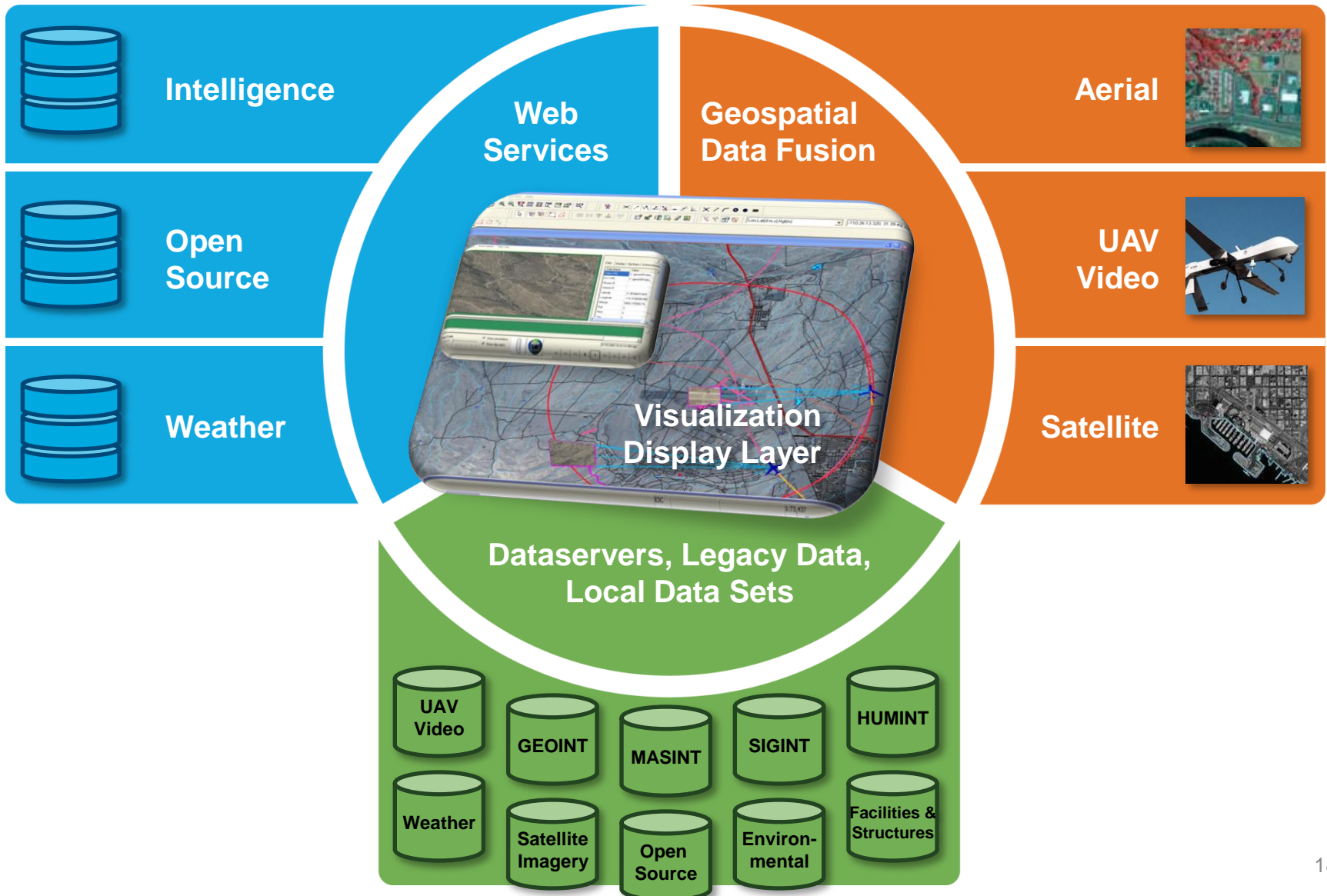
Collect photos as part of data update process



Architecture



Putting It All Together

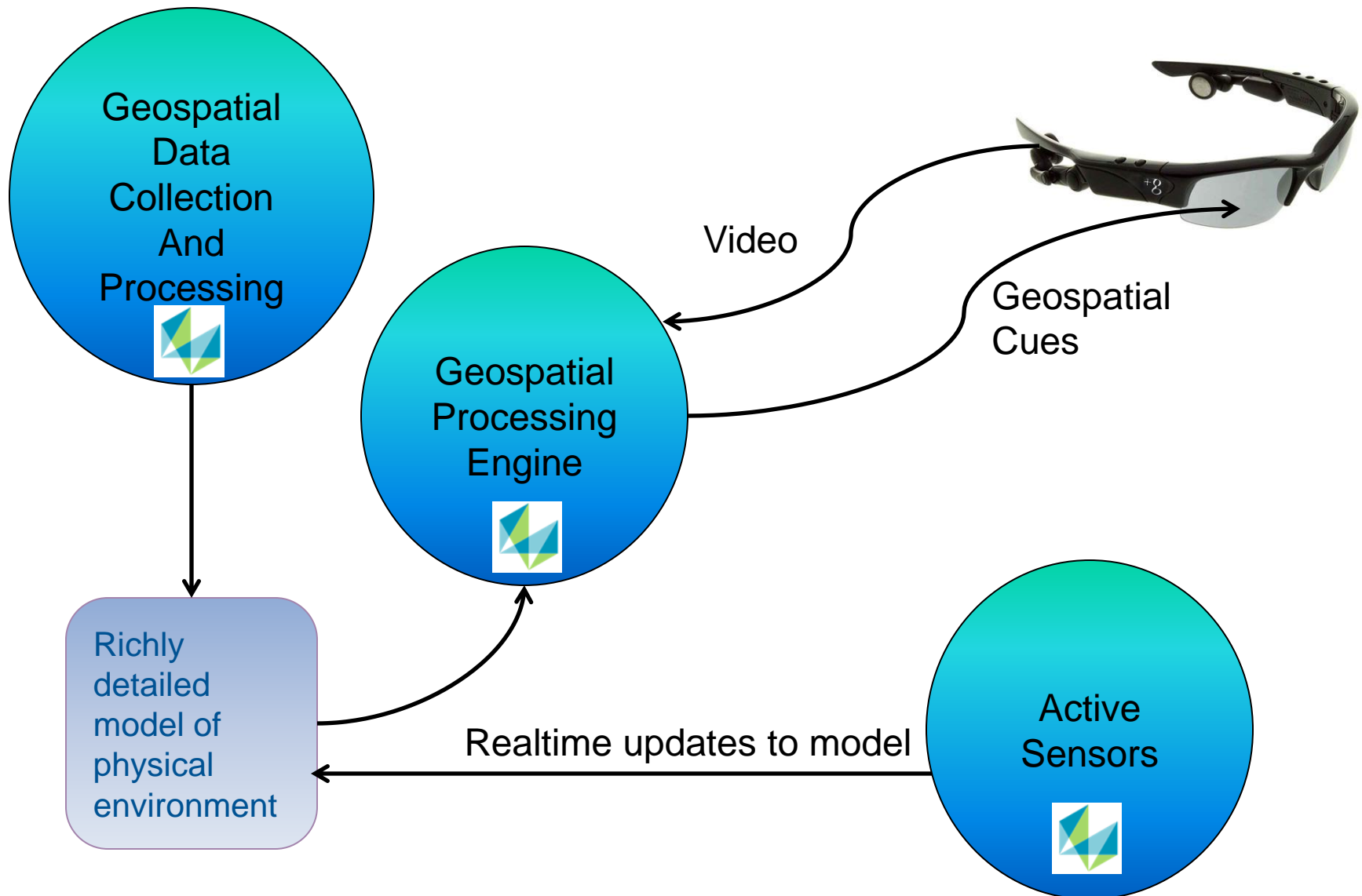


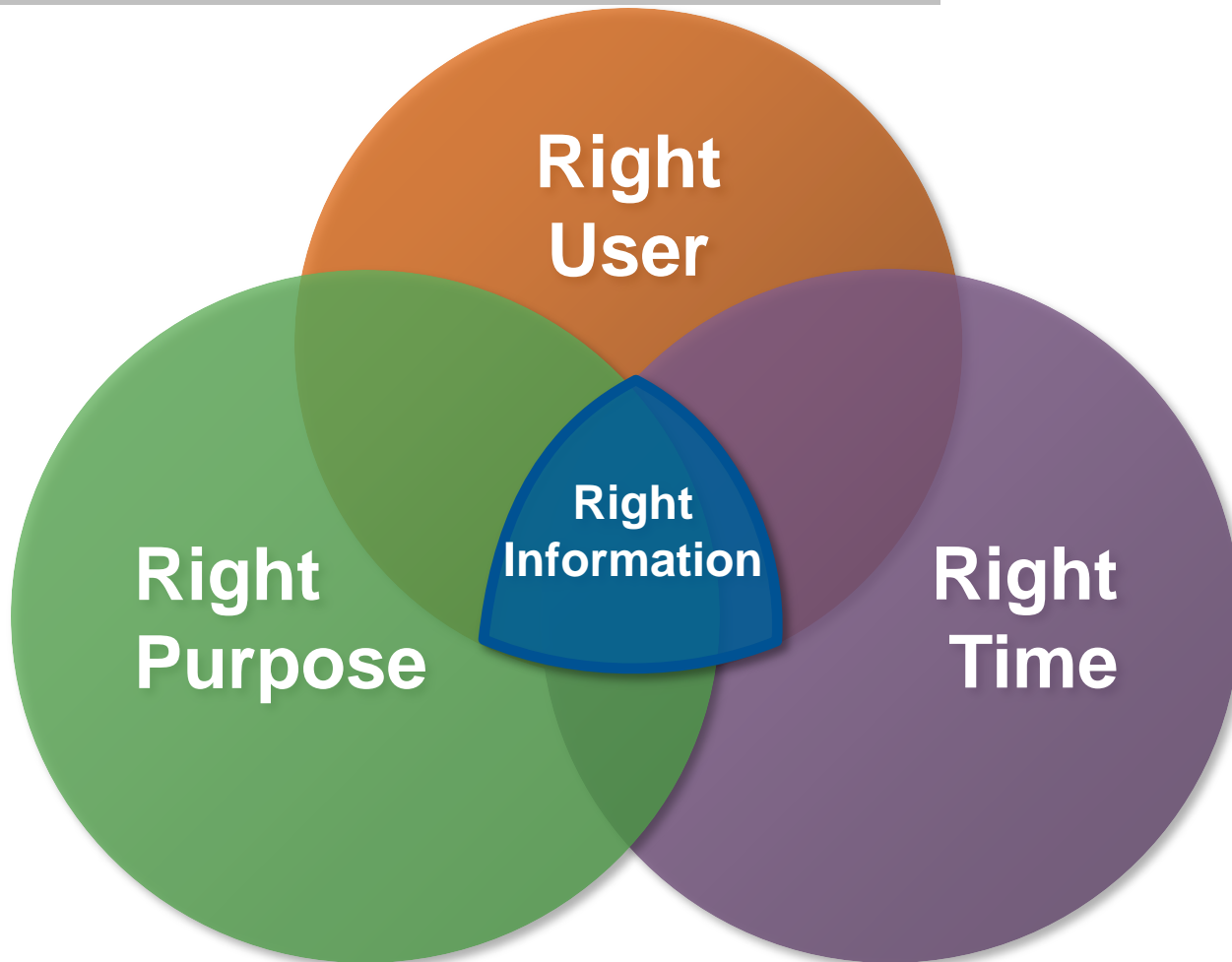
GeoTech - What Next...?



- Conflation of real and digital worlds
- Smart phones, tablets equipped with accelerometers, GPS, cameras, microphones, heads-up displays...
- Deploying geospatial, social and intelligence information directly but inconspicuously to the enduser.
- Seamless integration with the environment, data sources and live feeds.
- **“Smart Glasses”**

Deployment of Geospatial Technology in support of Augmented Reality





“Technology Leverages Success”

Thank You



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