

NSDI Context Map

INDUSTRY TRENDS

- Ubiquity of mobile computing & location-based services
- Movement – spatial. What doesn't have a spatial component any more?
- Moving to the cloud – cost factor, efficiencies
- Government data WILL be re-used by industry – how to push out, ensure value
- Greening industry
- Globalization, human geography, competing services
- Big data/data science pattern analysis
- Open source
- Metrics count everything
- Professional services competition market shift
- Market disruption – new tools
- Surveillance society
- Smart phones
- Broadband
- Crowd sourcing more mainstream; how to harness this capacity if of value
- Why should we do it when Google can do it?

POLITICAL FACTORS

- Inconsistent – non-integrated federal initiative priorities
- Political perspective of GIS has changed
- Do more with less & work smarter
- Privacy issues – copyright, open data sources, tension between privacy & services
- Drones, wireless, hot spots
- Demonstrating utility of geospatial data
- Transparency – openness philosophy
- Data sharing between countries is key
- Government needs to understand what we need to publish authoritatively
- Need to understand who is consuming
- Politics of budget work against enterprise anything
- Campaign mode
- Leverage comms for messaging
- Issue is always the issue: “comms”
- Desire to eliminate redundancy
- Political attention span is diminishing

ECONOMIC CLIMATE

- Globalization
- A lot of power in the small business sector
- Pros & cons of budget cuts
- Shrinking budgets
- Business expansion
- Funding restrictions
- NO new programs?
- U.S. leadership position in geospatial services
- Emphasis on shared services
- Consolidation
- Evolving funding models

INTERNAL TRENDS

- Enterprise services
- Mainstreaming GIS
- Migrating to cloud
- Interagency partnering
- Mobile workforce
- Accessibility
- Data having a geospatial component
- Collect once – use many times
- Tell a story with the data
- Growth potential in geospatial workforce
- Tech savvy “youth” (35-year-olds) enter SES ranks; total shift from fear of technology to having it be part of life
- IT and GIS merge
- Rapid changes in technology & mobile apps not consistent across agencies
- Agencies focused on making data available generically
- Agencies don't know who is using their data; trend for increasing external use; need to survey to justify/improve

TECHNOLOGY FACTORS

- Mobile devices increase demand for ROI
- Commoditization leads to technology transfer
- Real time data demand
- Device mash-ups with spatial data
- Faster access
- Small disruptive tech innovation
- Network is the computer
- Ease of delivery – mobile devices, services, apps

AGENCY NEEDS

- Subject matter experts specific to agency needs
- Connecting in remote locations & emergencies
- Understanding & validating requirements
- Data security & privacy
- Shrinking budgets
- Mature & trusted data
- Dynamic data access
- Meet mandated requirements

CUSTOMER/STAKEHOLDER NEEDS

- Cost – software, network
- Stakeholder needs driven by industry; build so they know they need it
- Spending money wisely
- Social media
- Crowd source
- National data at local scale

UNCERTAINTIES