

**JOINT EUROS DR & EUROGEOGRAPHICS WORKSHOP
ON GEODATA DISCOVERABILITY**

Maximizing discoverability and access in a system-of-systems



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Evolving SDI: Integrated Geospatial Infrastructure

Expanding beyond data to knowledge and understanding



Metadata catalogs



Federated portals



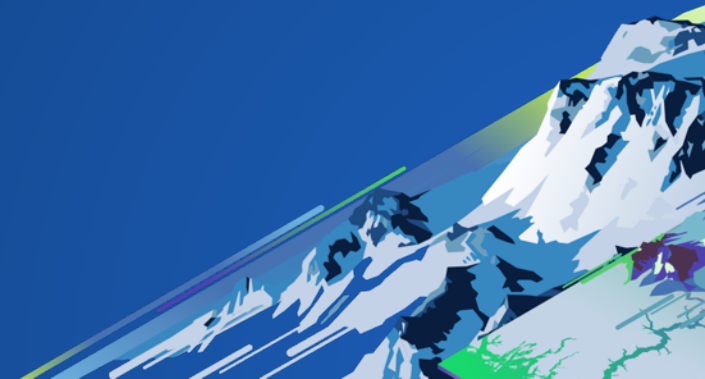
Digital ecosystems

Search & Discovery \longrightarrow Integration & Use

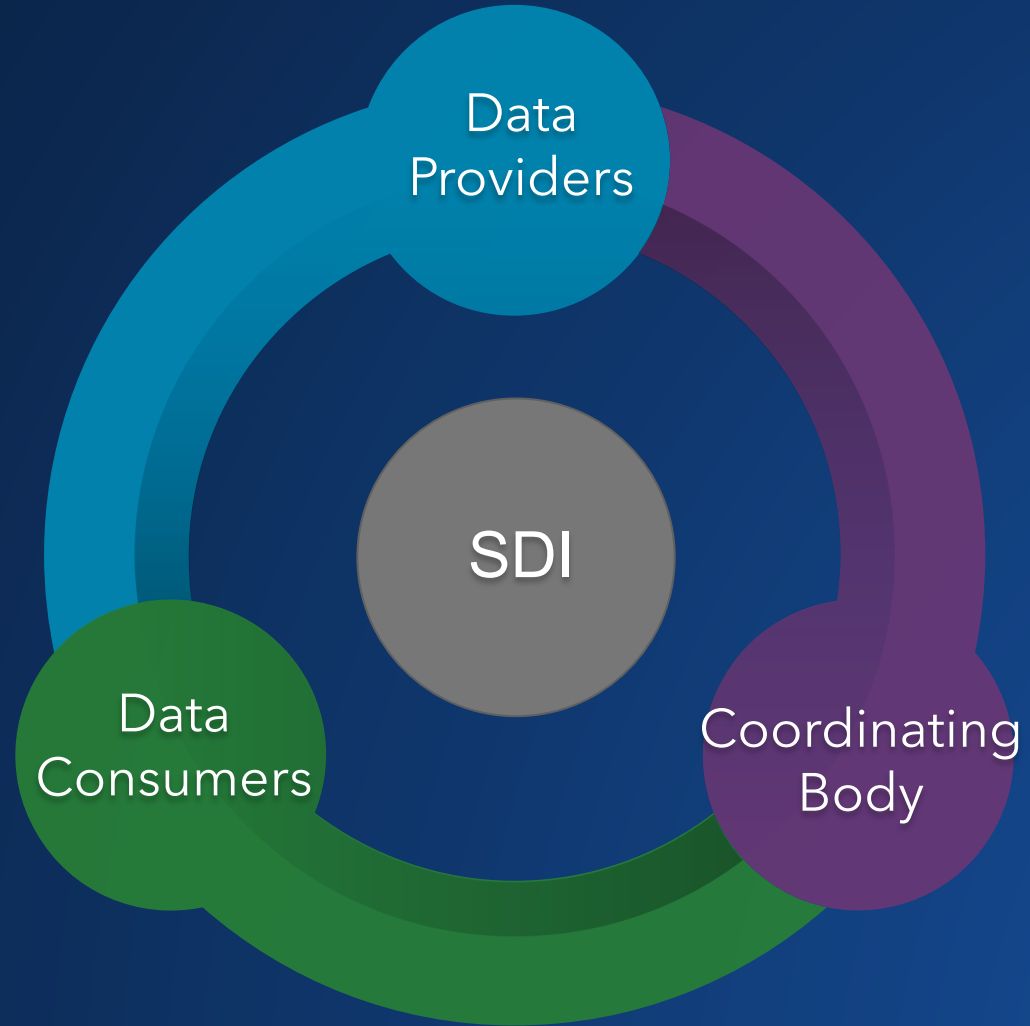
A System of Systems: Integrated Geospatial Infrastructure

Whether we call it SDI, Open Data, Digital Twin, or otherwise...

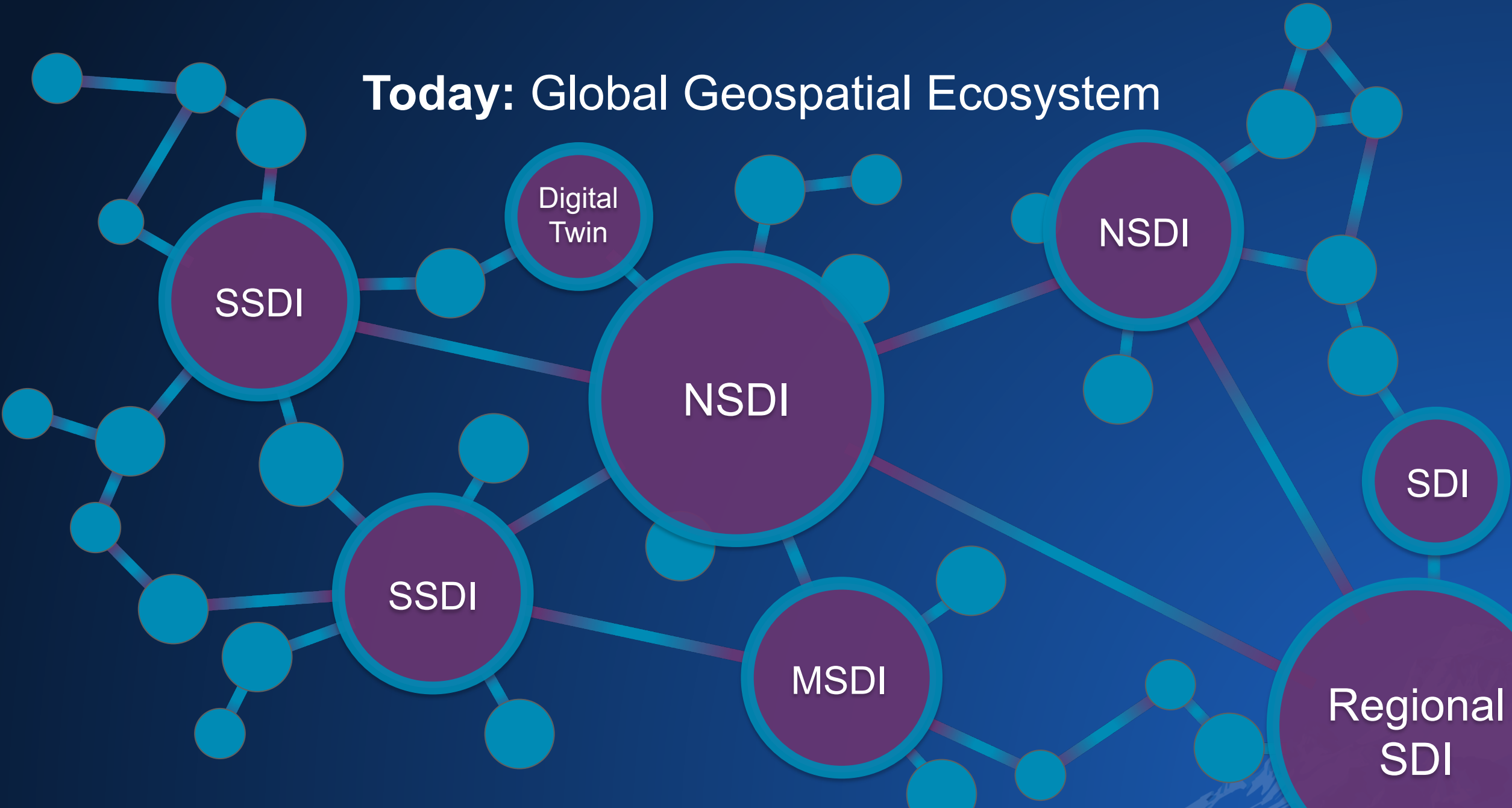
- Key characteristics:
 - Multi-organizational
 - Integrated Fundamental & Operational Data
 - Interoperable (standards)
 - Collaborative
 - Digital Ecosystem
 - Focus on End Users / Putting Data to Use



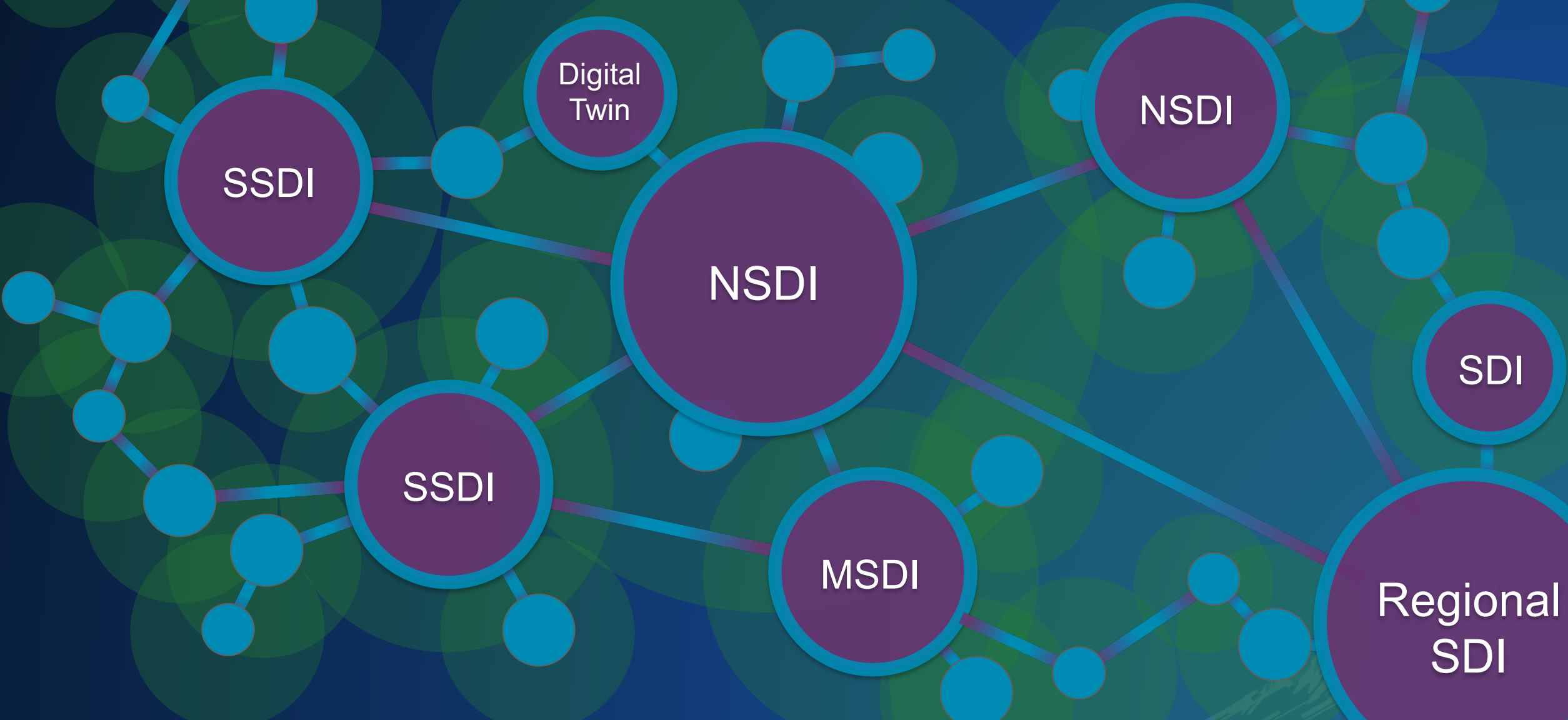
Digital Ecosystem: SDI Community of Practice



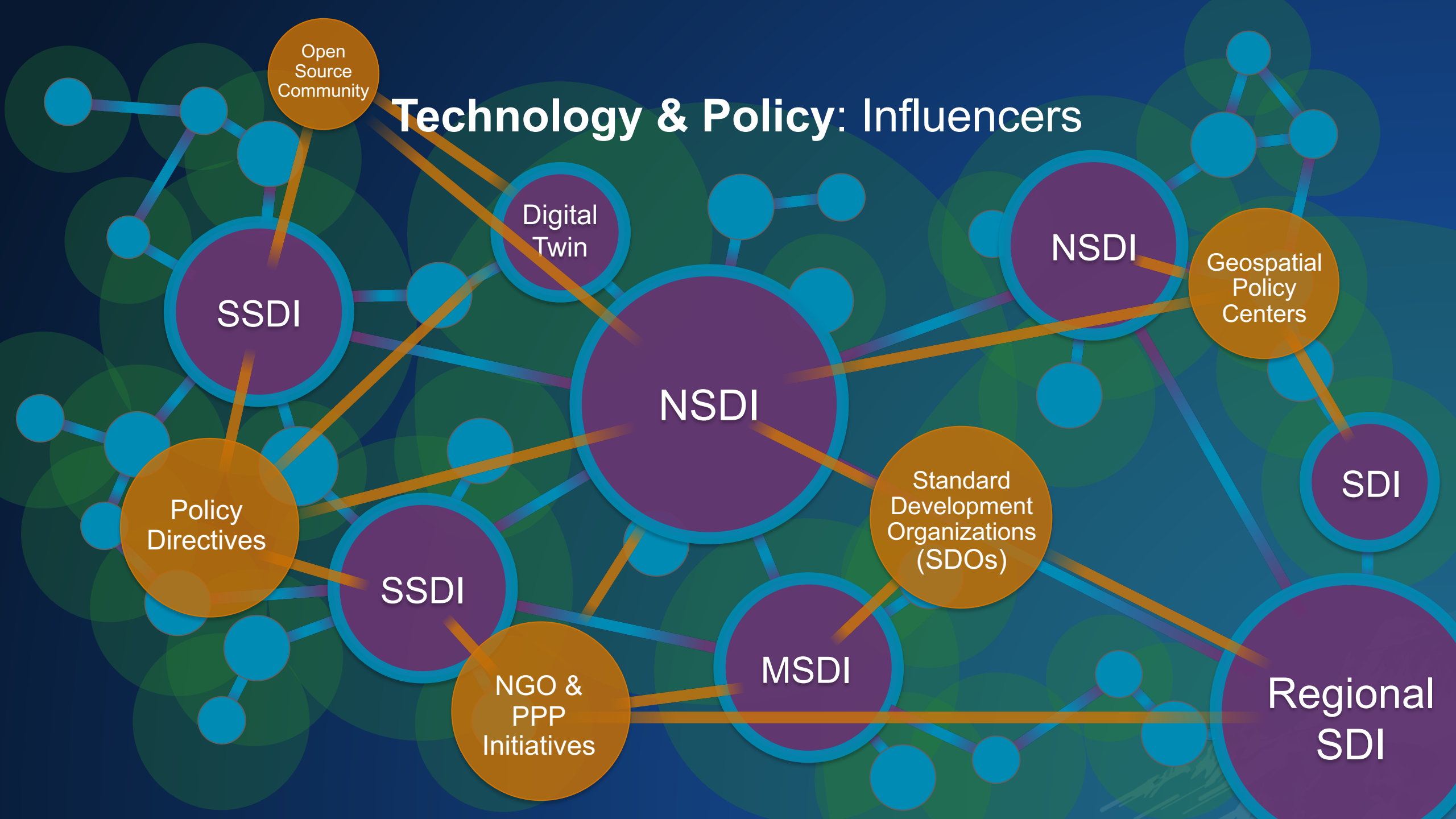
Today: Global Geospatial Ecosystem



Sphere of Influence: Data Consumers



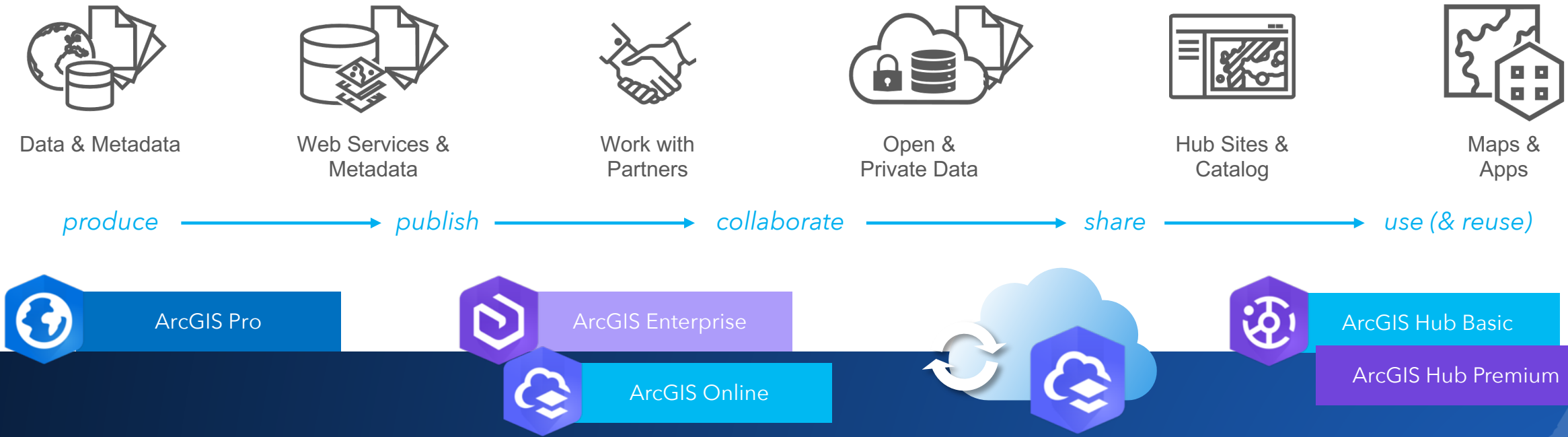
Technology & Policy: Influencers



How do we maximize geodata
discoverability and access
in this system of systems?



Activities span the end-to-end workflows of data providers






What does this enable?

Ease of Sharing and Integration: NebraskaMap and Douglas County

The image displays two web interfaces side-by-side, connected by a large white arrow pointing from the left to the right. The left interface is the NebraskaMap website, featuring a teal header with the Nebraska state logo, the text 'NEBRASKA', and 'Nebraskamap.gov Case Study'. The main content area shows an aerial landscape with the text 'NebraskaMAP' and 'Nebraska Open Data' above a search bar labeled 'Search Data'. Below this is a section titled 'NebraskaMap News and Notes' with the subtext 'New additions to NebraskaMap Applications Page'. The right interface is the 'Omaha - Douglas County GIS' website, with a dark header containing 'DCGIS'. The main content area features a topographic map with the text 'Omaha - Douglas County GIS' and 'Open Data Portal' above a search bar labeled 'Search Open Data'. Below the map is a welcome message: 'Welcome to the Omaha/Douglas County GIS Open Data website. From here you can access various geospatial data layers, maps, and apps for public use. If you have questions or comments, please contact us.' This is followed by a yellow section for 'COVID-19 Resources' with links to 'Douglas County COVID-19 GIS HUB' and 'Douglas County COVID-19 Dashboard'. The bottom of the page has two white buttons labeled 'New & Popular Data' and 'New & Popular Apps'.

Maximizing discoverability and access

Enabled by geospatial infrastructure



How we support USDA to do right and feed everyone:

- 90+ Research Locations
- 6,000 technical and administrative employees
- 2,000 scientists and post docs
- 660 in-house research projects plus hundreds of collaborative research projects




Esri Case Study | BP Global




ARCUSER

Regional Data Platform Strengthens Collaboration and Cooperation




GeoHive Map Viewer Data Themes About Help



Riadas na Mídeana
Government of Ireland

GeoHive

Ireland's National Geospatial Data Hub



Search, view, and access the State's authoritative geospatial information via interactive map applications and data catalogues.

We have updated GeoHive as the National Geospatial Data Hub, meeting the needs of citizens, business & government as outlined in the Public Service Data Strategy. We are continuously developing and updating GeoHive, and welcome your feedback and suggestions for improvement. To learn more about GeoHive please click here.



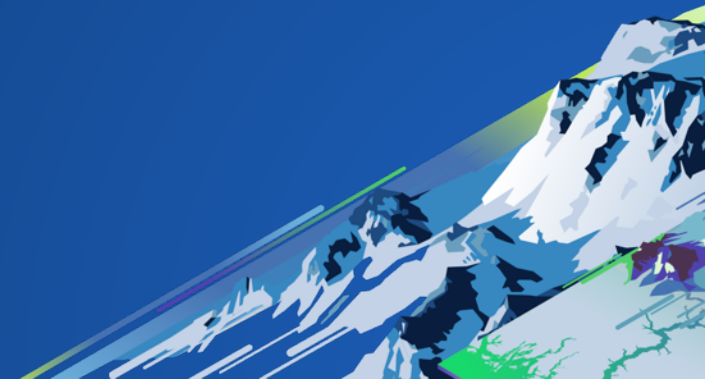
About Data Catalog SDG API Data Stories

Welcome to the Open SDG Data Hub

To fully implement and monitor progress on the Sustainable Development Goals, decision makers everywhere need data and statistics that are accurate, timely, sufficiently disaggregated, relevant, accessible and easy to use. The Open SDG Data Hub promotes the exploration, analysis, and use of authoritative SDG data sources for evidence-based decision-making and advocacy. Its goal is to enable

Let's Recap

- The **main take-aways** to leave with:
 - A global digital ecosystem is emerging
 - **Maximize geodata discoverability and access** takes place across end-to-end workflows
 - Expand access through maps and apps to engage new audiences and enable new things!



Esri's Open Vision & Geospatial Infrastructure Resources

The screenshot shows the top navigation bar with 'esri' logo and links for Products, Solutions, Support & Services, Stories, and About. Below the navigation is a search bar and a 'Sign In' link. The main header reads 'Open Vision' with sub-links for Overview, Initiatives, and Resources. The main content area features a blue background with the text 'Esri's Open Vision' and a sub-headline 'Listen to Esri President Jack Dangermond describe our commitment'. A 'Hear about Esri's open vision' button is present. Below this, a paragraph states: 'ArcGIS is an open, interoperable system that drives efficiency and innovation. Esri is committed to an open and secure design architecture. ArcGIS enables our users to integrate more easily within their specific IT contexts to leverage the power of location and data from virtually any source. Whether you're a large enterprise systems integrator, a developer looking to build your own apps, or a user who wants to share information and collaborate with others, we support multiple pathways to get your work done. Esri's open vision supports users around the globe in their work with geospatial data, connecting people with the data and information they need to complete their mission.' A QR code is overlaid on the right side of the page. At the bottom, there is a section titled 'More on the open system' with two featured articles: 'A conversation with Jack and Satish' and 'Integrated tool for prioritizing capital projects'.

<https://www.esri.com/en-us/arcgis/open-vision>

The screenshot shows the top navigation bar with 'esri' logo and links for Products, Solutions, Support & Services, Stories, and About. Below the navigation is a search bar and a 'Sign In' link. The main header reads 'Integrated Geospatial Infrastructure' with sub-links for Overview, Pillars, and Get Started. The main content area features a dark background with the text 'Integrated Geospatial Infrastructure' and a sub-headline 'Address shared challenges'. A sub-headline below reads 'Interconnect organizations across borders, jurisdictions, and sectors'. A QR code is overlaid on the right side of the page. Below this, there is a section titled 'Address shared challenges in integrated geospatial infrastructure.' with a sub-headline 'People and economies, disasters, and infrastructure cross borders. Our location data and technology must cross borders, too.' and a paragraph: 'How we think of traditional spatial data infrastructure (SDI) is evolving. From local and regional data cooperatives to the National Spatial Data Infrastructure (NSDI), the internet and cloud computing are transforming the way organizations manage data and collaborate in a system of systems. Integrated geospatial infrastructure connects organizations across borders, jurisdictions, and sectors to address shared challenges—efficiently and effectively. Infrastructure for our future. New patterns for modern SDI and federated Web GIS are shifting paradigms from hierarchical to interconnected networks of collaborating partners.' A photograph of a man in a suit walking in a modern building is also visible.

<https://www.esri.com/en-us/arcgis/integrated-geospatial-infrastructure>



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**THE
SCIENCE
OF
WHERE**[®]