

Using a Location Platform for Integrated Intelligence

Ben Conklin

Craig Cleveland

Global Challenges

A Dynamic World Creates Complex Intelligence Challenges

Pandemics

Famine and Drought

Natural Disasters

Displaced Persons

Civil Unrest

Political Crisis

Organized Crime

Terrorism

Adversaries

... And Impacts National Security

Technology Advances

A Whole New Pattern Is Emerging

Collaborative
Real-Time
Visualization
3D
Analytics
Apps
Applications

GMTI
Sensors
Crowdsourcing
Field Reports
Real-Time
GPS
Remote Sensing
UAVs
WAMI
Social Media
Content

Virtualization
Technology
Faster Computing
Distributed Processing
Smart Devices
Consumerization
IoT
Cloud



Location, Mapping and GIS Are Becoming Essential

A Fundamental Language
for Understanding and
Managing Our World

Providing Content
and Context

About Everything



GIS Provides the Framework and Process

For Enabling a Smarter World



Data Integration
and Management

Visualization
and Mapping

Analysis
and Modeling

Planning and
Design

Decision-
Making

Action

Science

Understanding

Collaborating

*Transforming How We Think and Act . . .
. . . Creating a More Sustainable Future*

GIS Connects Everyone

Creating a System of Engagement

Supporting Real-Time
Awareness and
Collaboration

Communities

Organizations

People

*GIS Provides a
Common Language
for Communication*



GIS Embeds Advanced Analytics and Visualization

Providing a System of Insight



GIS Is Becoming Distributed

A New Architecture Is Emerging

Enabling
Collaboration

Systems of Systems



*Enabled by Portals ...
... Abstracting Distributed Data and Analytics*

GIS Integrates Everything

Connecting People, Processes, Things and Data About Them

Improving Efficiency,
Collaboration and
Communication

*System of
Engagement*

Helping Organizations
Understand ...

*System of
Record*

*System of
Insight*

Supports Multiple
Types of Systems

... And Be Aware, Alert,
and Responsive



An Enterprise GIS

Connecting People, Processes and Data



Evolving to an Enterprise GIS

Four Recommended Focus Areas



Integrate Imagery and
Foundation into the Analytic
Workflow



Expose Analytic Content
to the Enterprise

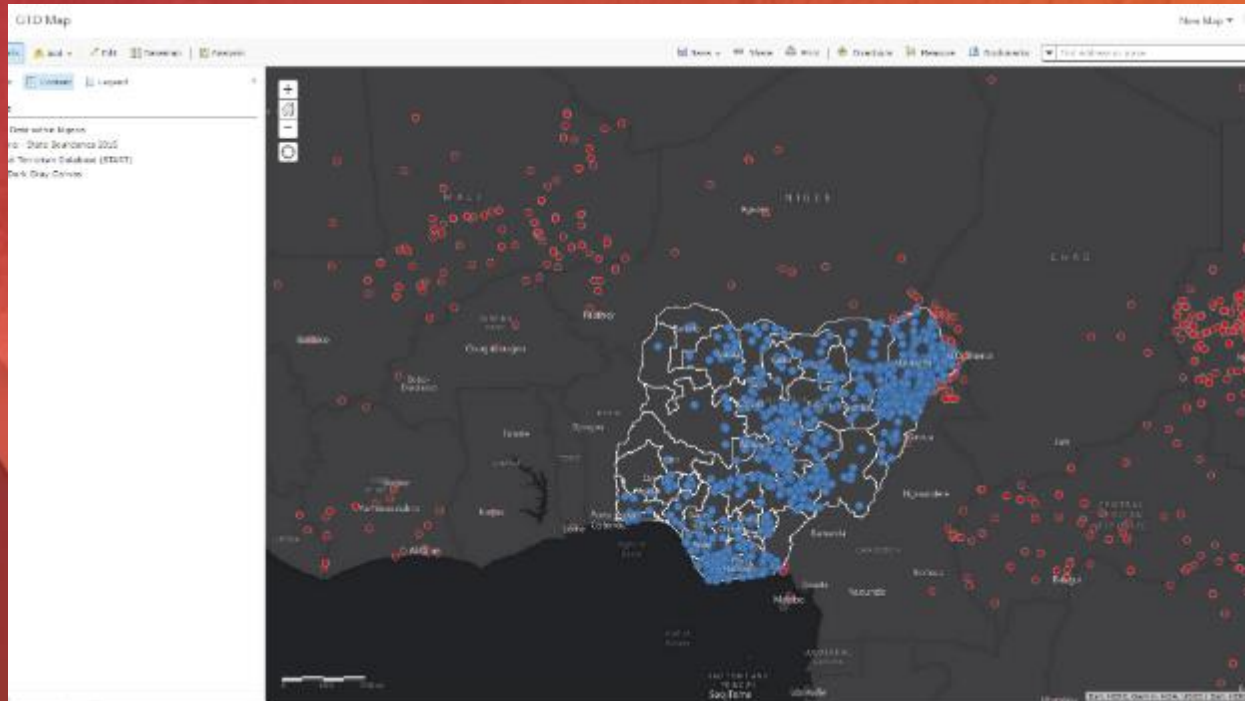


Derive Deeper Insights



Deliver Mission-Focused Apps

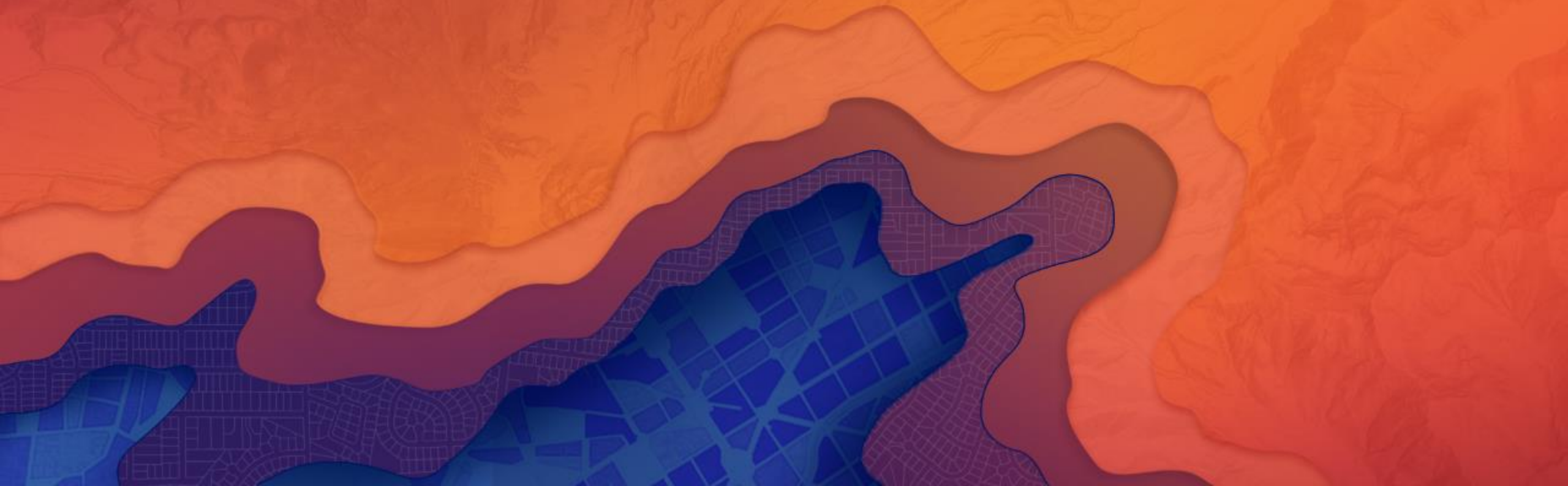
...Continuous Evolution – Aligned to Technology Advancement



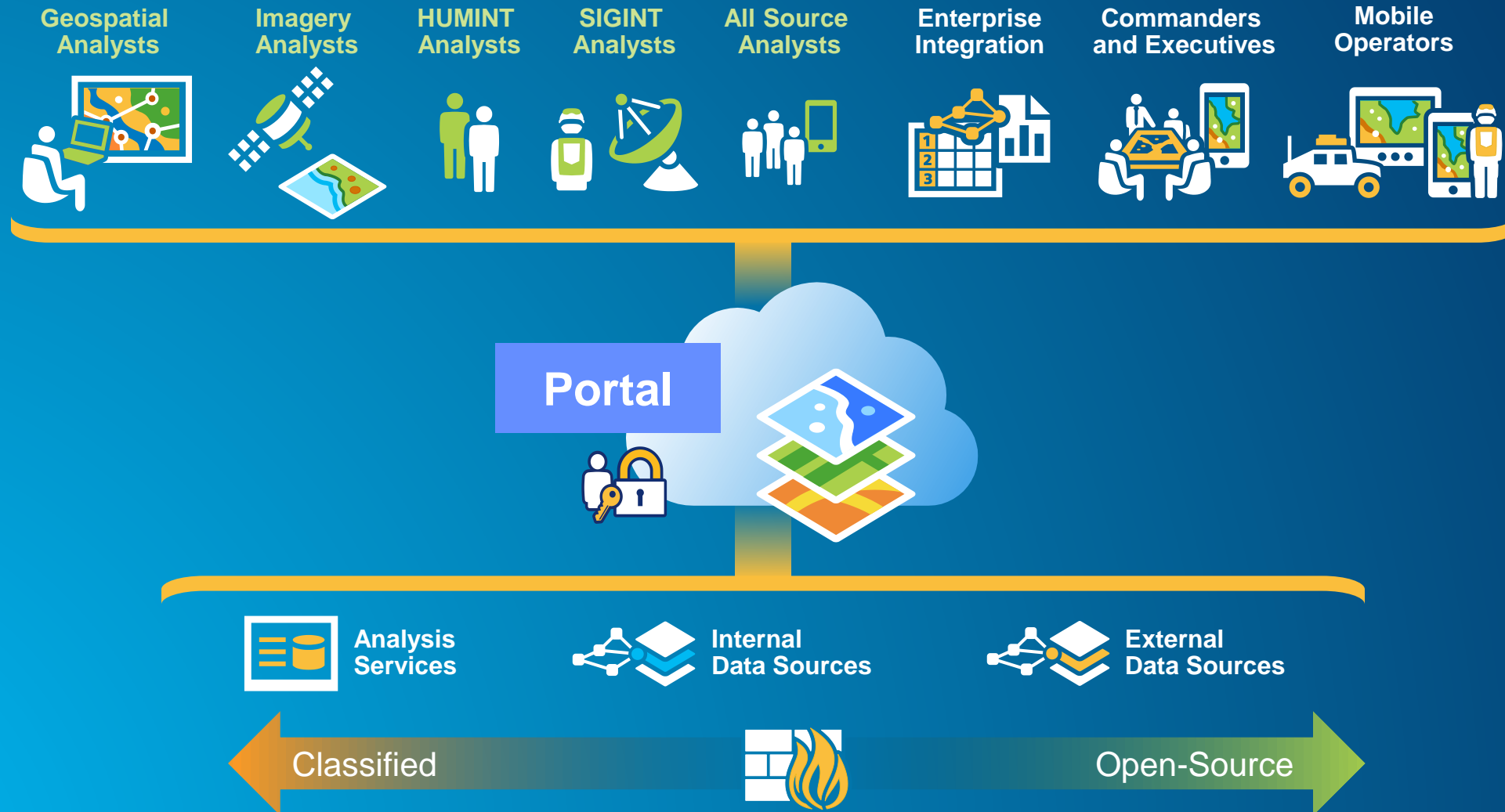
WebGIS - Portal

Craig Cleveland

System of Record

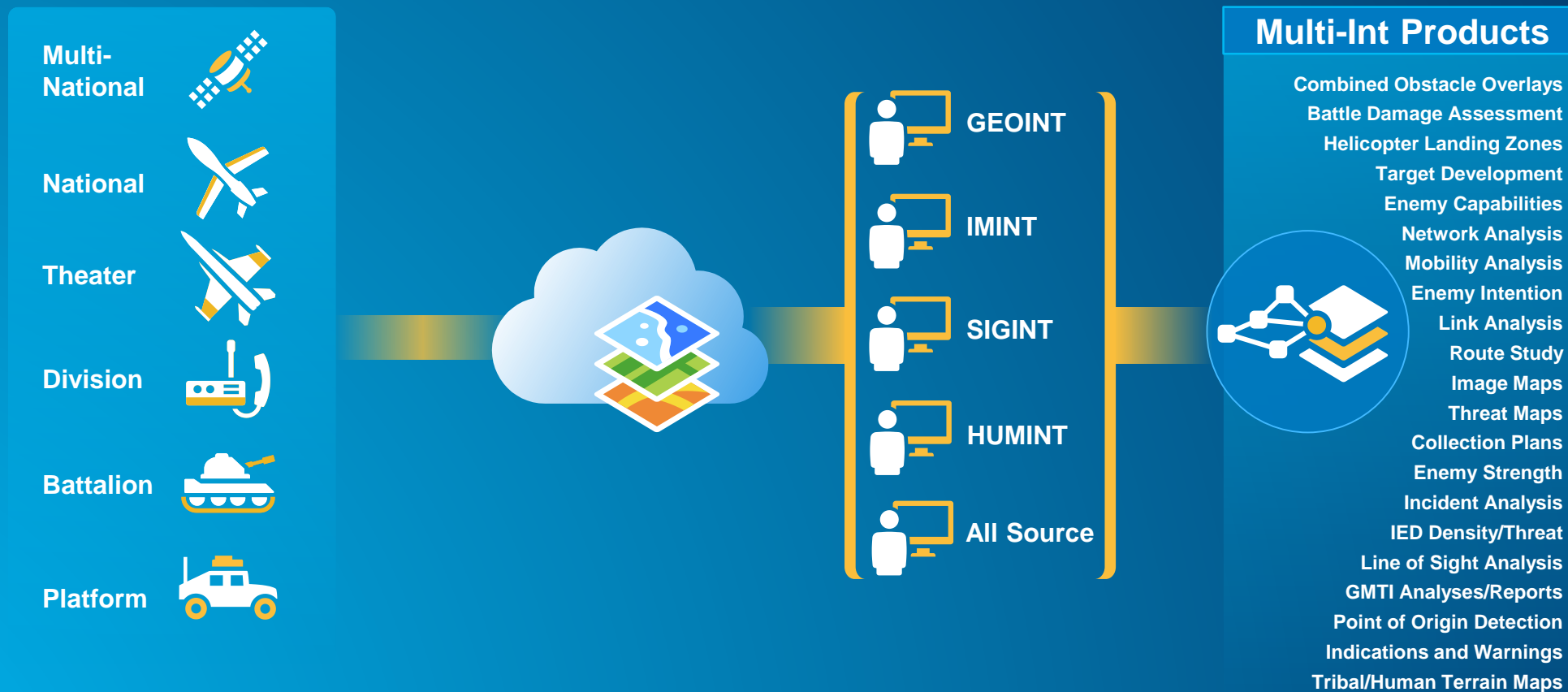


GIS Integrates Intelligence and Operations



Intelligence Platform

ArcGIS Can Provide the Intelligence Platform

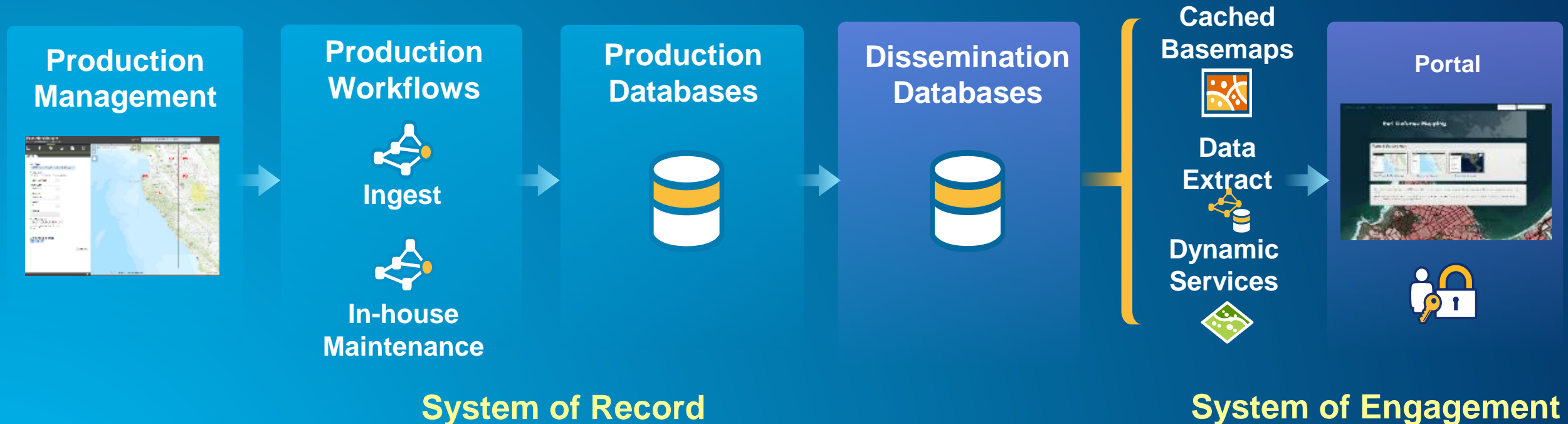


From Raw Data to Finished Intelligence

Foundation Geospatial Management

COTS-Based Topographic Production

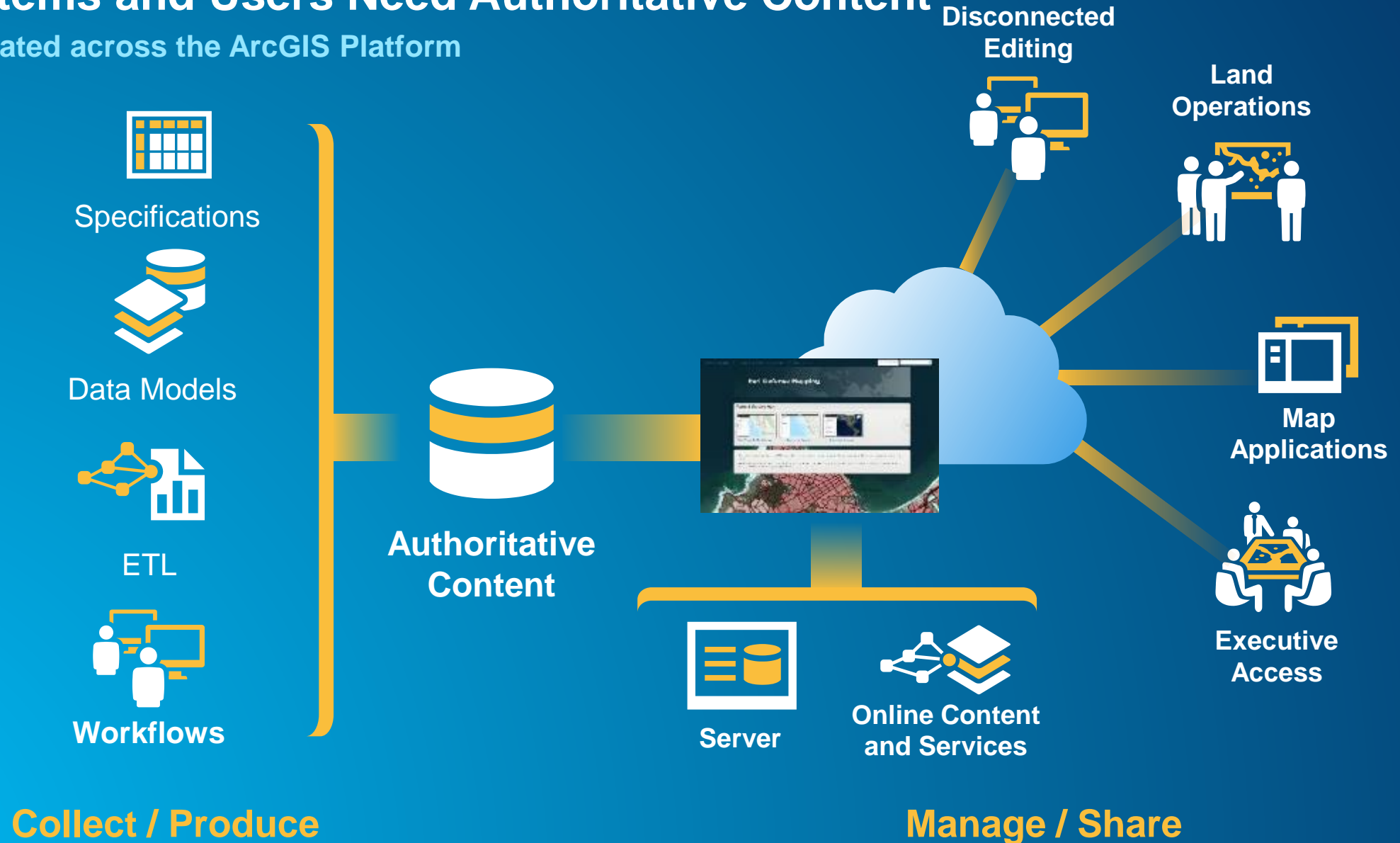
Aero, Hydro, Topo, Names and Boundaries



From Product Centric to Data Centric Production

Systems and Users Need Authoritative Content

Integrated across the ArcGIS Platform



Foundation GEOINT

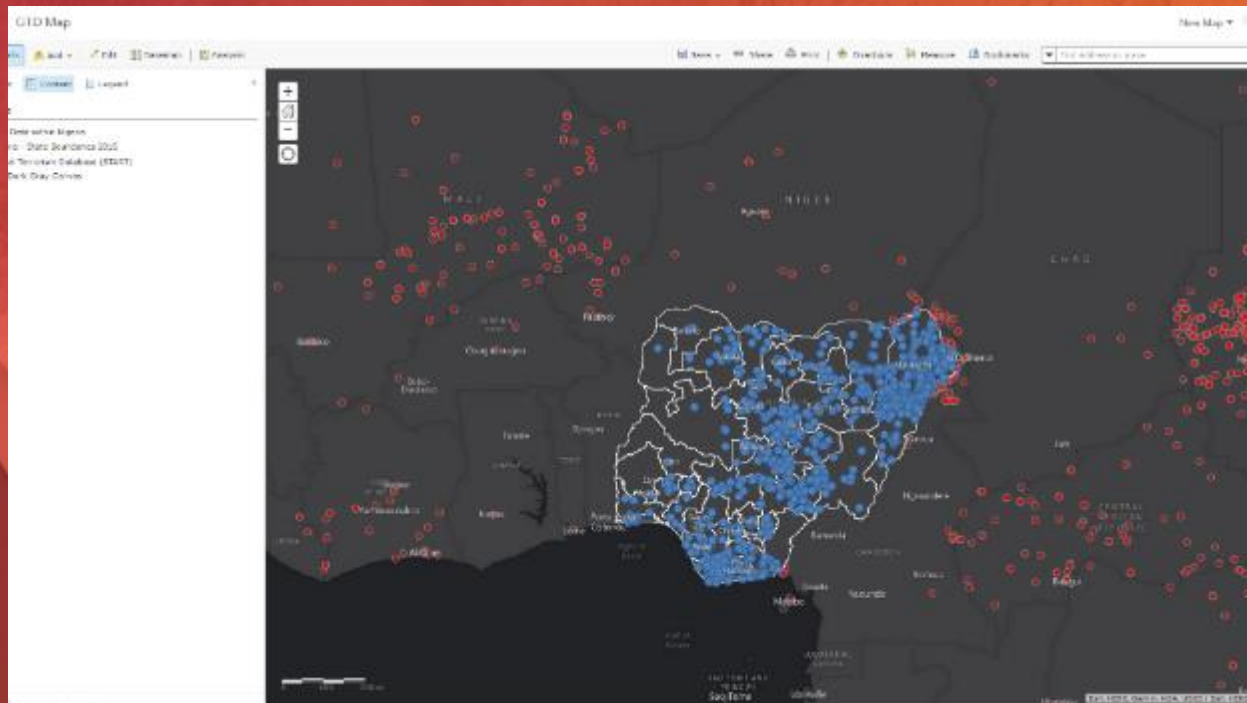
Topography | Aeronautical | Maritime | Human Geography
Boundaries | Geographic Names | Imagery | Elevation

Timely and Accurate

Ready-to-Use

Authoritative

Delivered at the point of warfighter and analyst needs to ensure timely decision making and operational success



Living Atlas

Craig Cleveland

Foundation Modernization Resources



Modernizing National Government Webinar Series

Creating the Maps that Run National Government


Responding to issues of national priority requires accurate and secure information products that are readily available to aid in decision-making. National governments have a mandate to provide this information to their citizens but are challenged with the pace of change and ever-evolving technologies. Modern systems and processes are required to transform large quantities of data into products that can be used to address a nation's most pressing issues. By implementing the ArcGIS platform, national governments can more effectively meet the needs of citizens with secure, authoritative information while also reducing operational costs.

In this webinar series, you will learn how the ArcGIS platform can enable your organization to

- Do more with less by using ArcGIS to streamline workflows.
- Produce authoritative information products more efficiently.

Sign up for email updates on the series.

<http://go.esri.com/modernizinggovernment/webinars>



Mapping | Statistics | Imagery

- Main
- Topographic
- Maritime
- Aviation
- Imagery and 3D
- Spatial Data Infrastructure
- Statistics

Expect more from your mapping investment.

Esri's platform allows you to collect data once and reuse it many times. Manage the integrity of your data efficiently and use it on demand. Produce the high-quality, authoritative cartographic and topographic maps, data, and services your organization needs to succeed. Develop strategic mapping products for your customers to help them solve local and national problems.

"It is only when people can appreciate the value of integrated geospatial information that efforts to increase data sharing, geospatial adoption, or application development can take root."

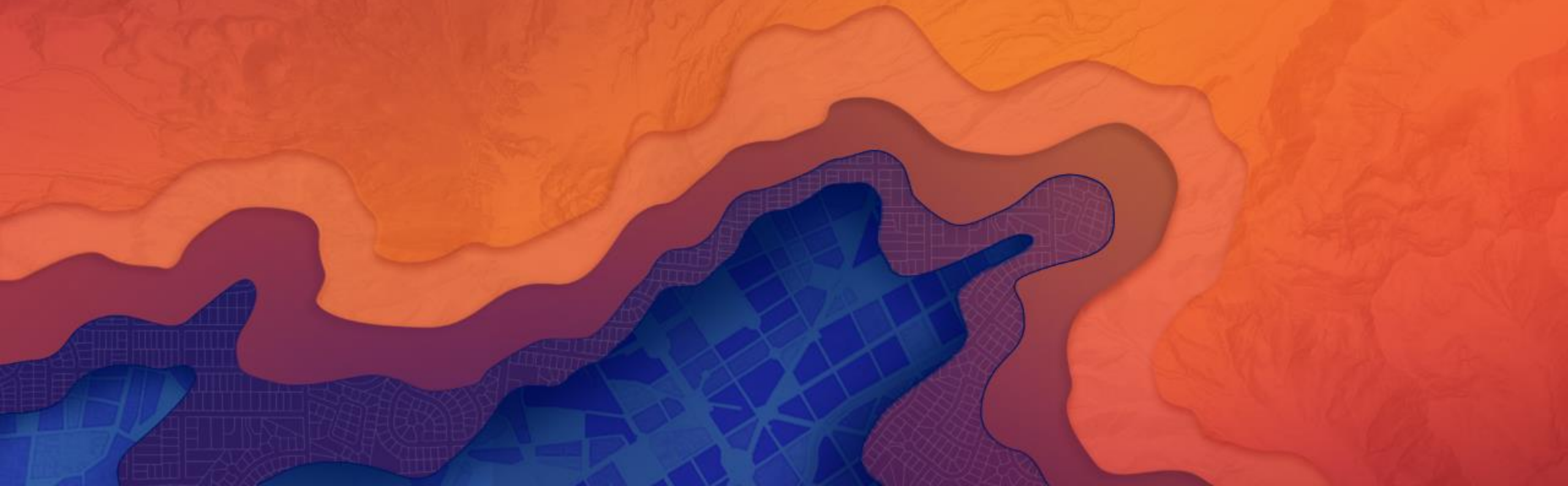
Vincent Hoang, Chief Executive, Singapore Land Authority

Esri User Conference

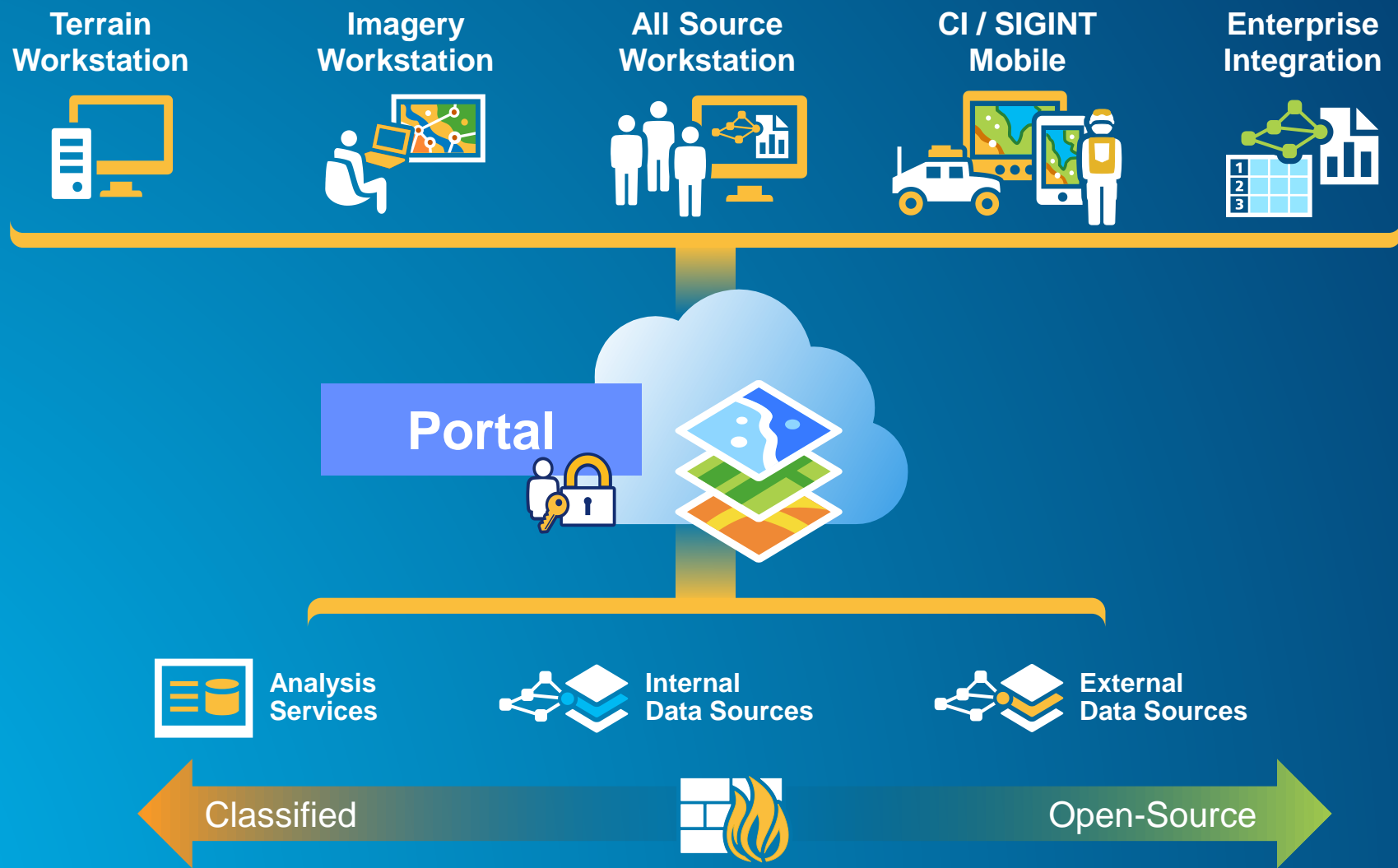
Join us in San Diego, California, to collaborate, learn, and inspire at the Esri User Conference.

<http://www.esri.com/industries/mapping-statistics-imagery>

System of Engagement

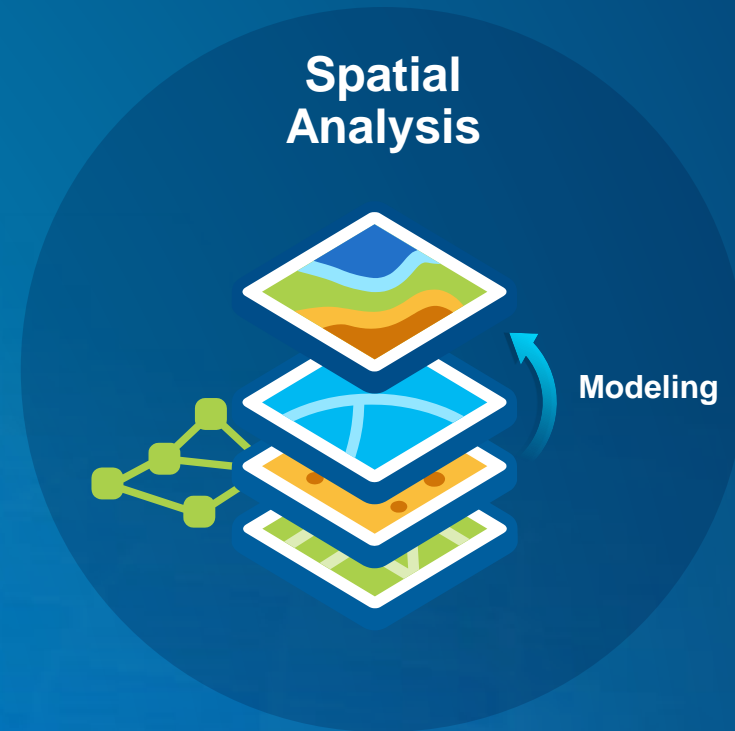
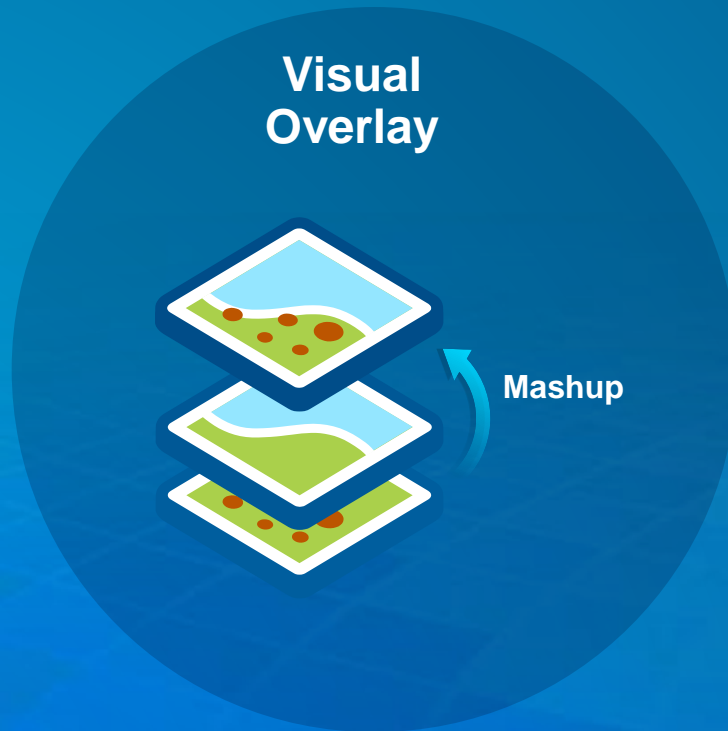


GIS is a Multi-Int Platform



GIS Dynamically Integrates Information

From Collector to Enterprise and Analysis



Helping to Discover and Understand Relationships

GIS Connects Everyone

Enable your organization

Make their own maps

Use Authoritative data and tools

Access useful apps

Communities

Organizations

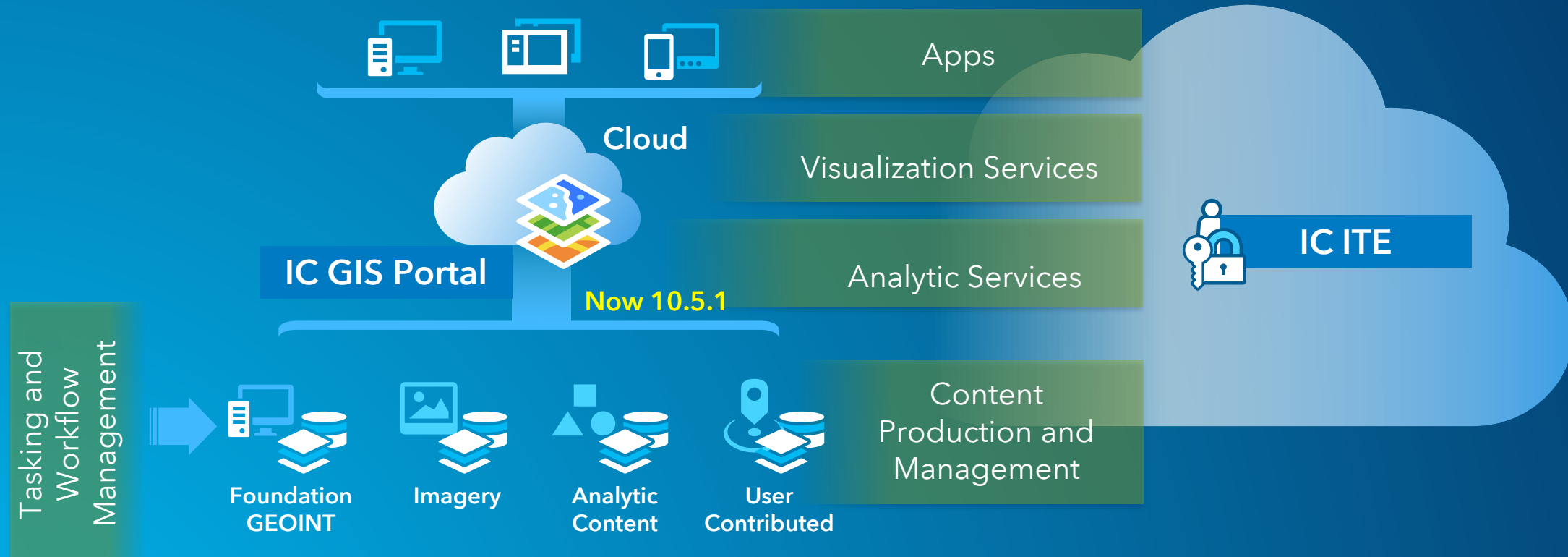
People

*GIS Provides a
Common Language
for Communication*



A Platform for the GEOINT Community

60,000+ Users across the Intelligence Community



"One of our really great approaches is the use of ArcGIS as a geospatial framework...the IC GIS Portal is a platform for analytics, collaboration, and data sharing that is used throughout the Intelligence Community." -Sue Gordon, Deputy Director, NGA

Mission Focused Applications

Planning & Collection

Geoform

Collector

GeoEvent

Workforce

Crowd
Source

Survey123

Exploitation & Analysis

Insights

Pro

Geo Planner

Operations Dashboard

Maps for Office

Geo-Analytics

Quick Report

Summary Viewer

Swipe & Spyglass

Time Aware

Production & Dissemination

Open Data

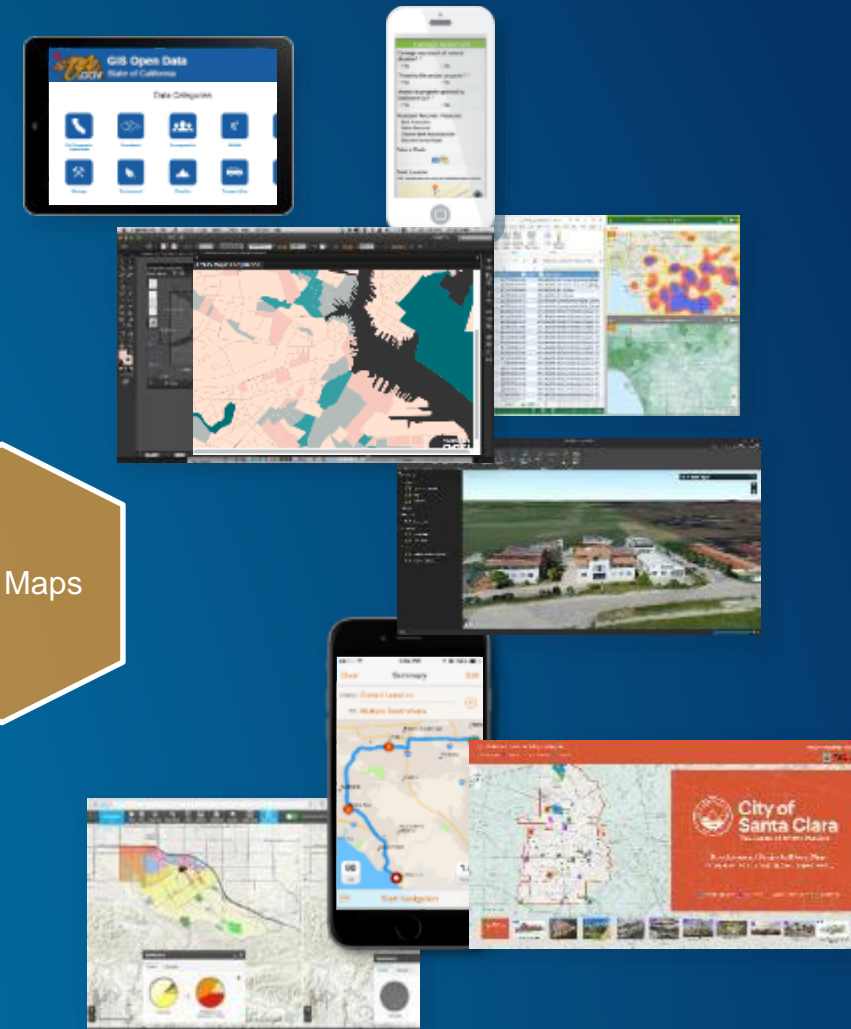
Story Maps

Quick Report

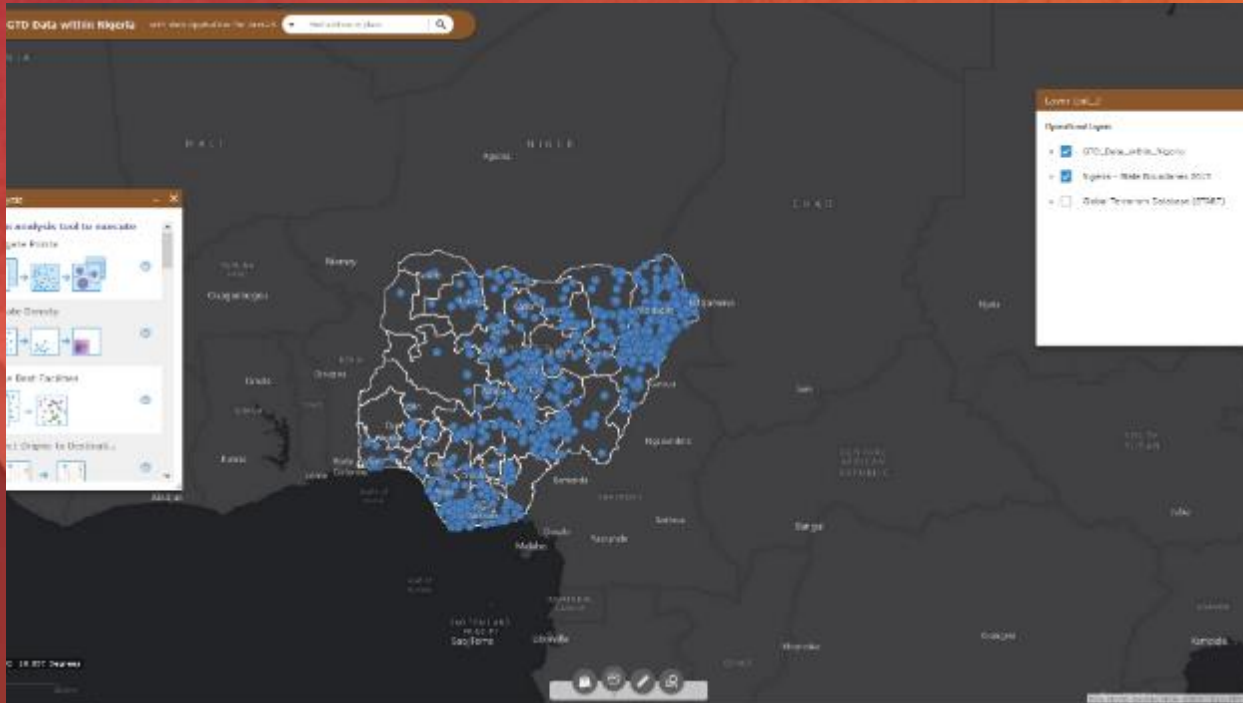
Summary Viewer

Swipe & Spyglass

Time Aware



Focused, Powerful and Ready-to-Use



Mission Focused Apps

Craig Cleveland

Mission-Focused Applications

Configured Apps for Analytical Workflows

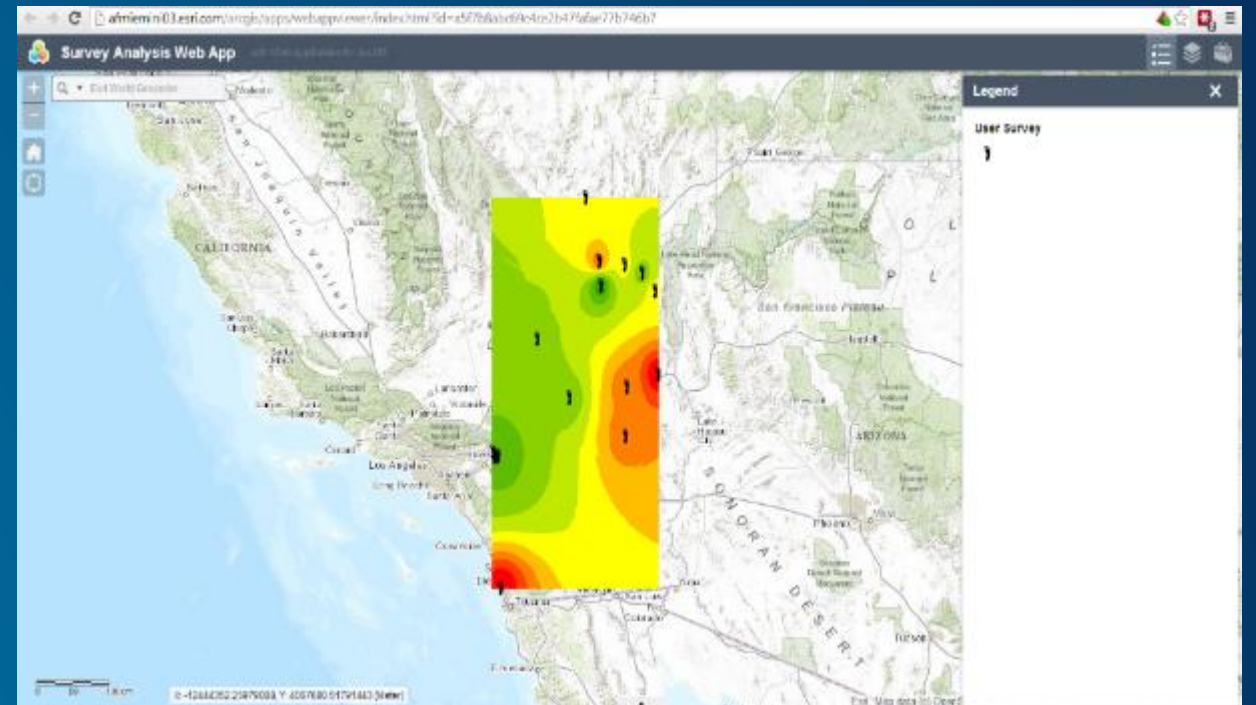
Browser based Application

Easily Configurable

Custom Analytical Tools

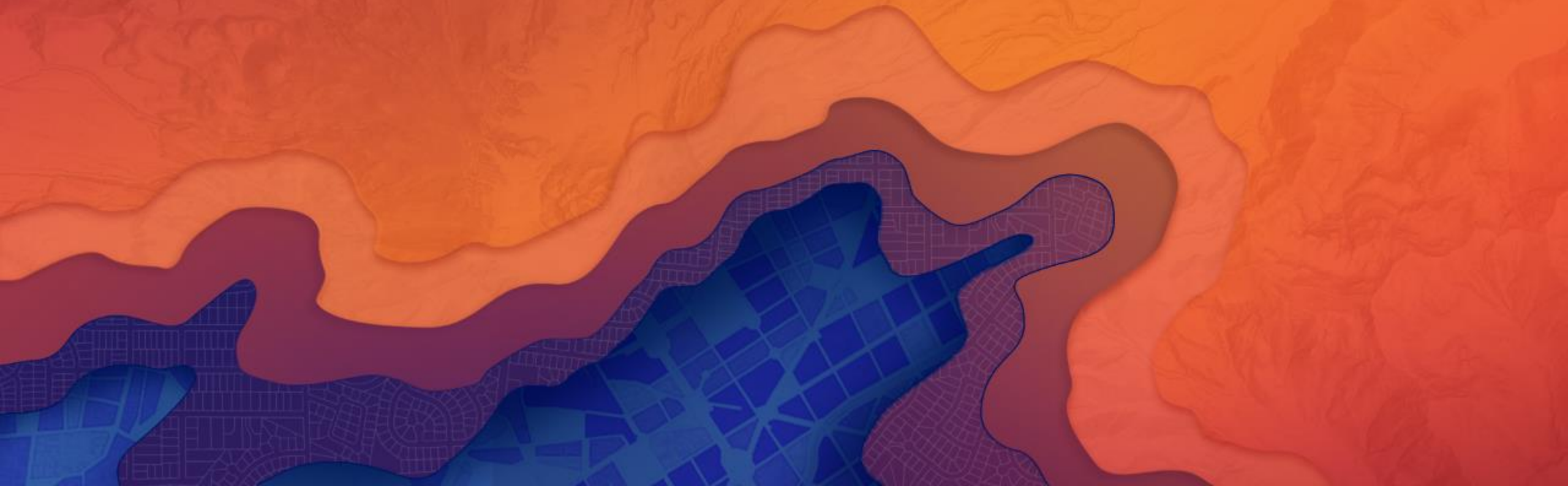
User-Defined Workflow

Powered by Services



Jumpstart the Analytical Workflow

System of Insights



GIS Embeds Advanced Analytics and Visualization

Providing a System of Insight

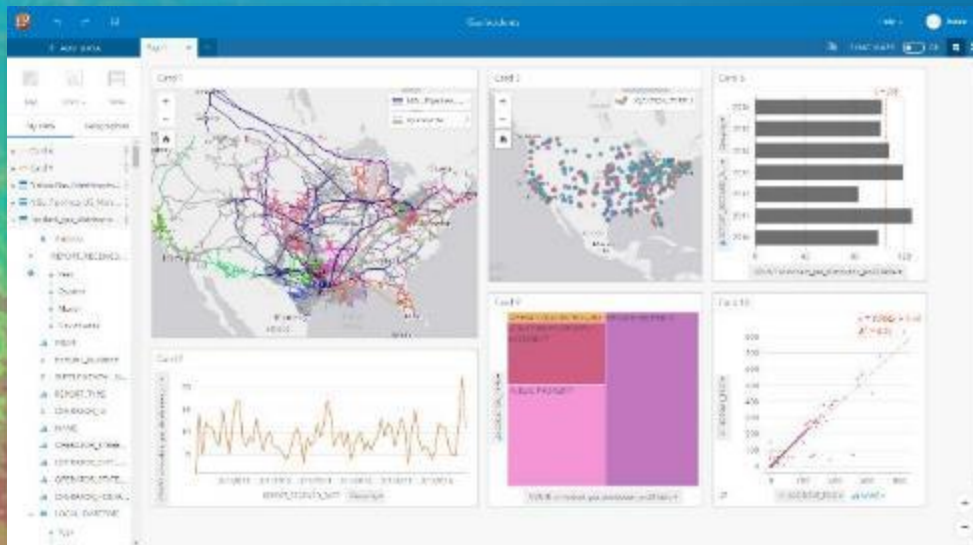


Insights

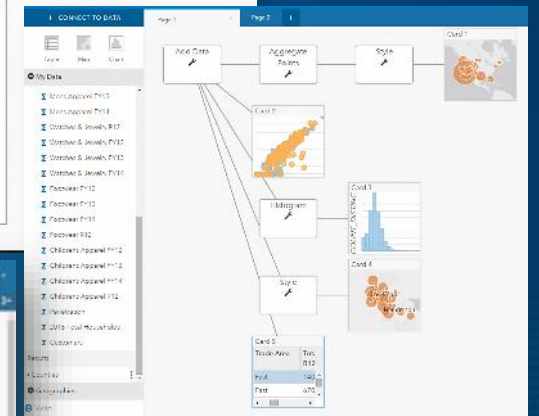
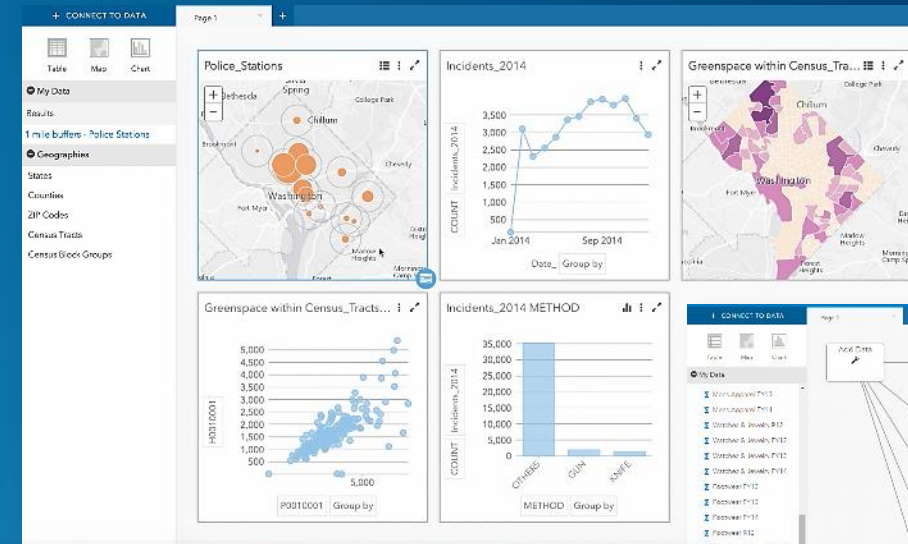
Transforming Understanding with Exploratory Analysis

- A New App
- Visual, Intuitive, Responsive
- Dynamic Spatial Analytics and Visualizations
- Very Fast

Integrated Spatial and Tabular Analysis

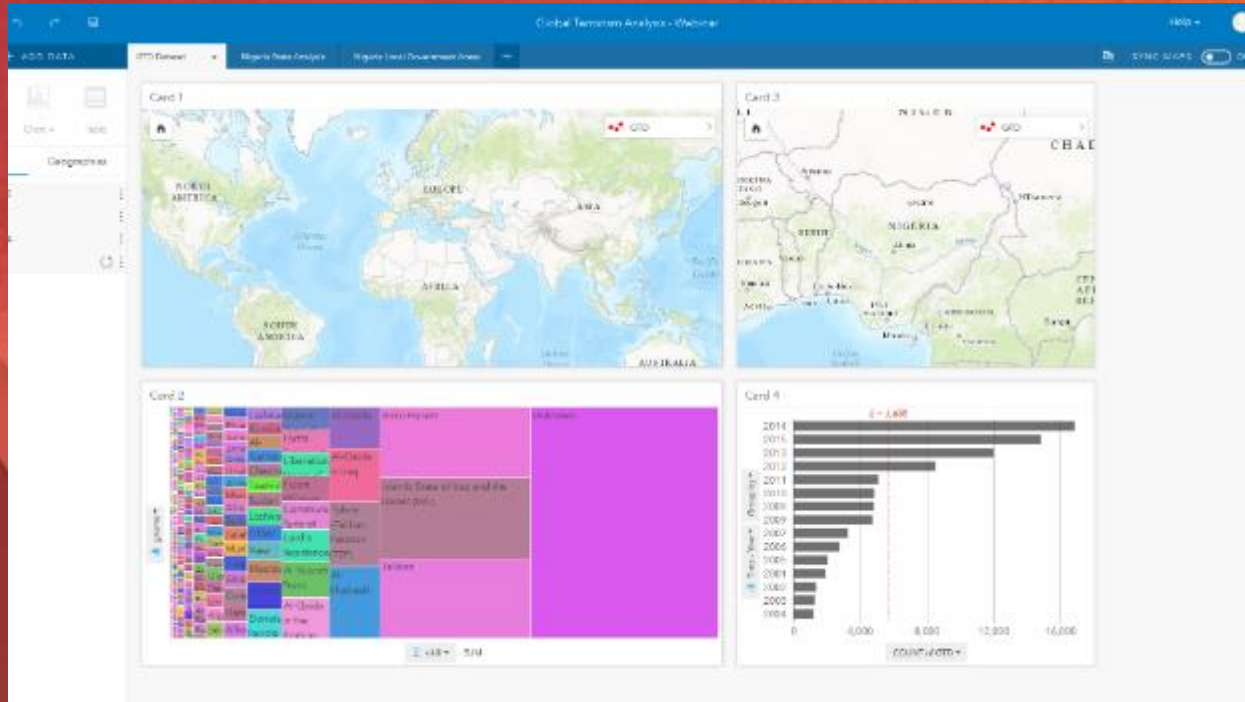


Linked and Responsive Charts and Maps



On-the-Fly Visual Models

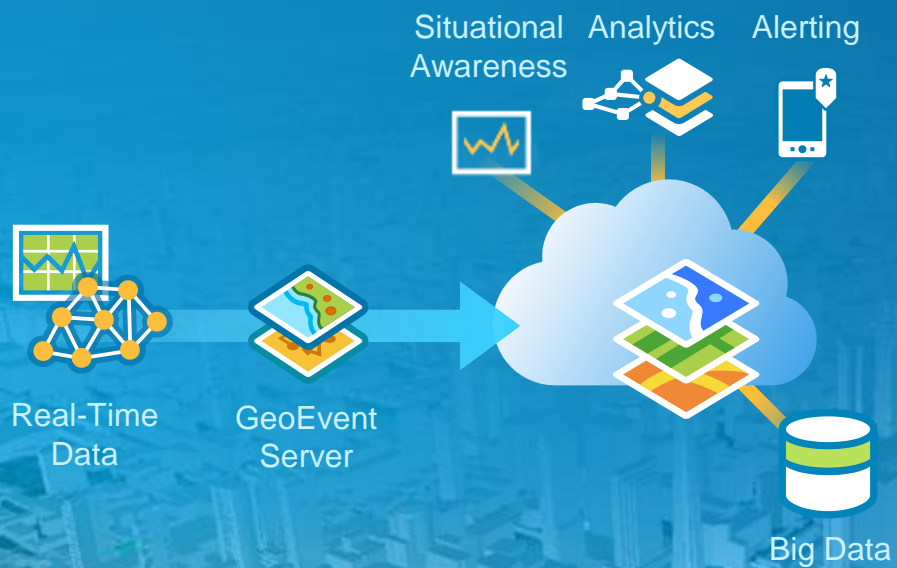




Real-Time

Integrating Sensor Networks and the IoT

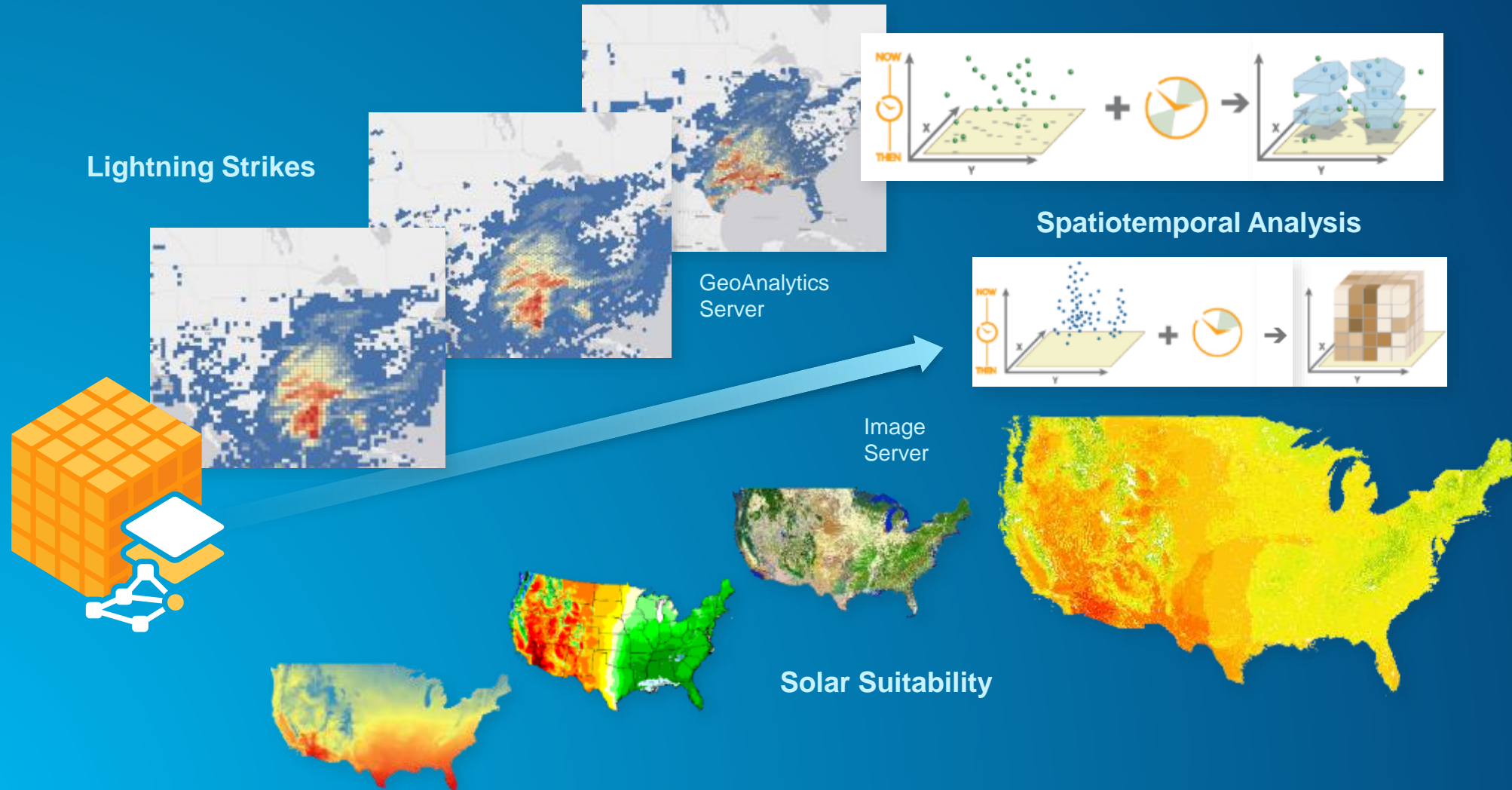
- High-Velocity Data Streams
- Monitoring and Alerting
- Dynamic and Big Data Analytics



Dashboard

Big Data

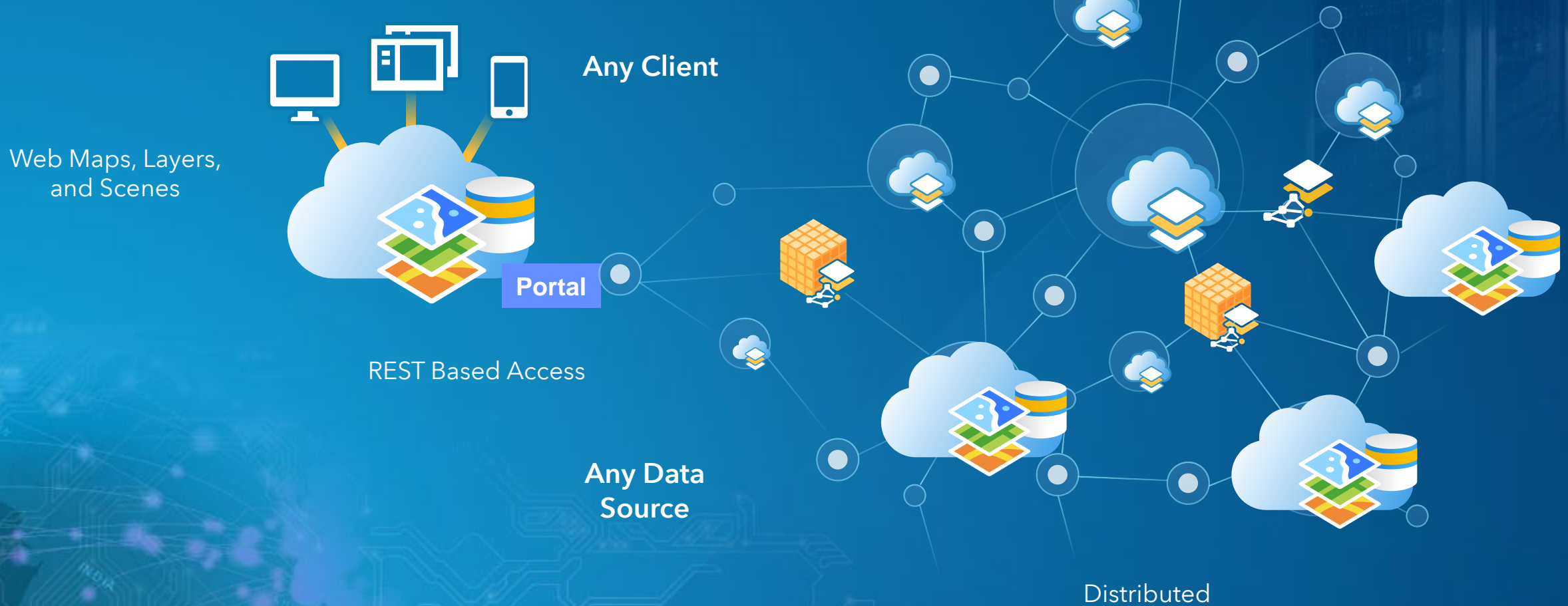
Parallelized Analytics on Vector and Raster Data



ArcGIS Enterprise

ArcGIS In Your Own Infrastructure

Portal Abstracts and Organizes Any Data Type

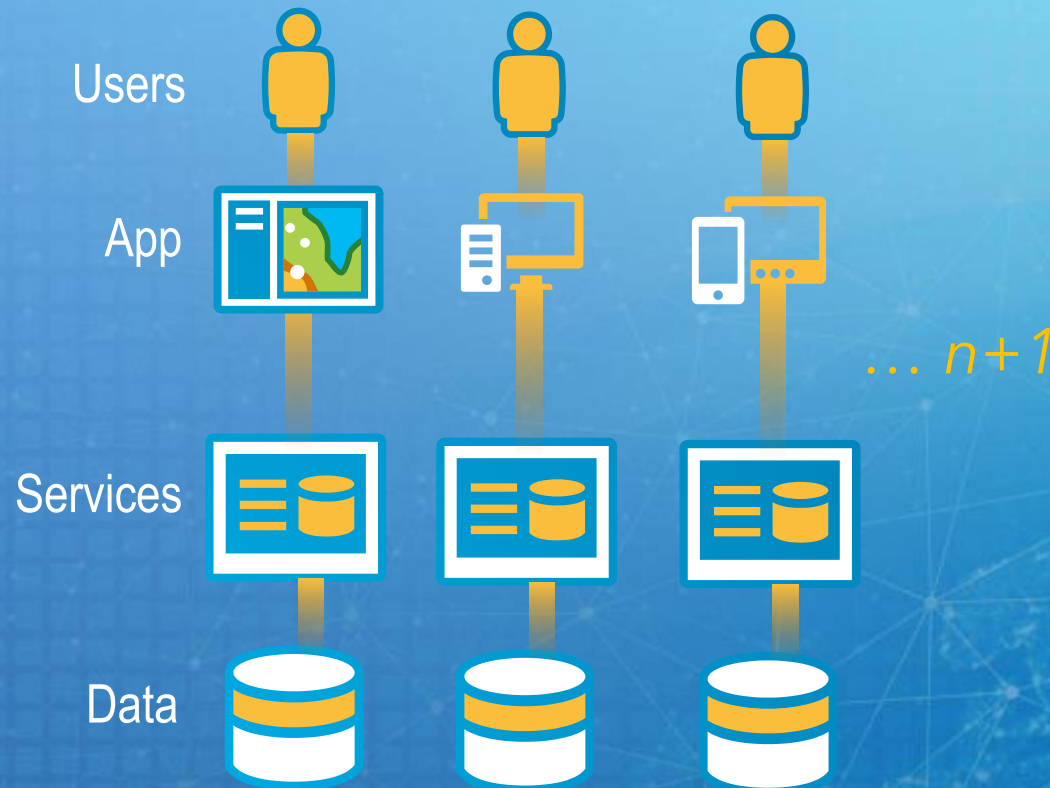


ArcGIS Enterprise | Server GIS vs. Web GIS

Scalability, Reliability and Maintainability

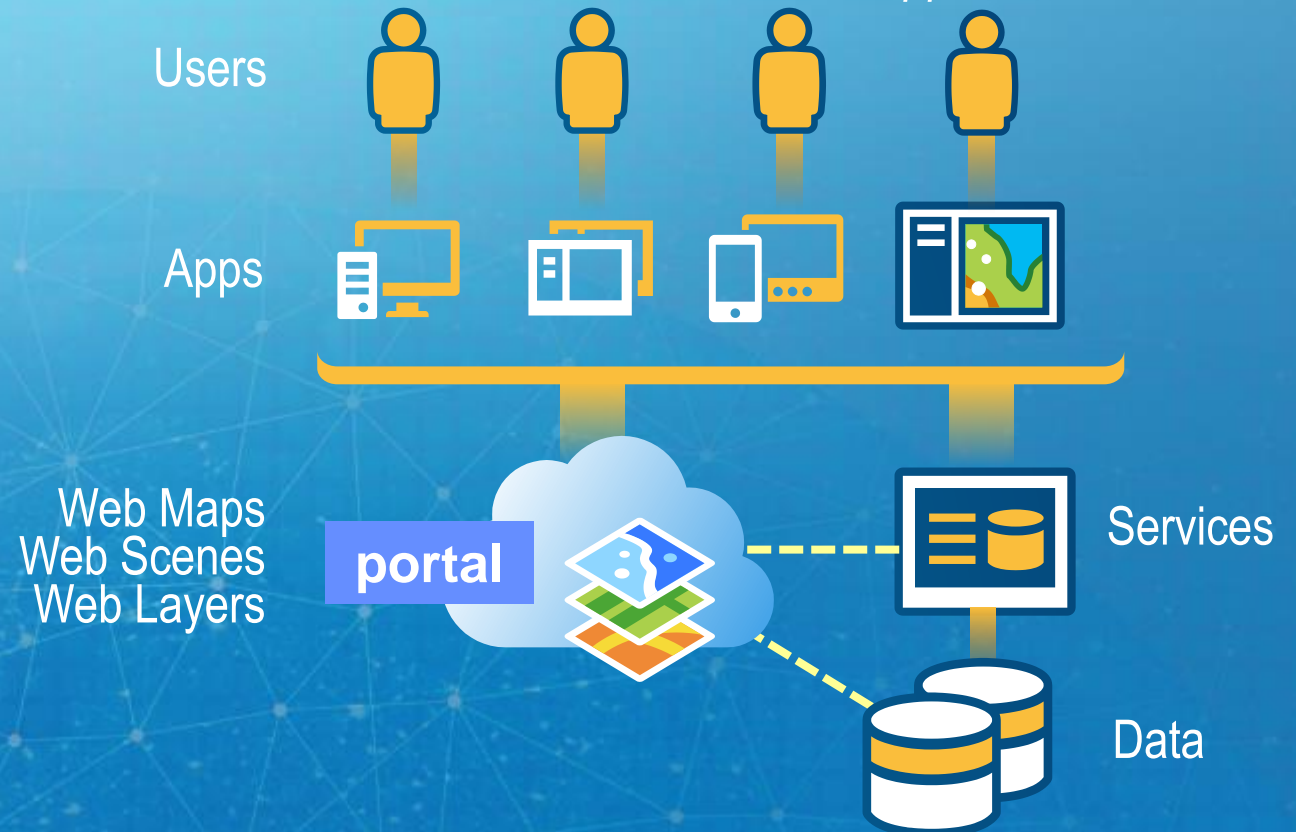
Server GIS

Silo'd use of GIS services within custom applications

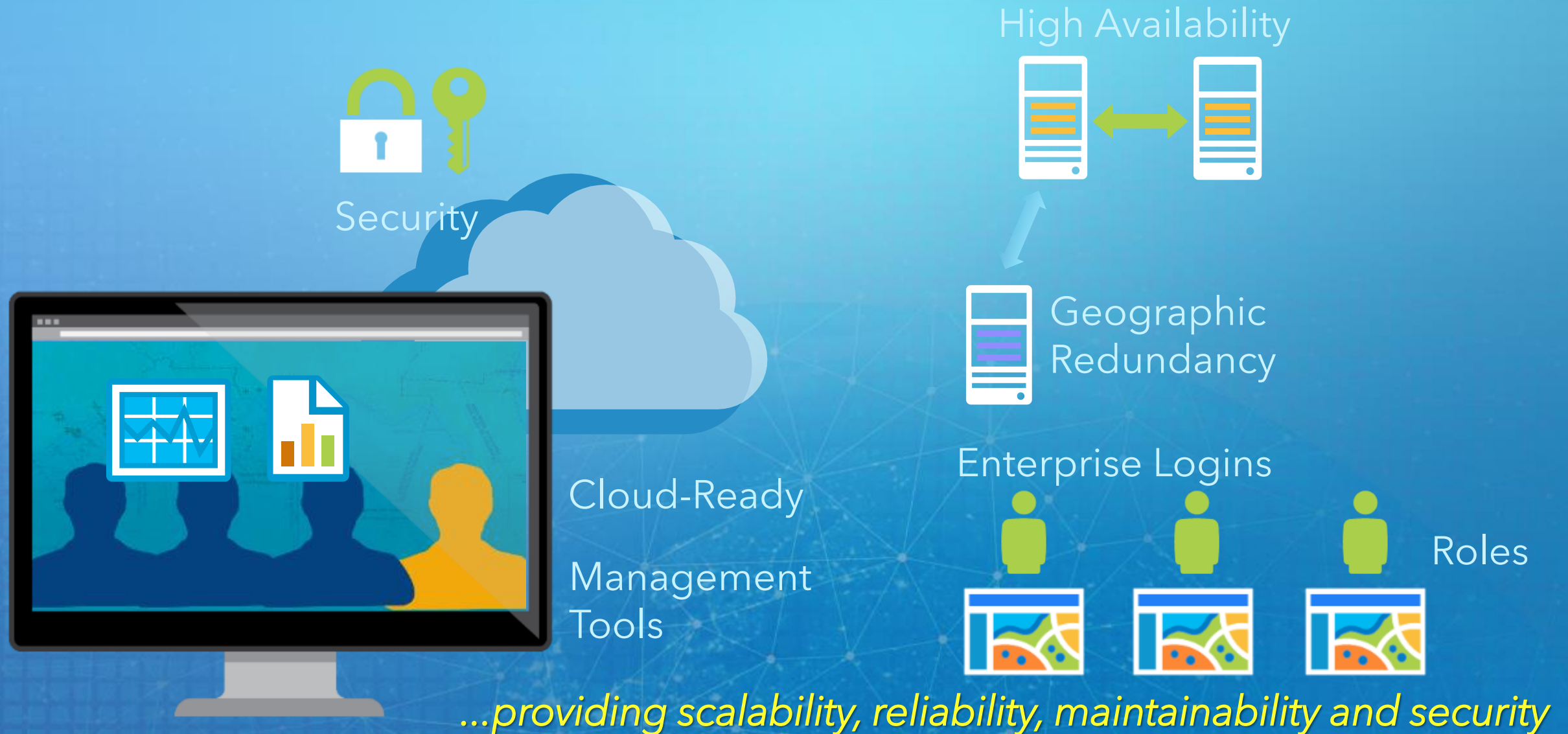


Web GIS

Pervasive use of web layers, scenes, and maps within all of the ArcGIS apps



Geospatial Infrastructure For Modern, Secure Networks

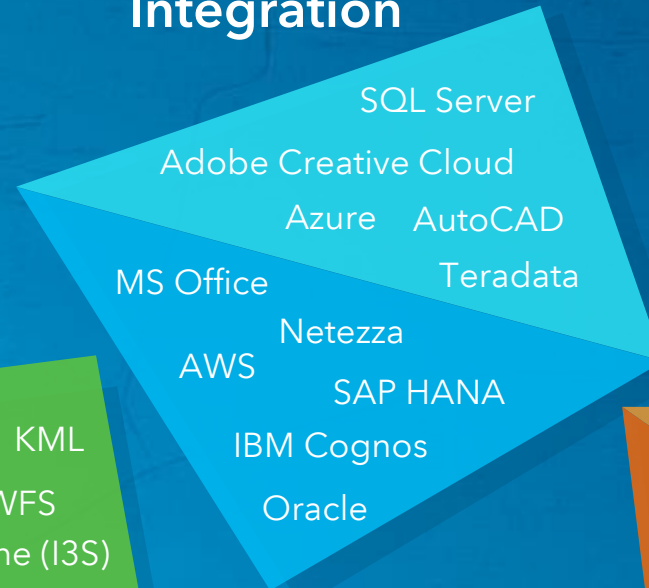


ArcGIS Is Open, Interoperable and Standards Compliant

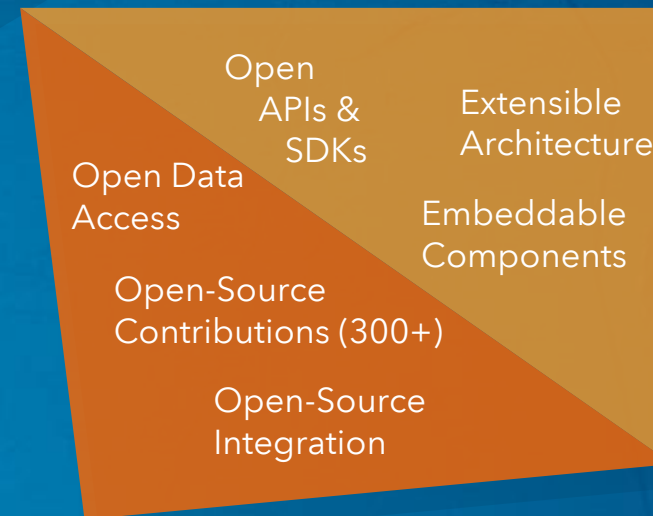
Open Standards and Formats



Product Integration



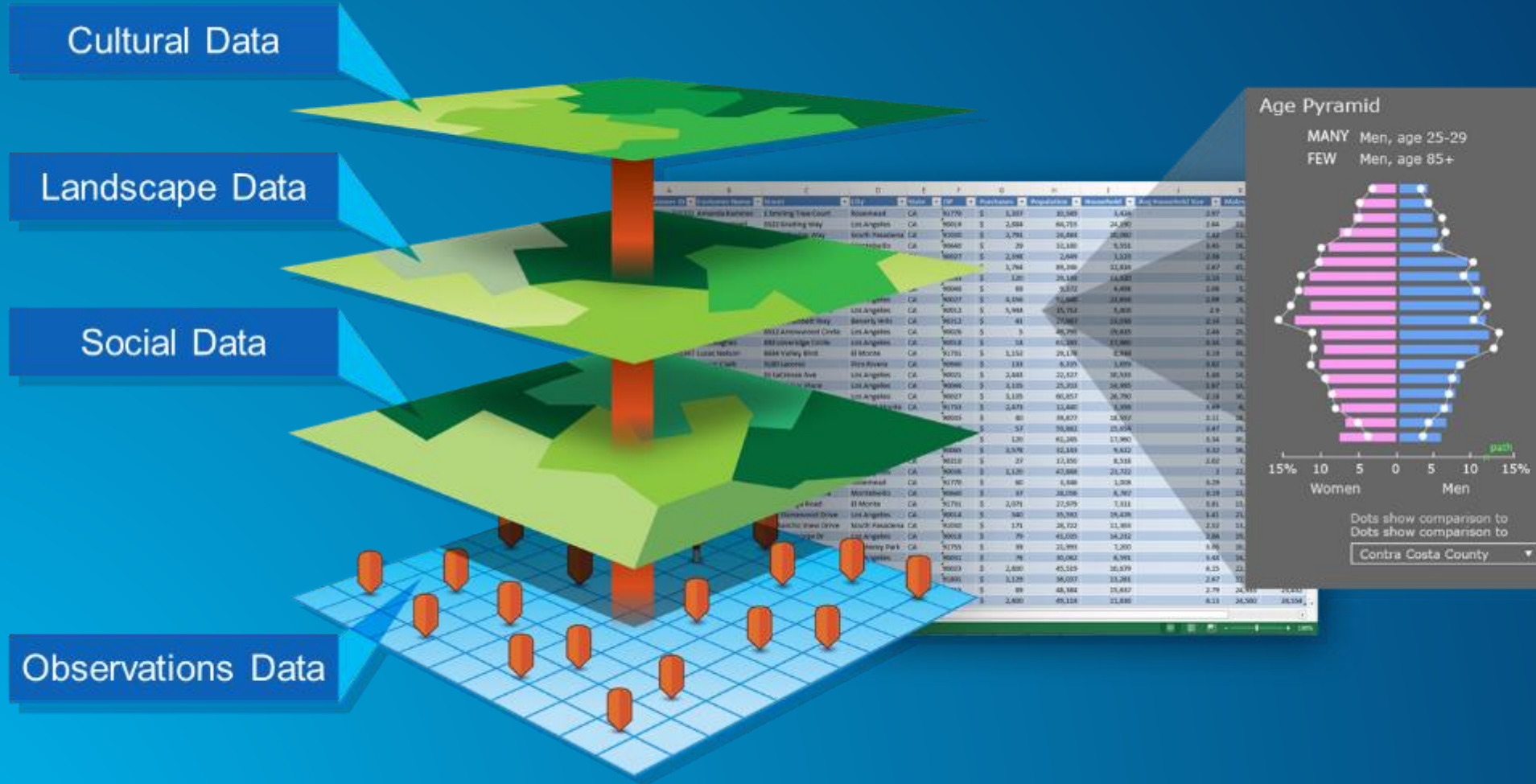
Open Software



... Successfully Integrated into Thousands of Systems



Integrating and Enriching Intelligence using Location



The Power of a Multi-Int Platform

Putting it all together



Using a Location Platform for Integrated Intelligence

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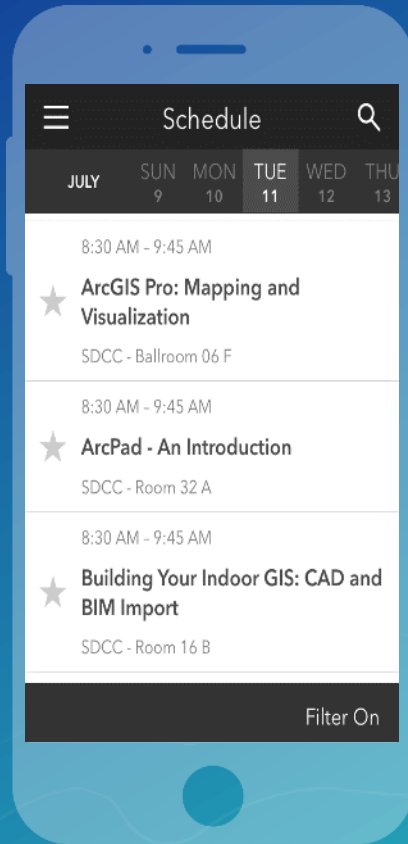
Craig Cleveland

Please Take Our Survey on the Esri Events App!

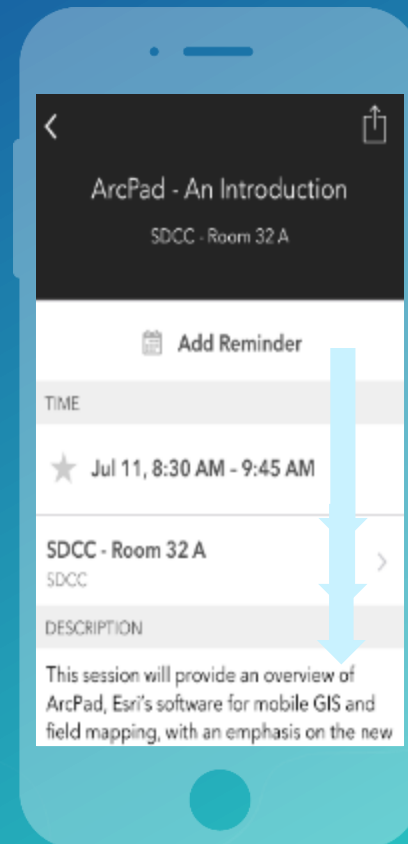
Download the Esri Events app and find your event



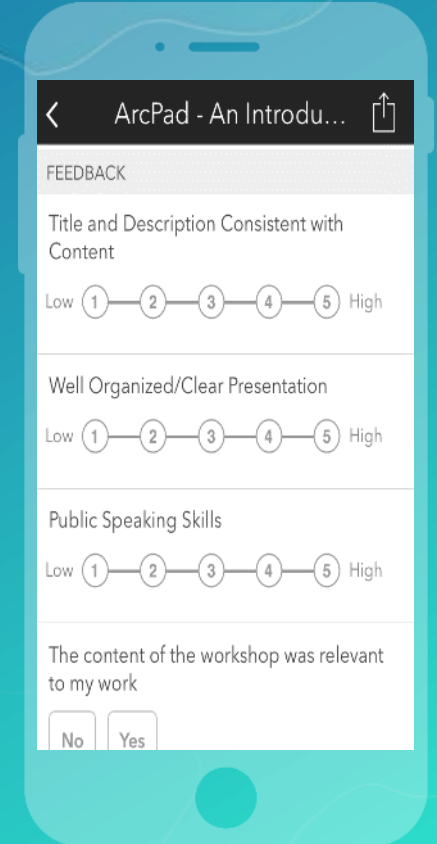
Select the session you attended



Scroll down to find the survey



Complete Answers and Select "Submit"





esri

THE
SCIENCE
OF
WHERE