



Connecting Space and Time

Presented by **Laura Berman**









From Backroom to a Explosion of Uses, Users and Data Sources



big data collections

sensor networks

social media

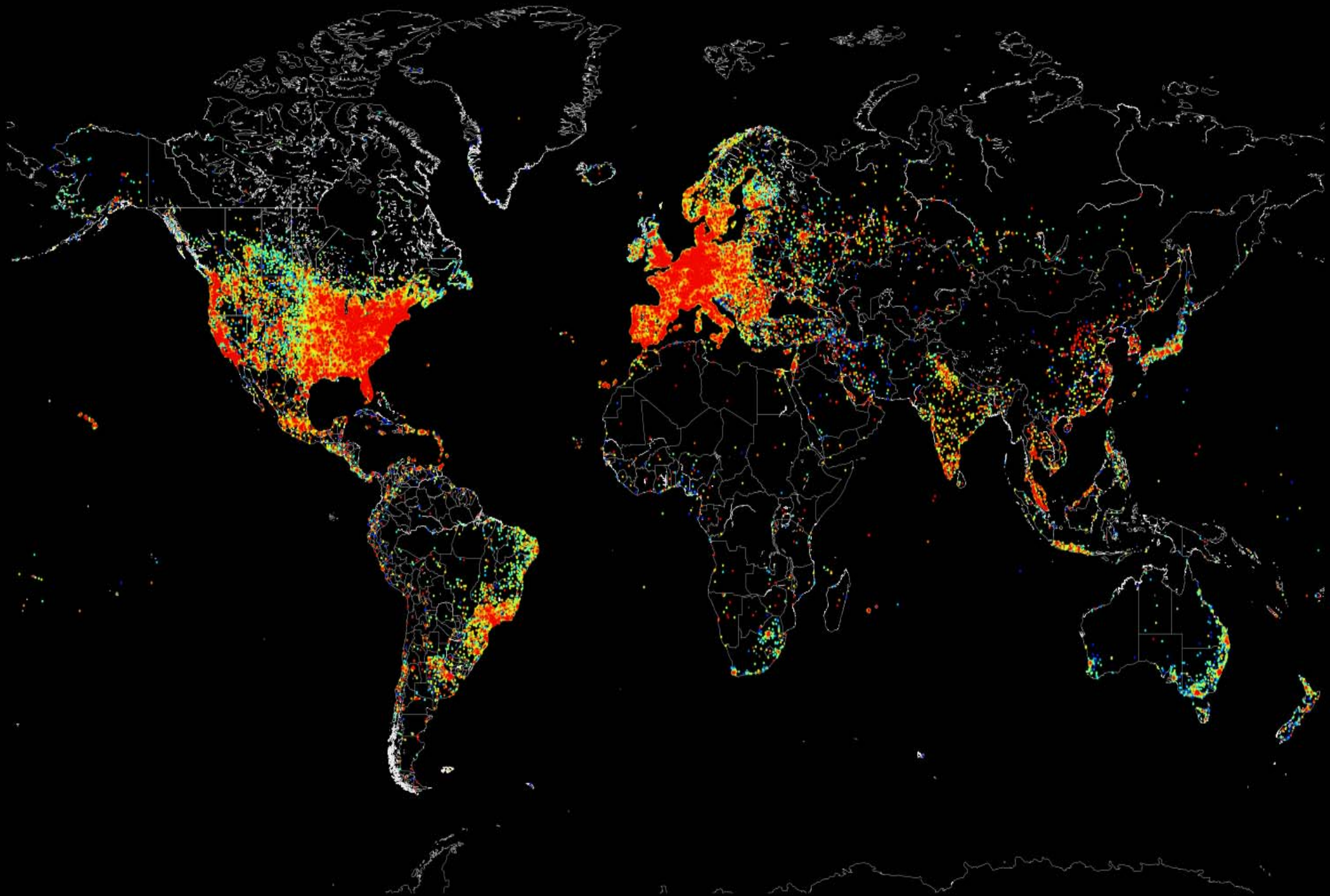
business systems

images / video

spreadsheets

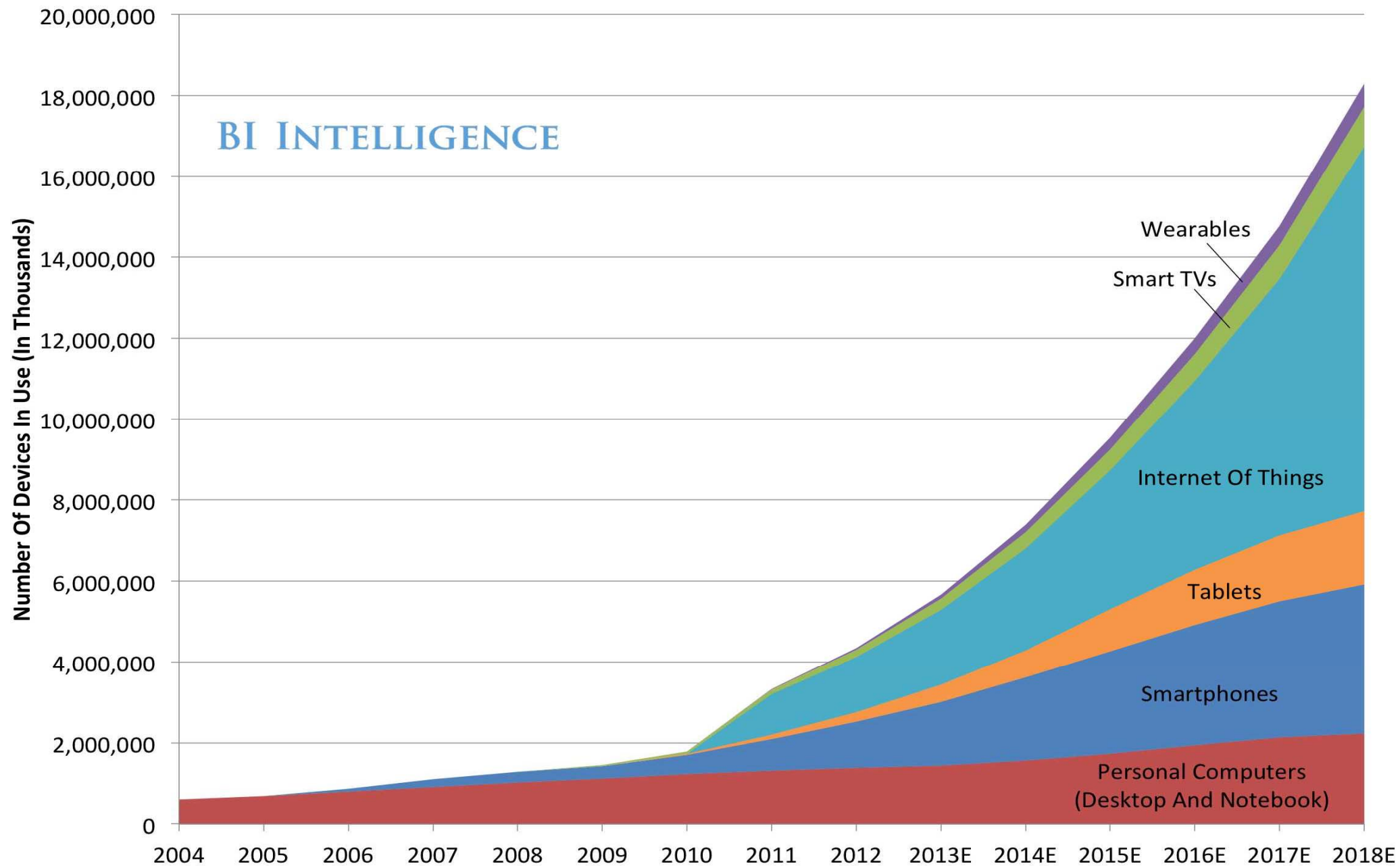
analytics

web services



Global Internet Device Installed Base Forecast

BI INTELLIGENCE

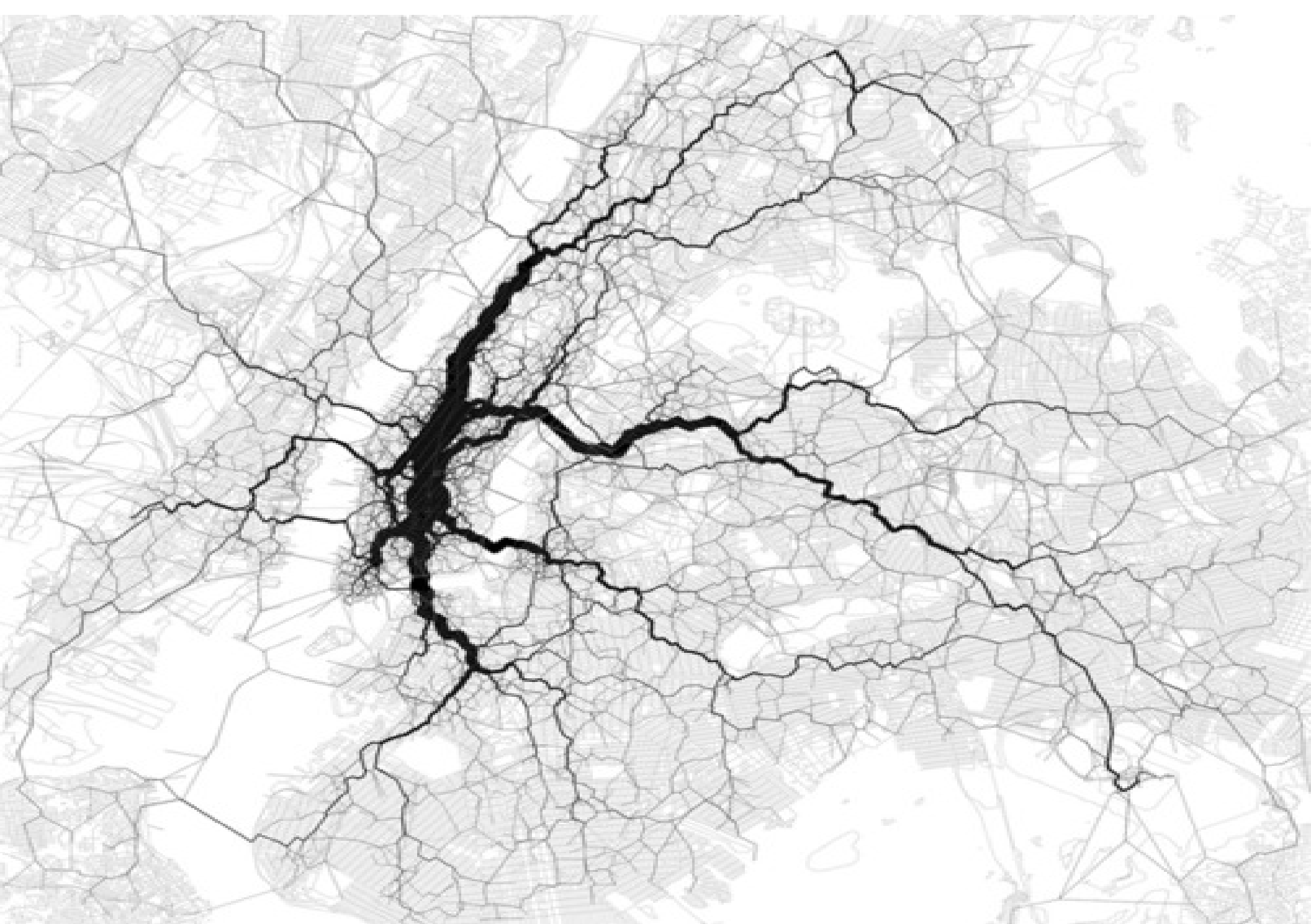


Source: Gartner, IDC, Strategy Analytics, Machina Research, company filings, BII estimates

Estimate Stickers – Hyper Local Sensor Networks

Nearables





GIS Is Being Transformed Into a Location Platform



*Making it Pervasive
... Involving Everyone*



Consumerisation

driving Expectations

How important is location in business?

74%

say location is
VERY IMPORTANT
or **IMPORTANT**

41%

VERY IMPORTANT



33%

IMPORTANT

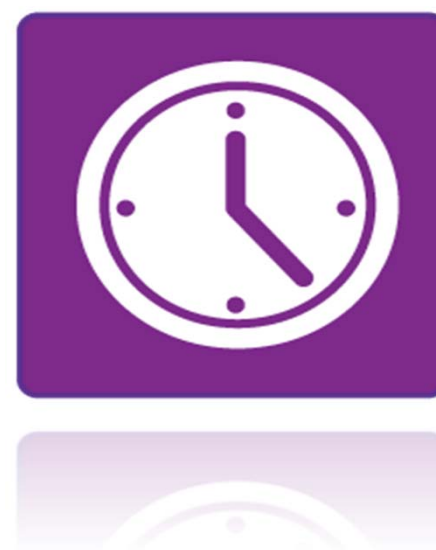
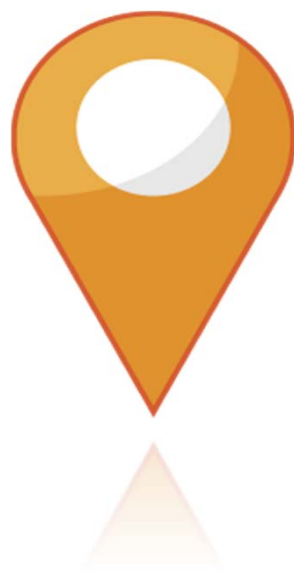
Source: Ventana Research Location Analytics Benchmark Research 2013

More than Location





Value of Understanding Place
Tobler's 1st Law of Geography



Esri | Privately Held

**Making a Difference . . .
. . . And Contributing to Society**

Managed
Growth

0

Debt

5,000

Employees
(Globally)

80

Esri
Distributors
Worldwide

1,700+

Business
Partners

25,000

Users
Trained
Annually

>1 mil.

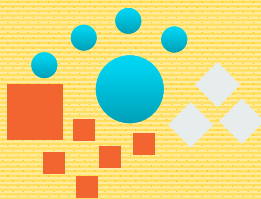
users
(350,000 clients)

OFFERINGS

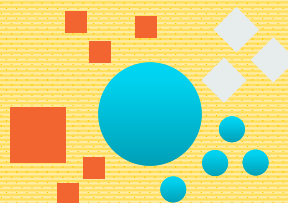
Individuals



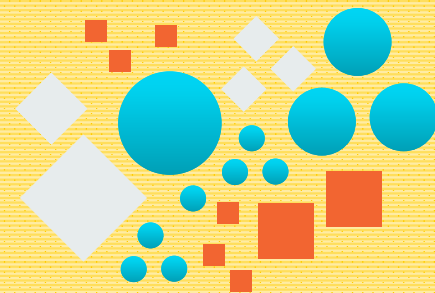
Teams |
Workgroups



Departments

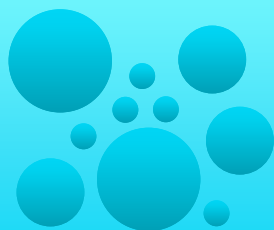


Organisations

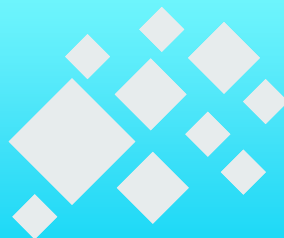


PRODUCTS

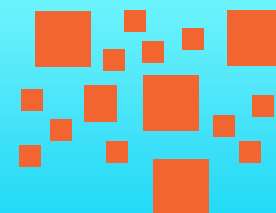
Software | Apps
| SaaS



Professional Services
| Training | Support

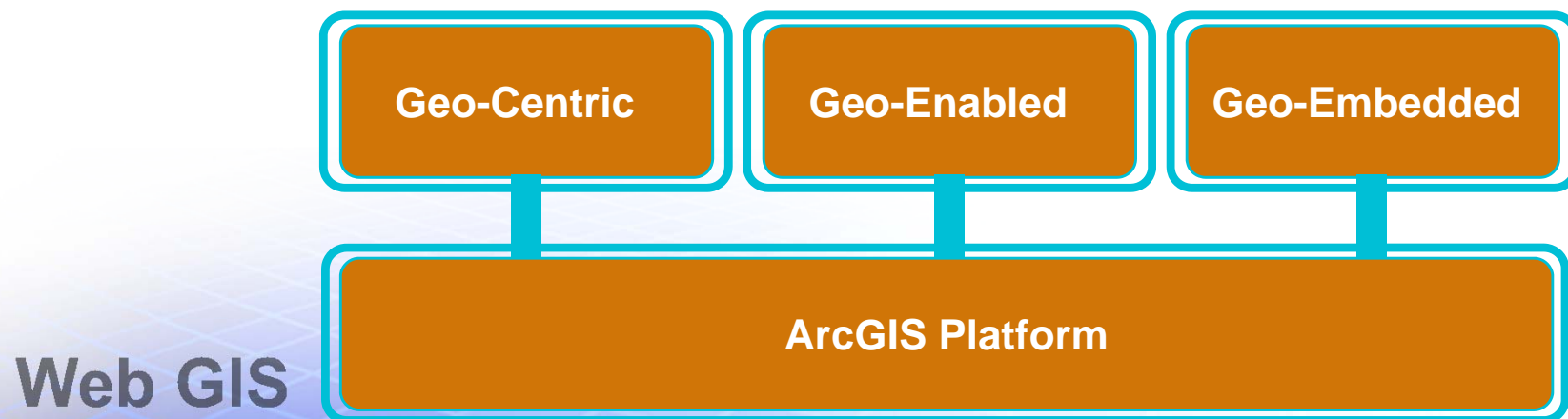


Base Maps | Content
| Information Products



Strategy

Build, Sell, and Support Common Platform For Three Communities



... and Provide Partners with Technology, Services, and Support

Web GIS Supports Everyone

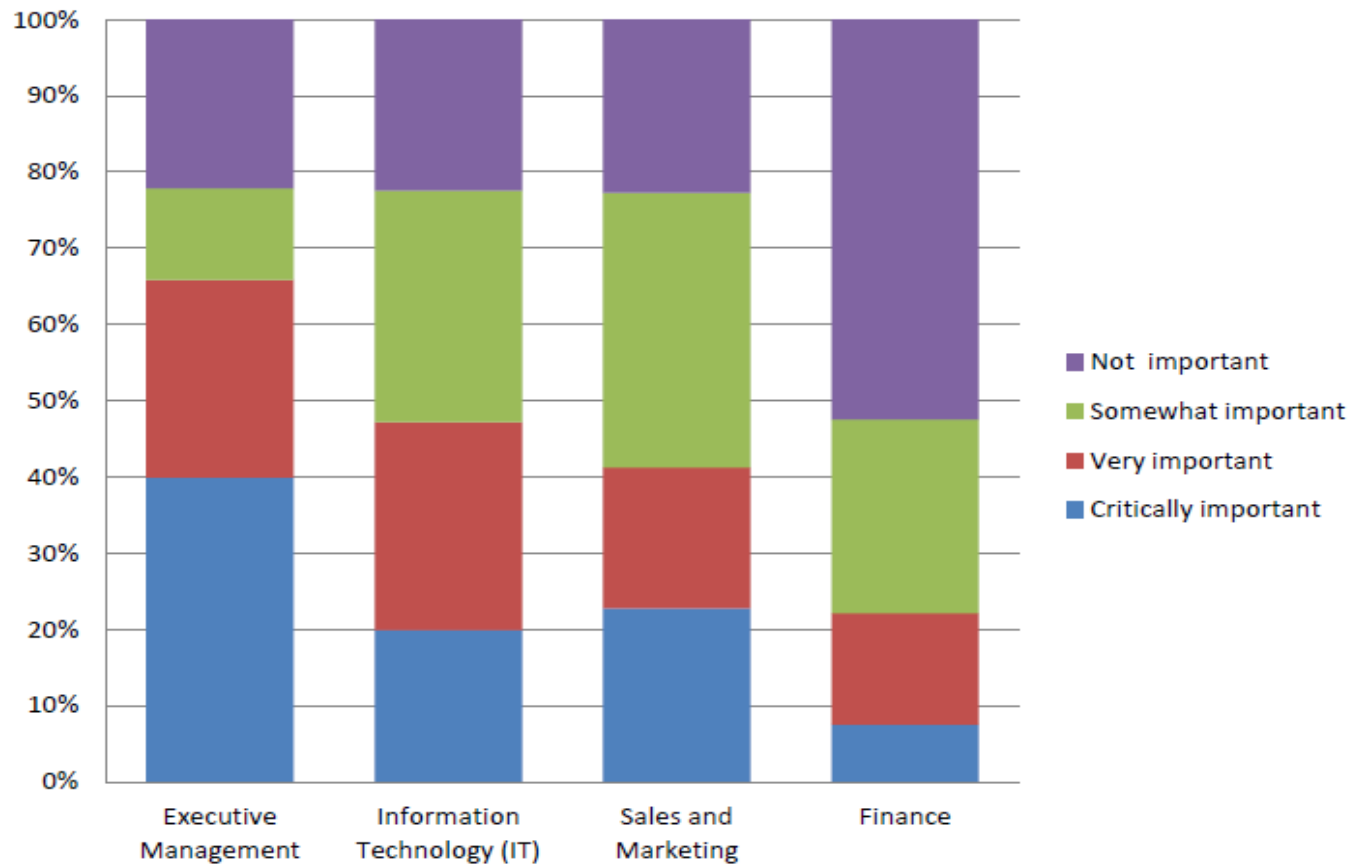
Providing a Common Location Platform



*Across Organisations and Across Partners
... a Framework for Integration*

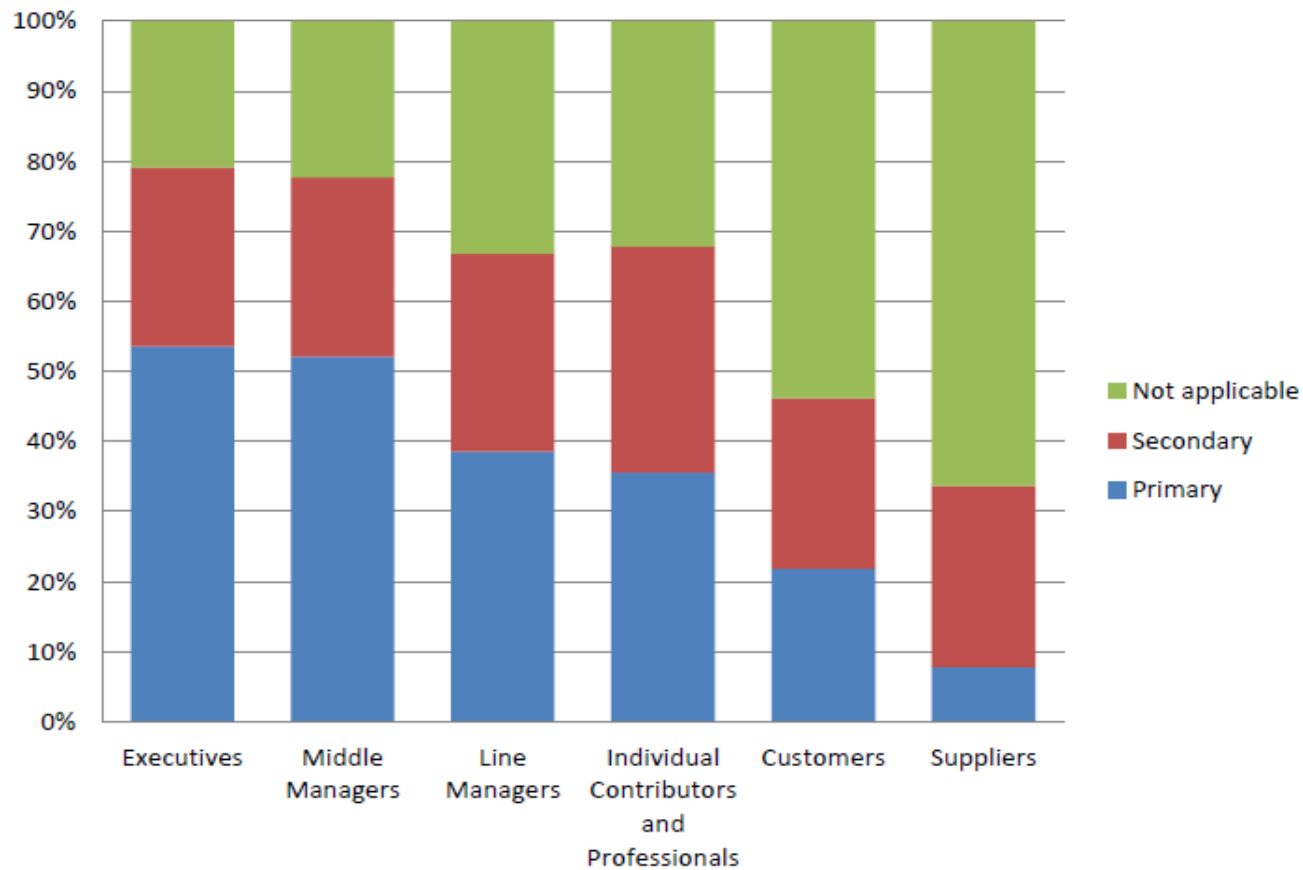
Wisdom of Crowds® Location Intelligence Market Study 2014
2014 Dresner Advisory Services

Importance of Location Intelligence by Function



Wisdom of Crowds® Location Intelligence Market Study 2014
2014 Dresner Advisory Services

Location Intelligence Targeted Users



They want
one corporate system.

They don't want any
limitations for all their users.

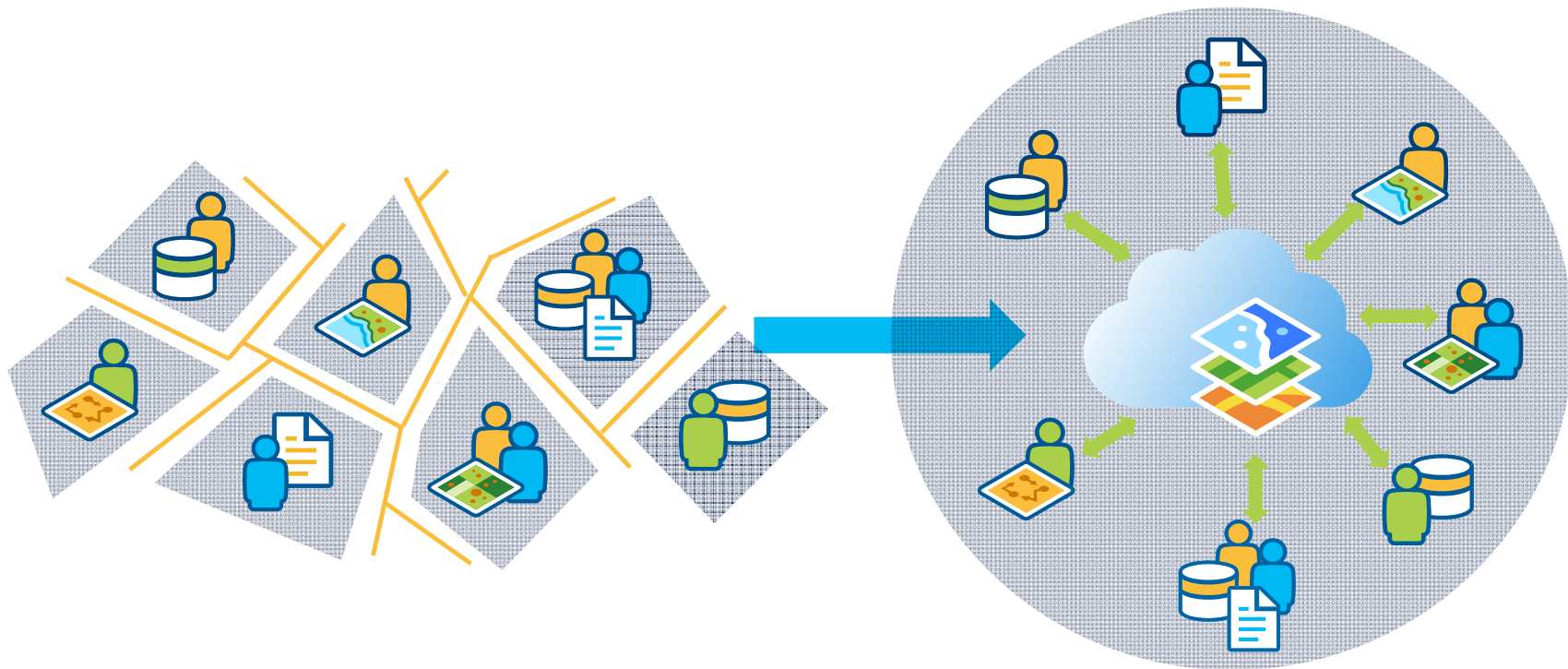
They want information at
everyone's fingertips in
3-clicks or less.

They want uniformity in
all their maps.

And, they want this to be
as easy to use as their iPhones.

Web GIS Helps Integrate Our Partner Solutions

Breaking Down the Barriers



Creating New Relationships

... Supporting Collaborative Approaches

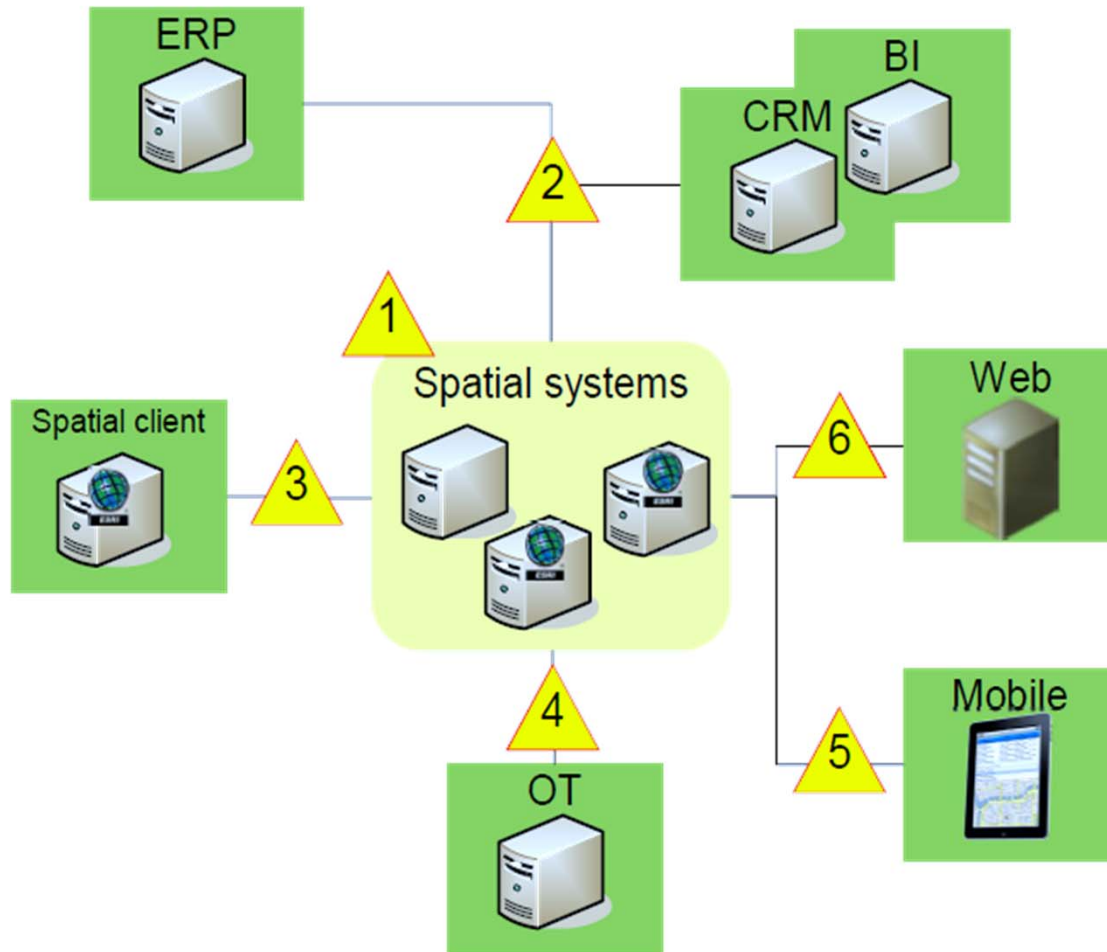


Without Integration

The Past - Sinking Feeling



Our Communities Struggle with Important Questions

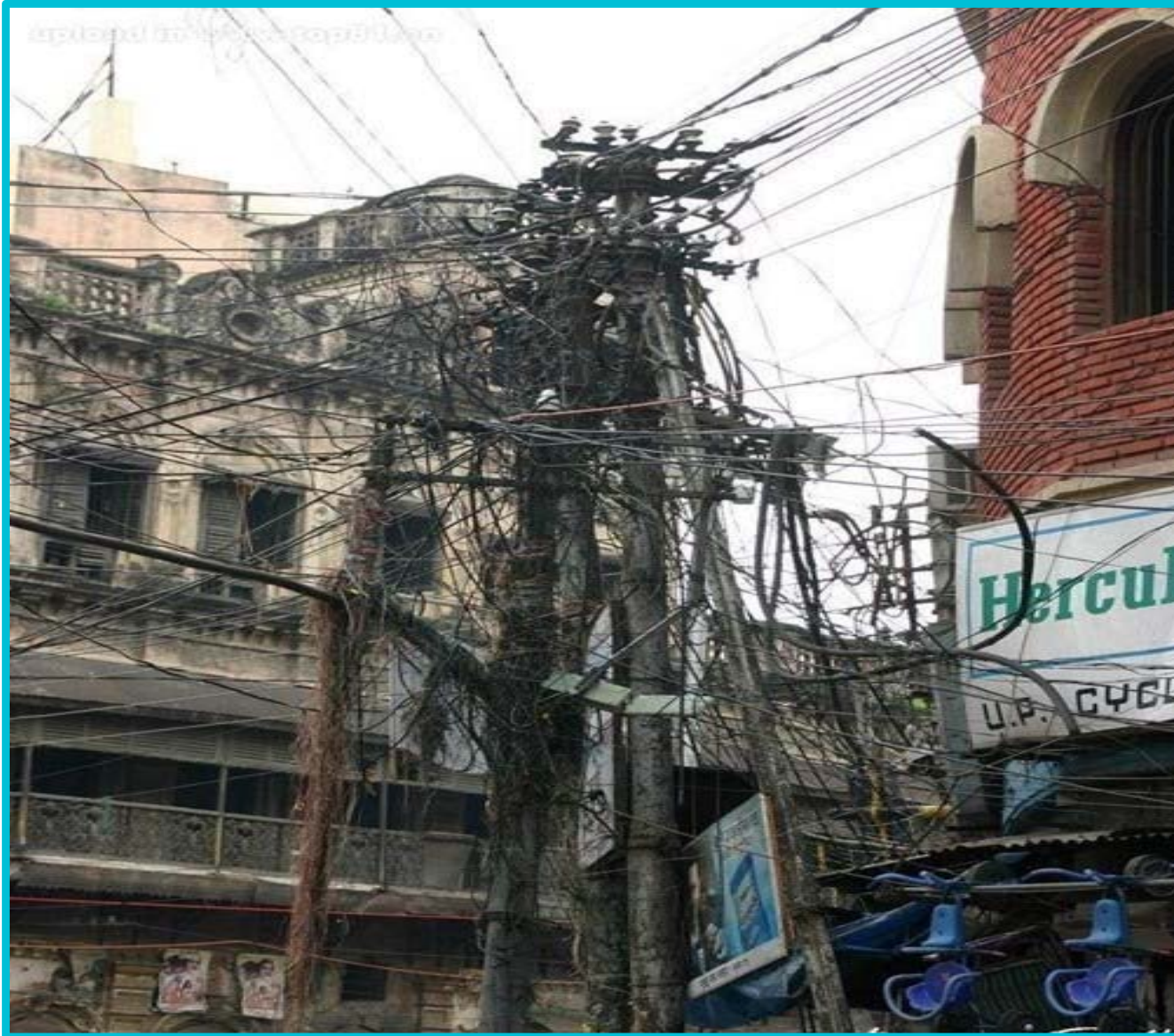


1. Which spatial system has my data and which version?
2. How do I sync data between business and spatial systems?
3. How do I access my business data from my spatial client tools?
4. How do I merge business and spatial data with my operations systems?
5. How do I connect and sync spatial data to mobile devices?
6. How do I provide web?

Traditional Integration



Complexity



Over Engineered



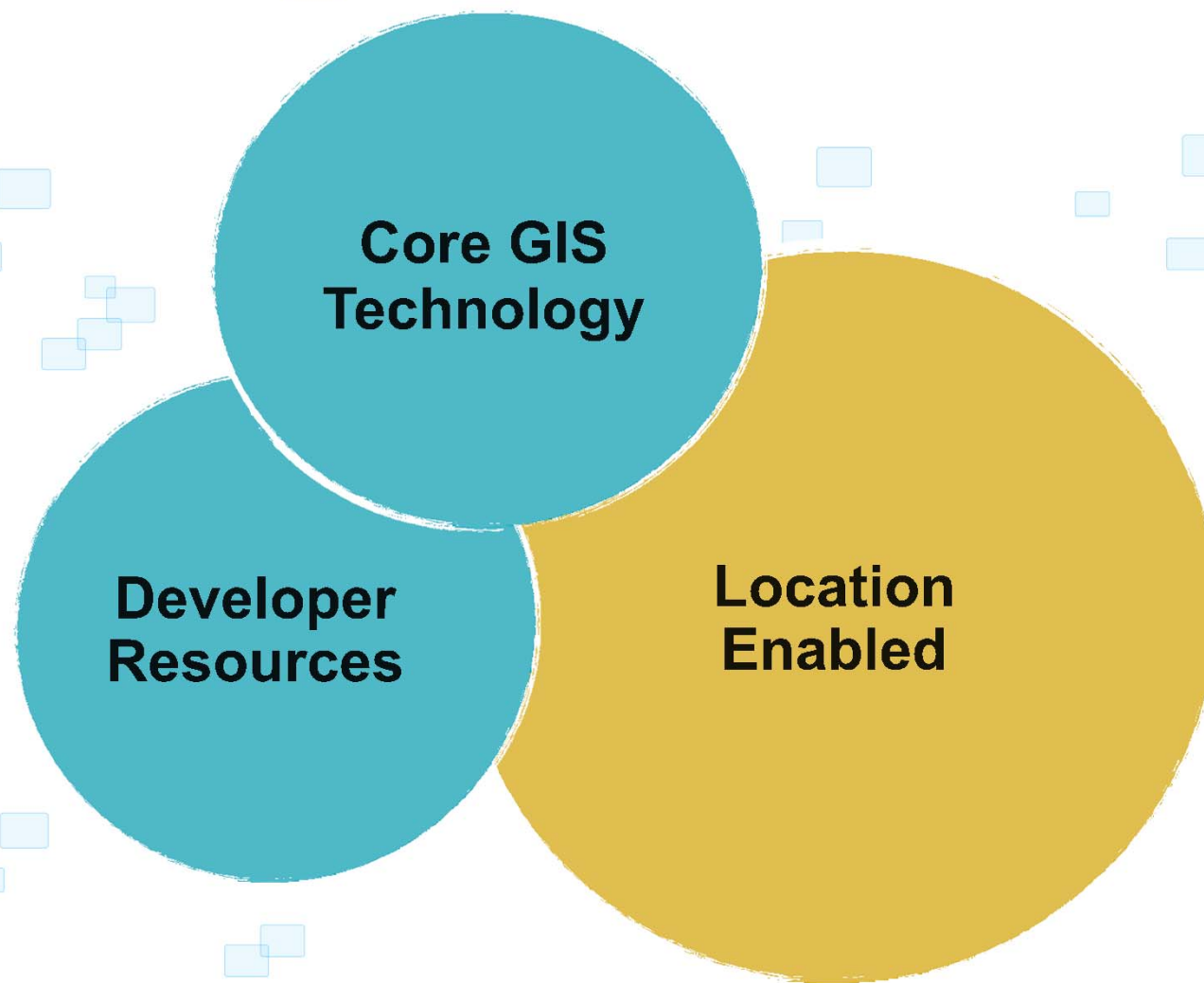
Usability

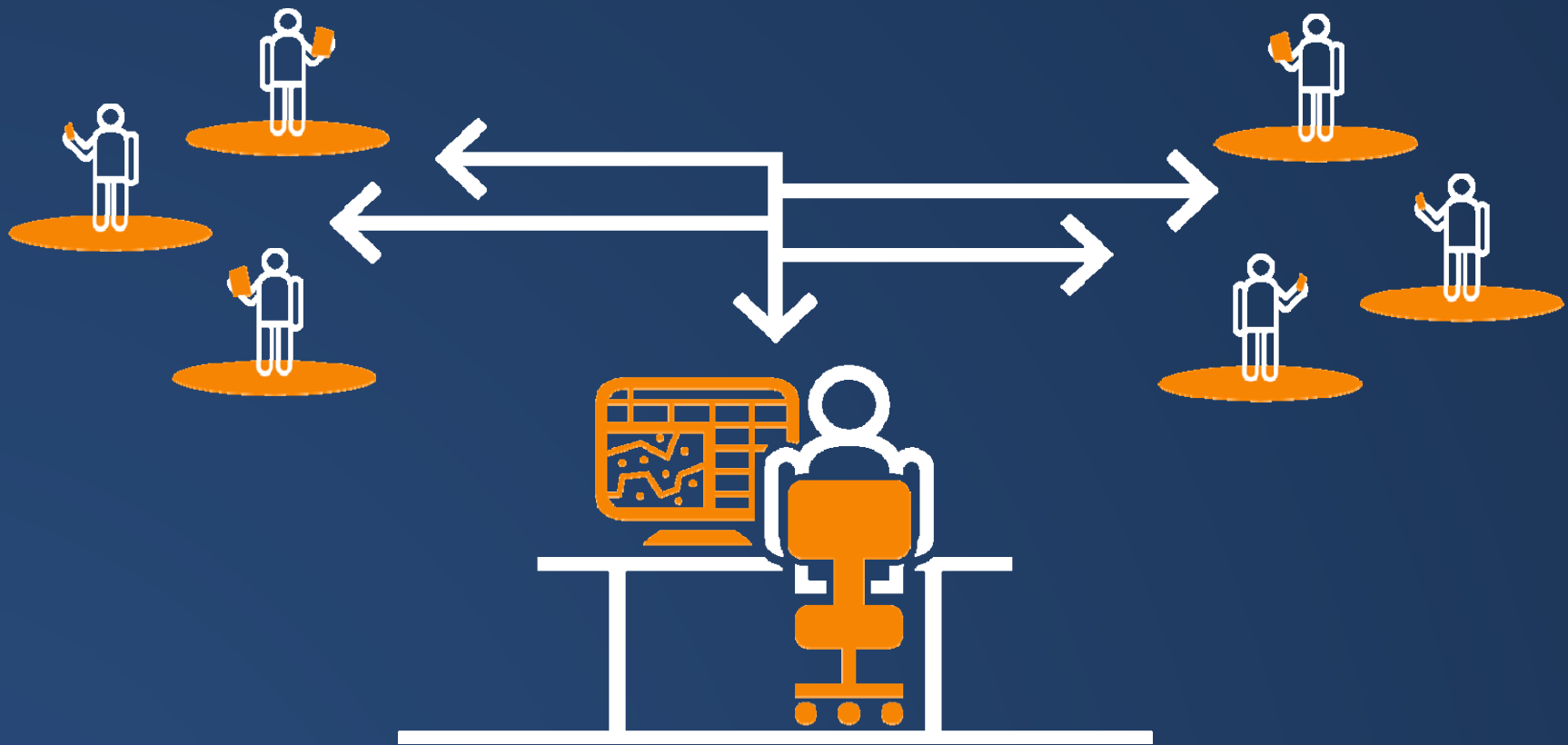


Lack of Agility



Complementary
Non-disruptive
Frictionless
Transparent





After Integration



Partners

Delivering Thousands of Solutions, Apps,
Services, Data and Technology





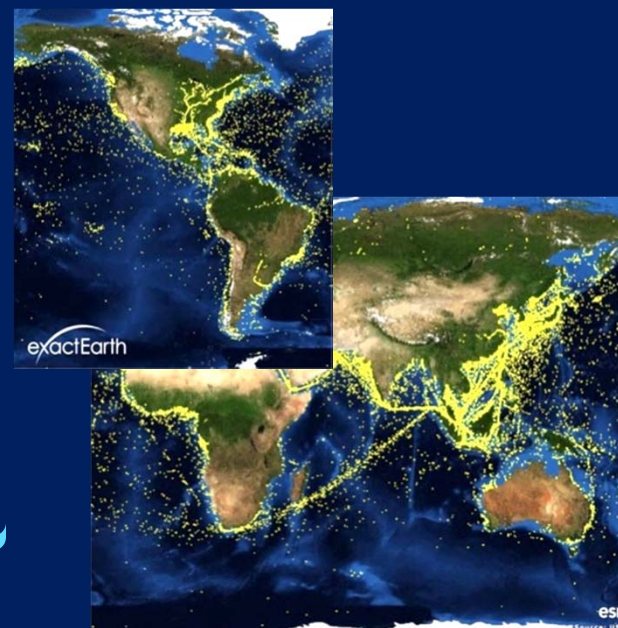
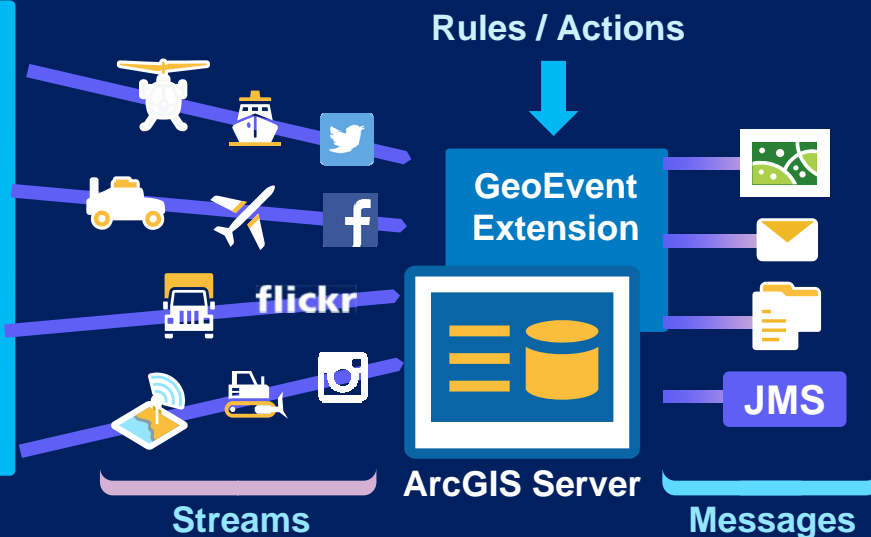
Connecting Space and Time OSIsoft & Esri

Real Time

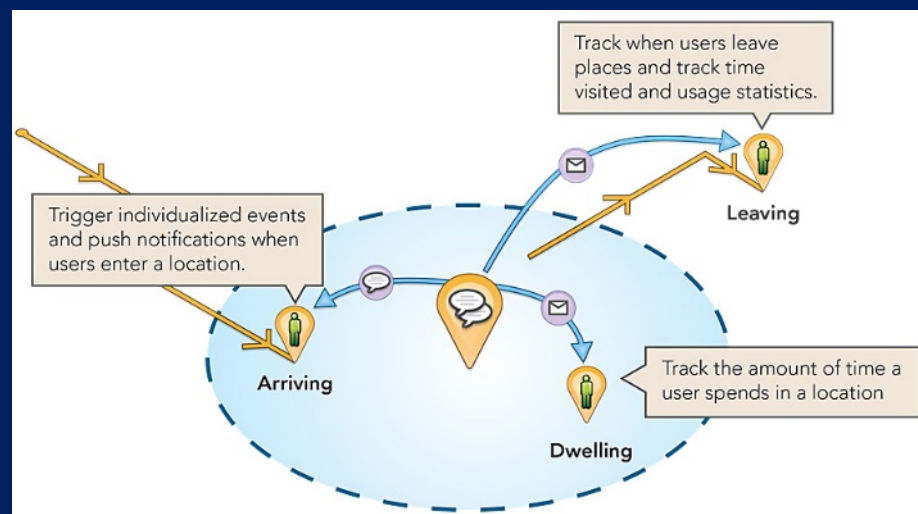
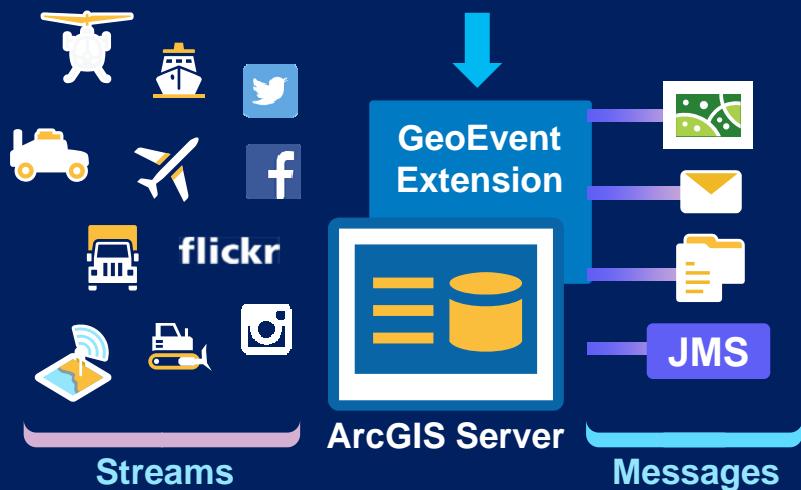
ArcGIS GeoEvent Extension for Server
Integrates and Exploits Real Time Data

Enabling

- Big Data
- Stream Processing
- Geo-Fencing

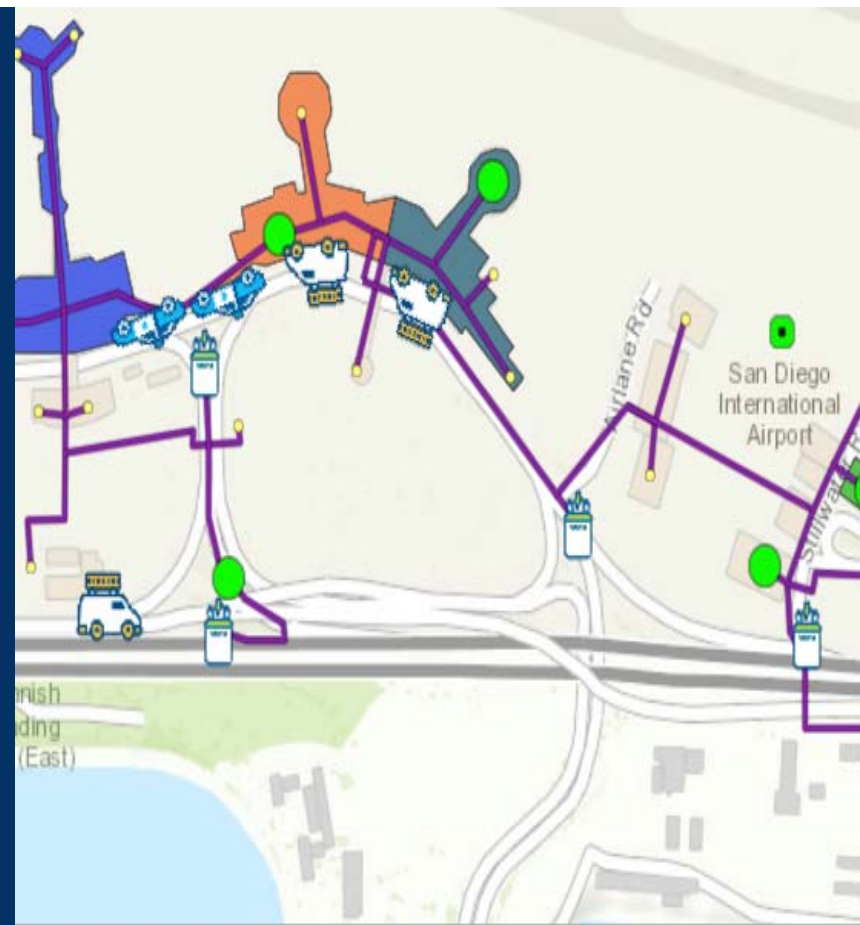


Continuous Processing and Analysis

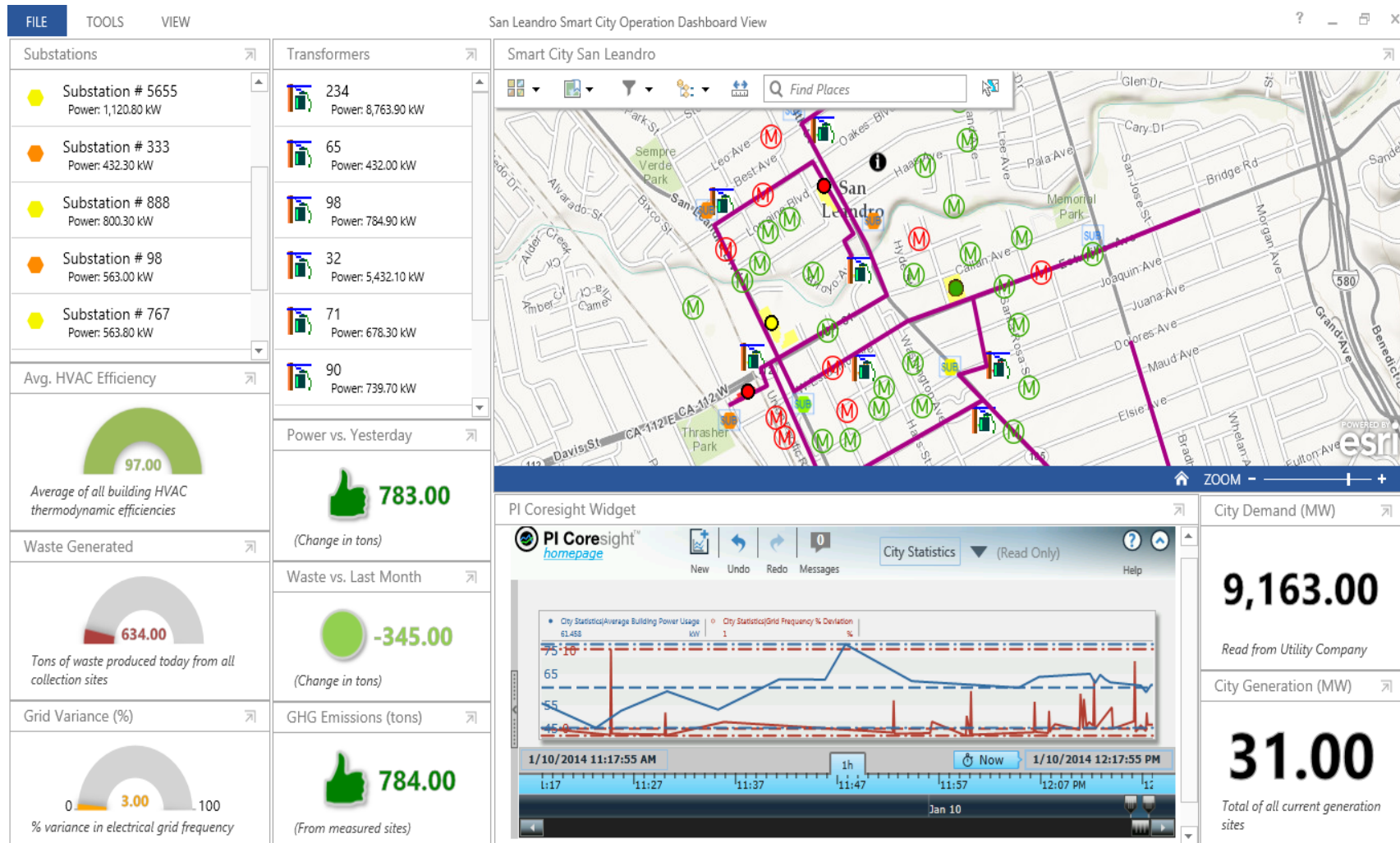


Demonstration

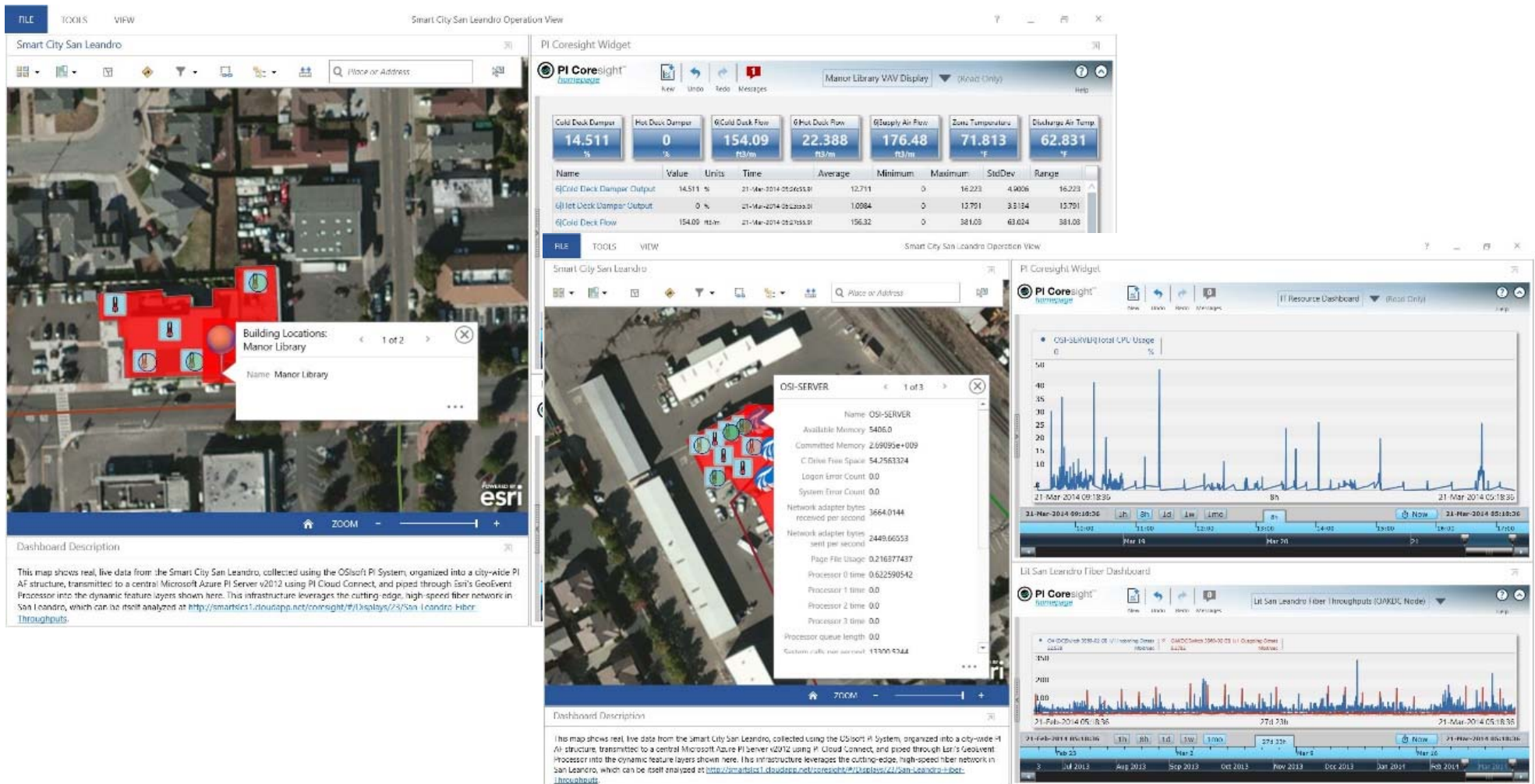
OSIsoft & Esri



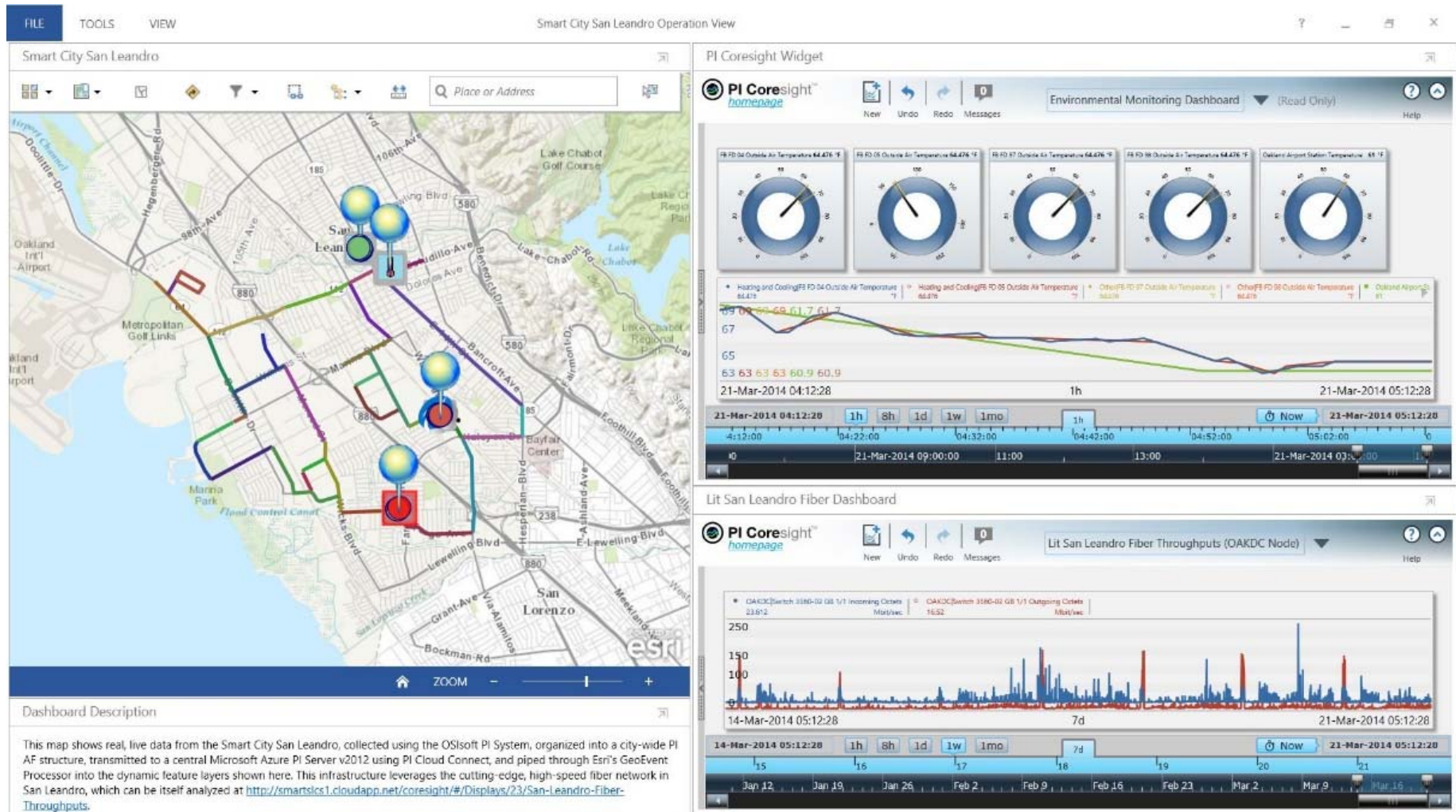
Operational Performance View



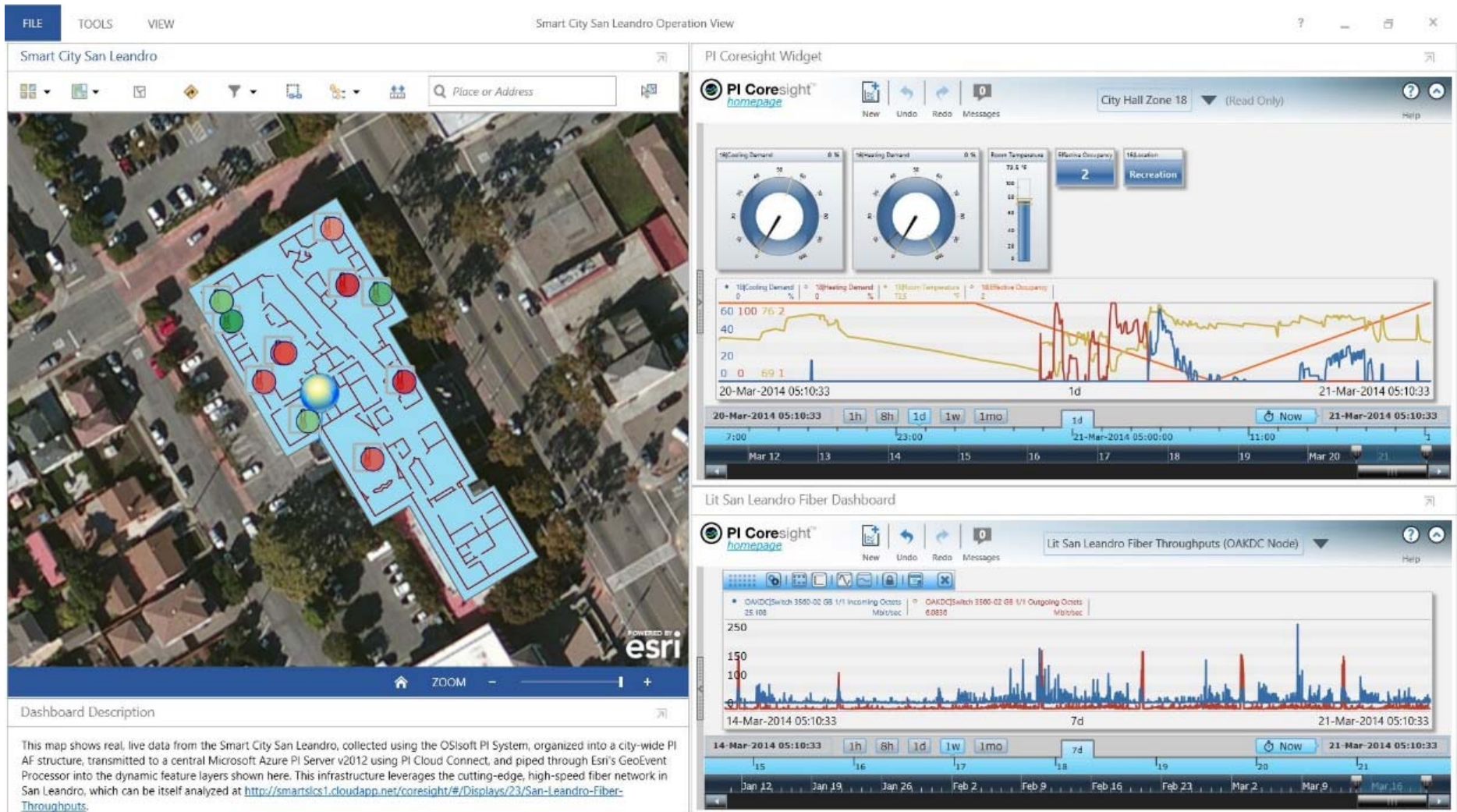
Energy Management



Environmental Monitoring

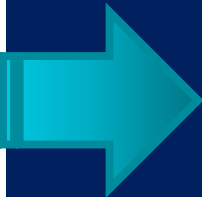
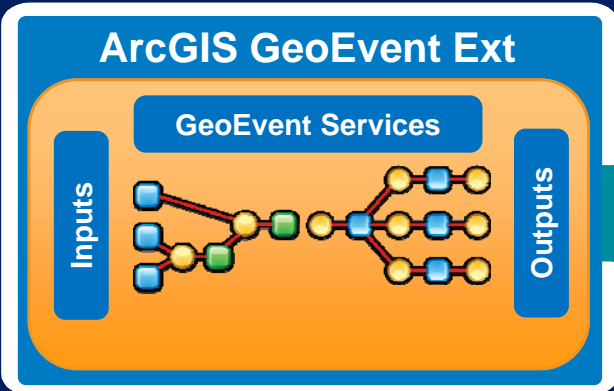


Smart Building



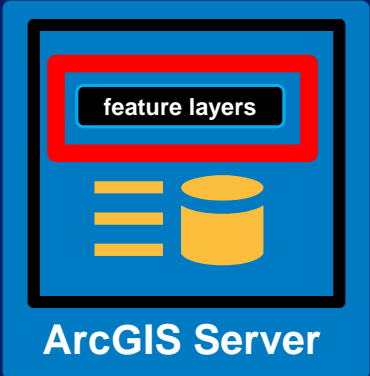


PI Integrator
for
Esri ArcGIS



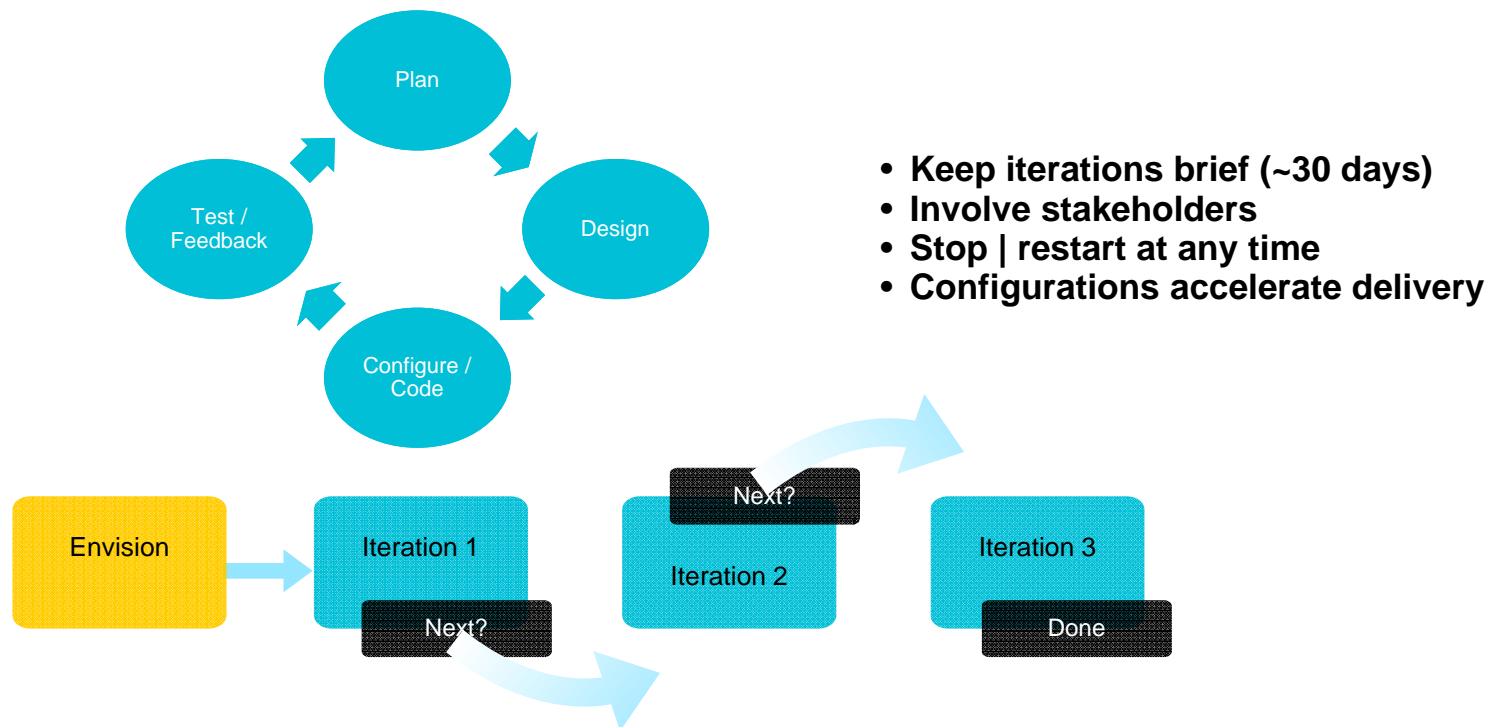
Your Dashboards & Apps

Operations
Dashboard for ArcGIS



Use an Agile Methodology

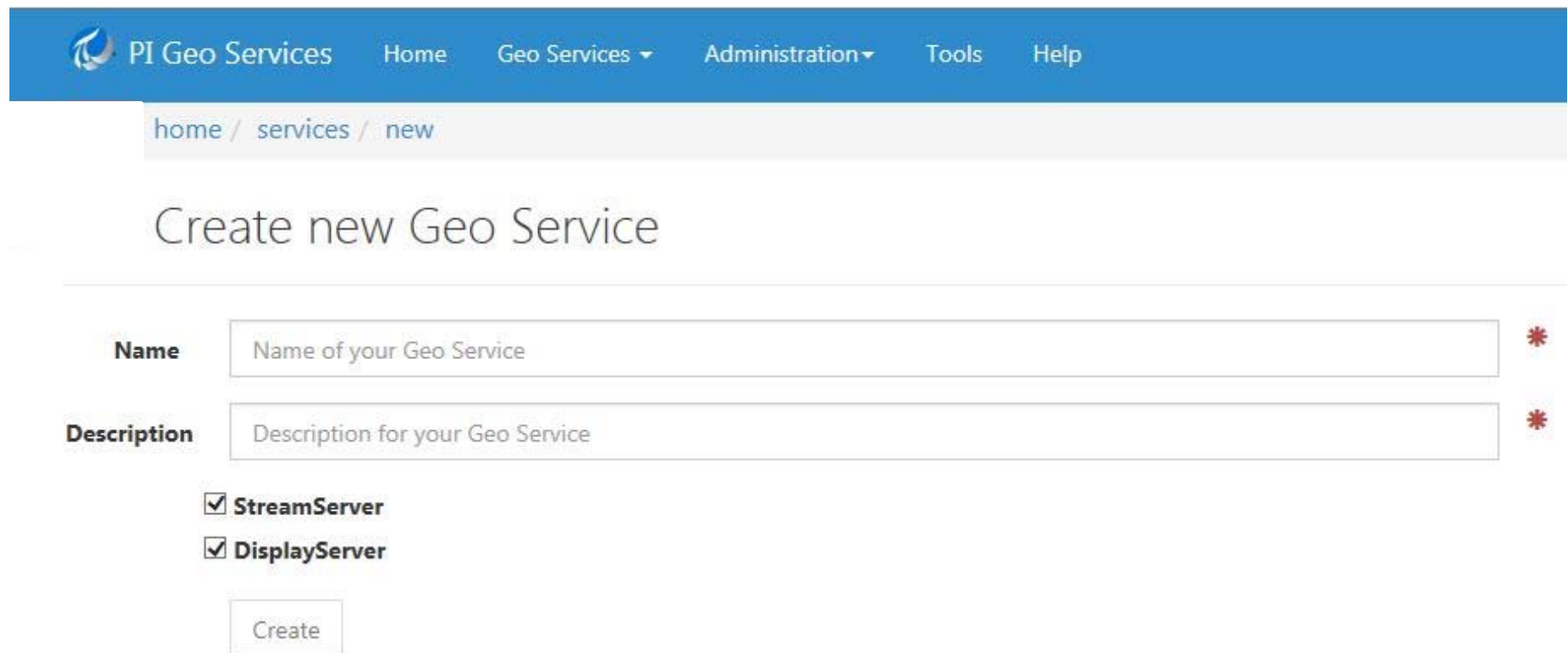
Iteratively and Incrementally Add New Capabilities using COTS



...Each iteration results in deliverables you can use

Portal Configuration Experience

Not a programming project!



The screenshot shows the 'PI Geo Services' portal interface. At the top is a blue navigation bar with the logo and links for Home, Geo Services (with a dropdown arrow), Administration (with a dropdown arrow), Tools, and Help. Below the navigation bar is a breadcrumb trail: 'home / services / new'. The main heading is 'Create new Geo Service'. The form contains two required text input fields: 'Name' with the placeholder 'Name of your Geo Service' and 'Description' with the placeholder 'Description for your Geo Service', both marked with a red asterisk. Below these are two checked checkboxes: 'StreamServer' and 'DisplayServer'. At the bottom of the form is a 'Create' button.

PI Geo Services Home Geo Services ▾ Administration ▾ Tools Help

home / services / new

Create new Geo Service

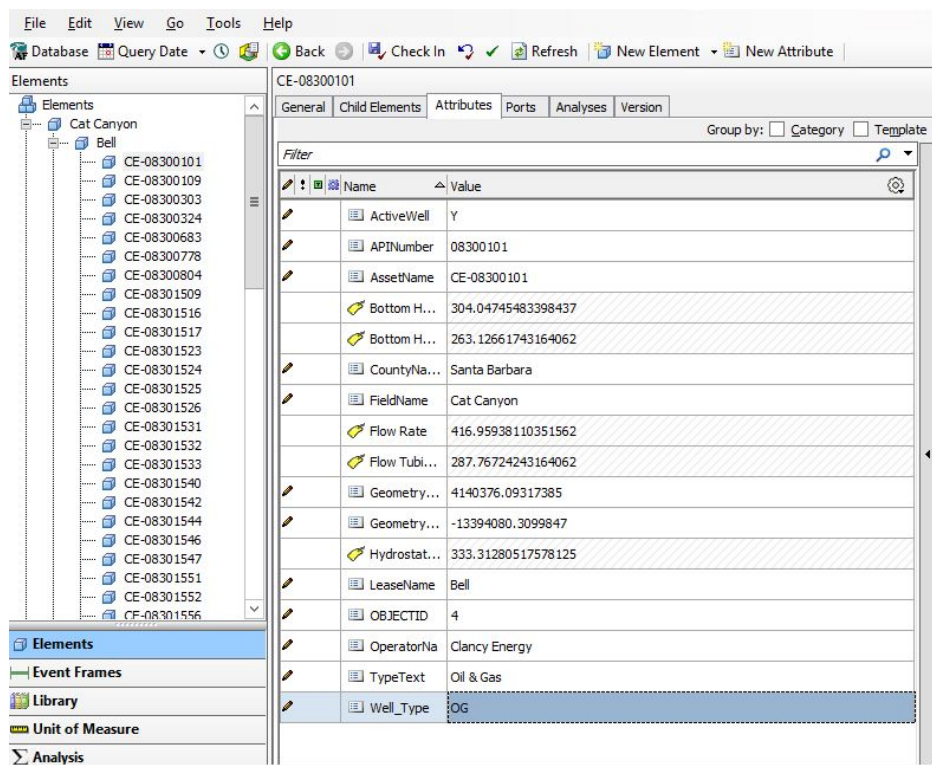
Name *

Description *

☒ **StreamServer**

☒ **DisplayServer**

Publish your layer



Find search root in database PUG Well Data on server AFSSERVER-DEMO

PUG Well Data / Cat Canyon / Bell

Cat Canyon	Bell	
Supervisor John	Blochman	CE-08300101
Vehicles	Brooking	CE-08300109
	Delaney-Tunnell	CE-08300303
	Dominion	CE-08300324
	Field Fee	CE-08300683
	Fugler	CE-08300778
	Fullerton	CE-08300804
	G.W.P.	CE-08301509
	GWP-RF	CE-08301516
	Los Flores	CE-08301517
	Palmer Stendel	CE-08301523
	Palmer-Stendel	CE-08301524
	Pyramid-DT	CE-08301525
	Recruit Fee	CE-08301526
	Sturgeon	CE-08301531
		CE-08301532

Preview the Elements

Selection preview (elements) ✕

Search:

Sort: [A - Z](#) [Z - A](#)

currently showing 149 elements

Aurora 15-8-7-20	
api	43-047-51509
county	Uintah
datum	NAD83
fid	912
flow	120.59617614746094
fracture_d	0001-01-01T00:00:00
geometryLatitude	4897739.843655001
geometryLongitude	-12210958.105615238
latitude	40.218464
longitude	-109.692903
operator	Bill Barrett Corp
pdf_seqid	31300
production	Oil
published	0001-01-01T00:00:00
r_seqid	968
state	Utah
total_wate	840706
true_verti	8048
well Pressure	88.42372131347656
well_name	Aurora 15-8-7-20
wellhead Flow	88.42372131347656

Aurora Federal 3-20D-7-20	
api	43-047-52005
county	Uintah
datum	NAD83
fid	924
flow	120.59617614746094
fracture_d	0001-01-01T00:00:00
geometryLatitude	4895459.45020187
geometryLongitude	-12211124.750869216
latitude	40.20282
longitude	-109.6944
operator	Bill Barrett Corp
pdf_seqid	31296
production	Oil
published	0001-01-01T00:00:00
r_seqid	972
state	Utah
total_wate	663228
true_verti	9974
well Pressure	88.42372131347656
well_name	Aurora Federal 3-20D-7-20
wellhead Flow	88.42372131347656

BBC 1-32D-36 BTR	
api	43-013-50979
county	Duchesne
datum	NAD83
fid	927
flow	120.59617614746094
fracture_d	0001-01-01T00:00:00
geometryLatitude	4892367.09544241
geometryLongitude	-12309842.875318035
latitude	40.1816
longitude	-110.5812
operator	Bill Barrett Corp
pdf_seqid	31295
production	Oil
published	0001-01-01T00:00:00
r_seqid	973
state	Utah
total_wate	972794
true_verti	9456
well Pressure	88.42372131347656
well_name	BBC 1-32D-36 BTR
wellhead Flow	88.42372131347656

BBC 5-27D-37 BTR	
api	43-013-50847
county	Duchesne
datum	NAD83

Beckstead 11-17-4-2W	
api	43-013-50446
county	Duchesne
datum	NAD27

Beckstead 14-17-4-2W	
api	43-013-50448
county	Duchesne
datum	NAD83

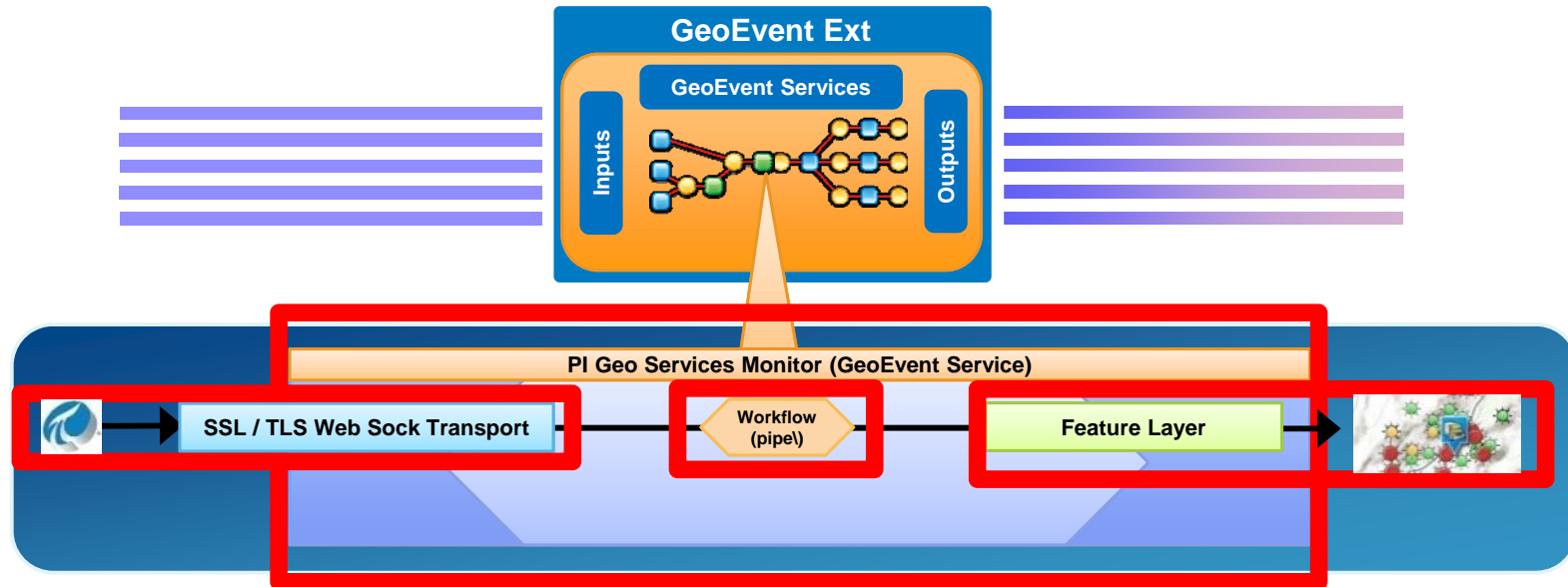
Close

OSIsoft does the work for you with each layer


- Automatic Configuration
 - ArcGIS GeoEvent Extension Input Connector
 - ArcGIS GeoEvent Extension Output Connector
 - ArcGIS GeoEvent Extension Workflow
- Create PI Coresight Endpoint

Stream Service

Configuration Results






Coresight End Point Created

 PI Geo Services

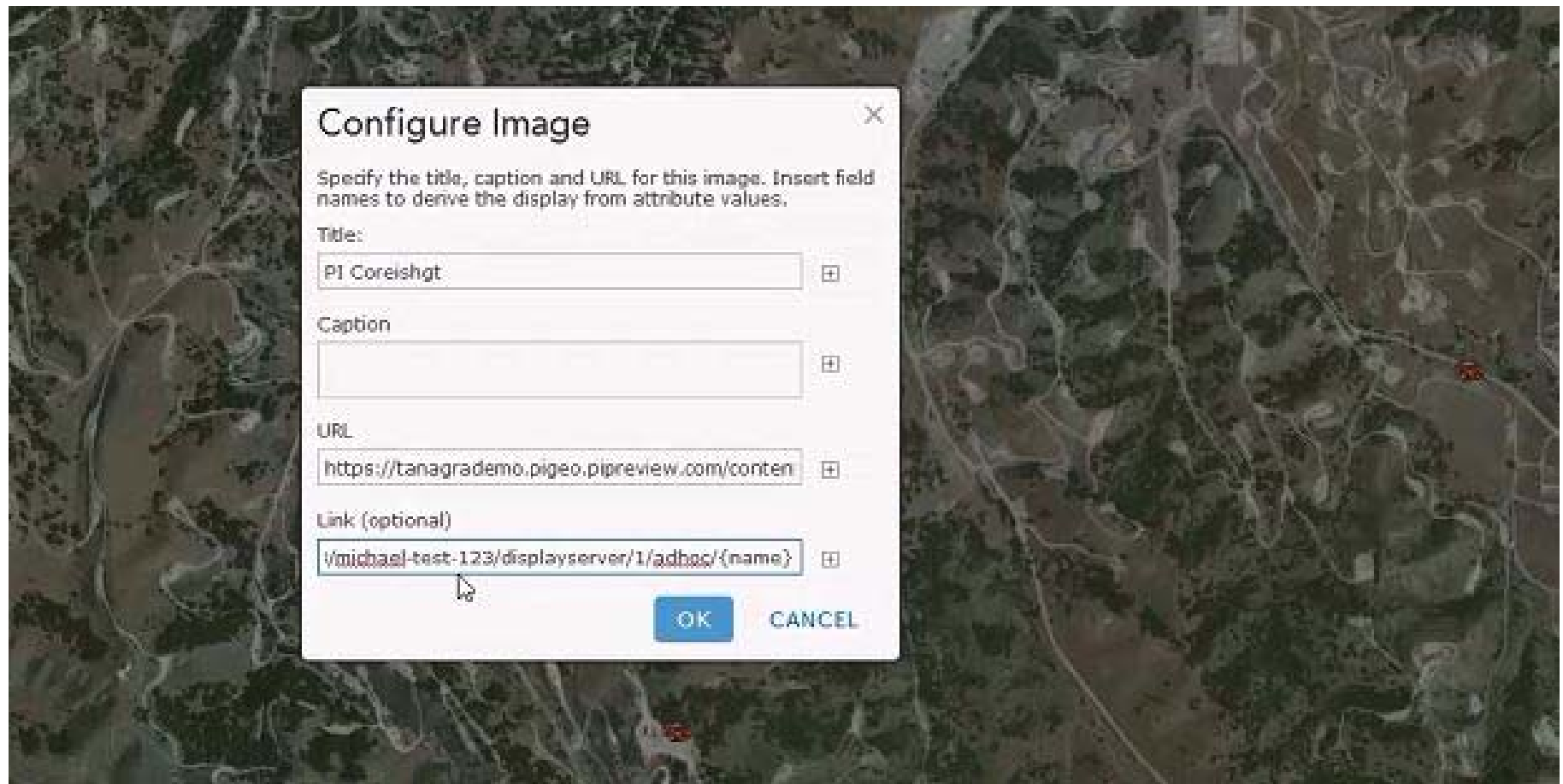
HomeGeo Services ▾Administration ▾ToolsHelp

Kuiee, Michelle | Log Off

Sharing

Ad hoc display	https://tanagrademo.pigeo.pipreview.com/api/services/michael-test-123/michael-test-123/displayserver/0/adhoc/	
AF Button Image	https://tanagrademo.pigeo.pipreview.com/content/img/display/analyse-af.png	 Analyze
OSIsoft Button Image	https://tanagrademo.pigeo.pipreview.com/content/img/display/analyse-osisoft.png	 Analyze
Coresight Button Image	https://tanagrademo.pigeo.pipreview.com/content/img/display/analyse-coresight.png	 Analyze

Configure Pop Up to Launch PI Coresight



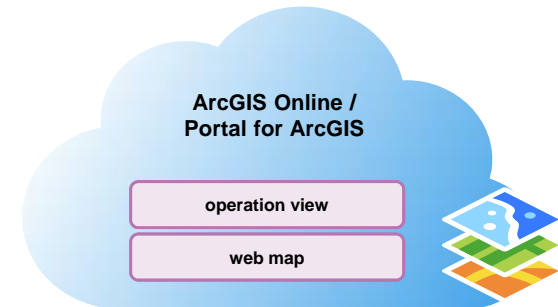
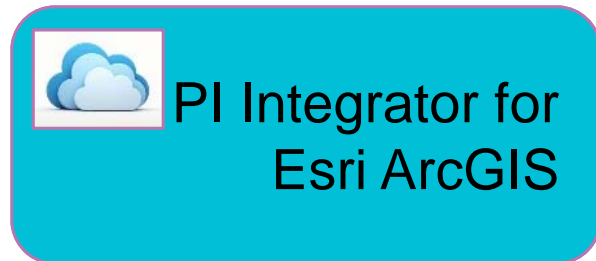
Pop Up with PI Coresight Hyperlink



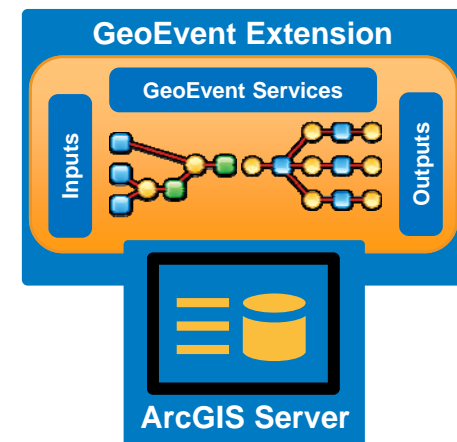
PI Integrator for Esri ArcGIS

- Automatic Configuration of GeoEvent Ext
- Send PI Current Values to ArcGIS Platform
- Analyse historical data with PI Coresight
 - Ad Hoc Trends
 - Processbook Displays via PB Viewer
- Jump Start PI AF

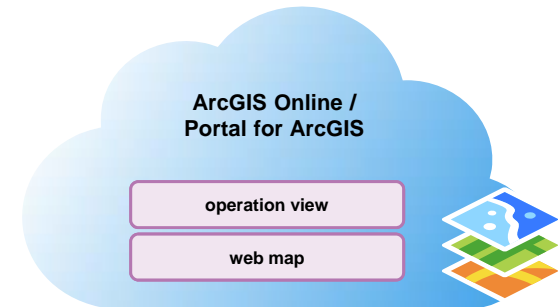
Cloud Architecture



PI System

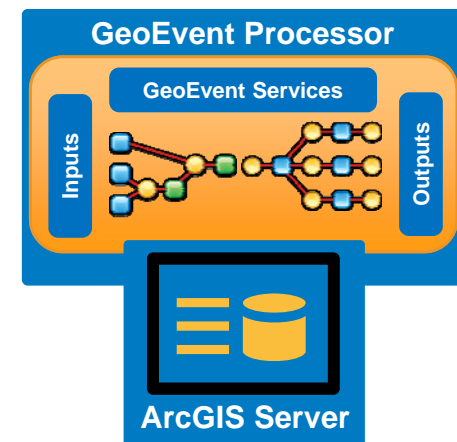


On Prem Architecture



PI System

PI Integrator
for
Esri ArcGIS



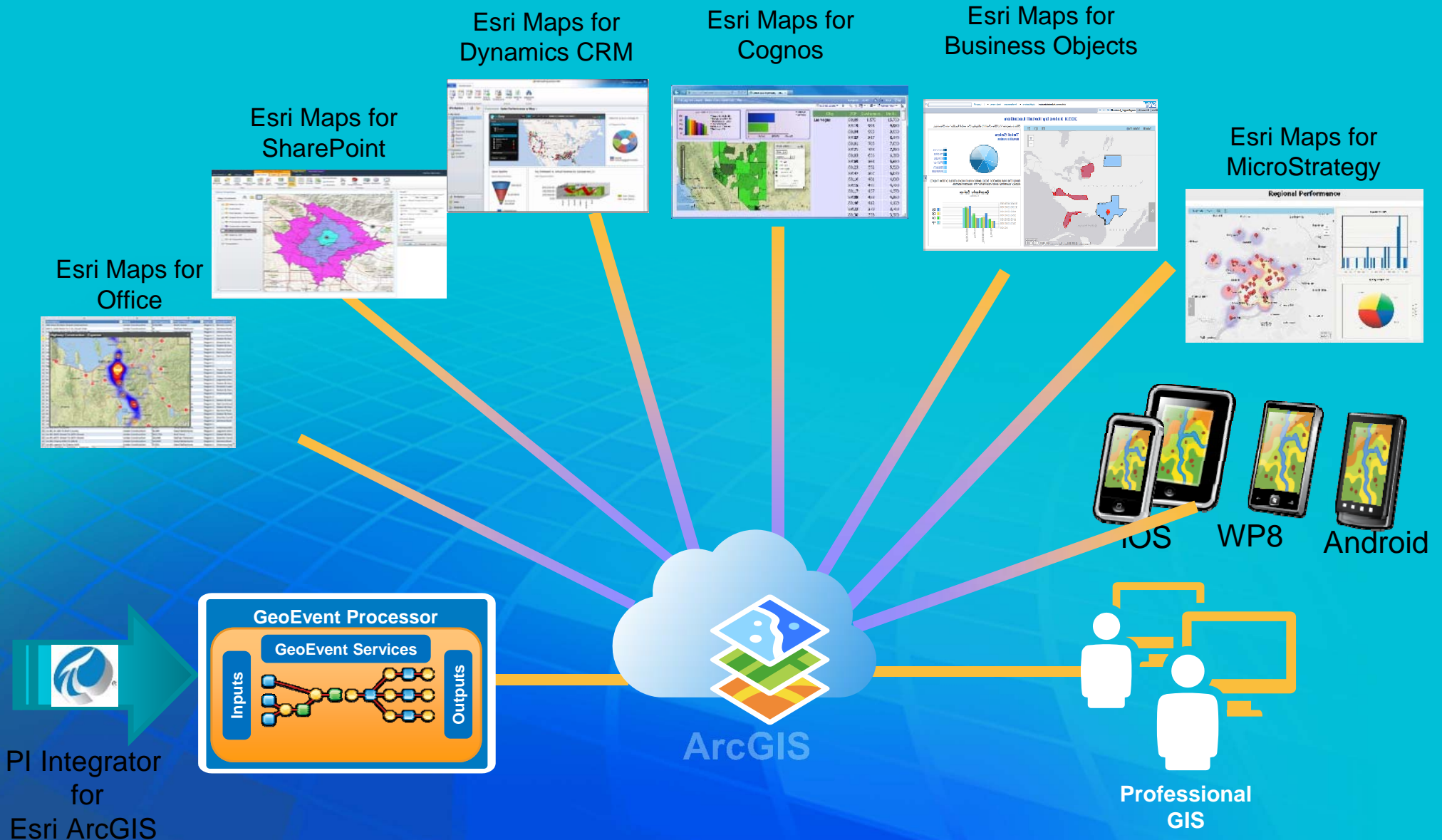
OSIsoft and Esri Supports Everyone

Providing a Common Real Time Location Platform

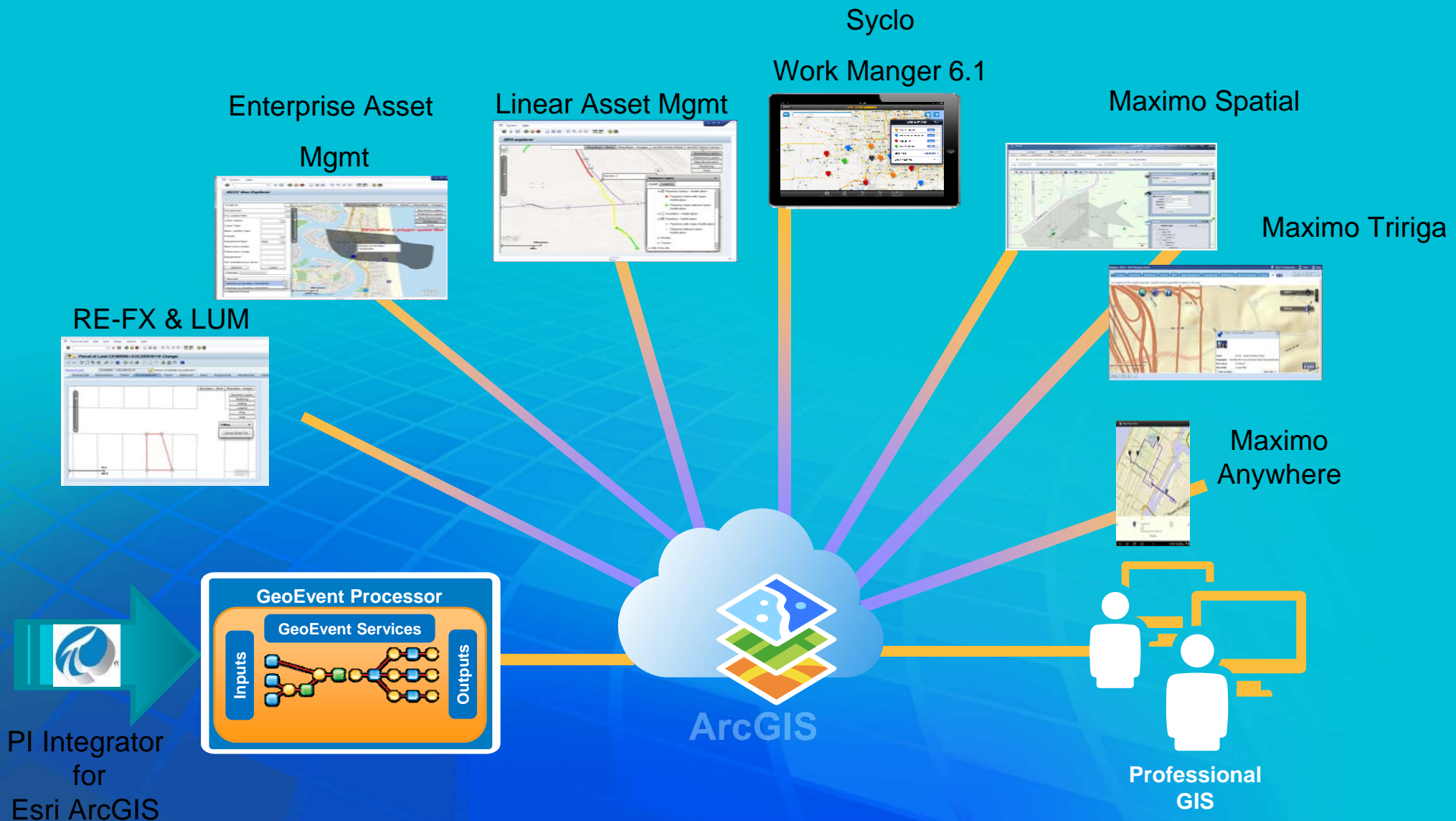


PI Integrator
for
Esri ArcGIS

OSIsoft and Esri Supports Real Time Across the Enterprise



OSIsoft and Esri Supports Real Time Across the Enterprise





Top 7

1. Configurable Integration
2. Deliver Real Time data across the organisation on any device, any app, any time
3. Designed for non technical users
4. Increase Speed of Deployment
5. Greater Agility to meet changing business need
6. Better Business Decisions
7. Reduced Costs and Higher Value



THANK YOU



Brought to you by  **OSIsoft.**