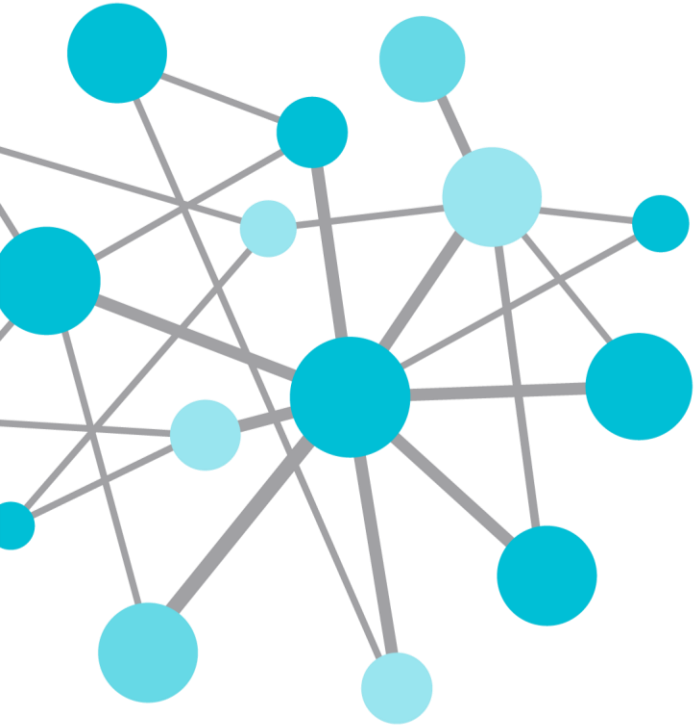
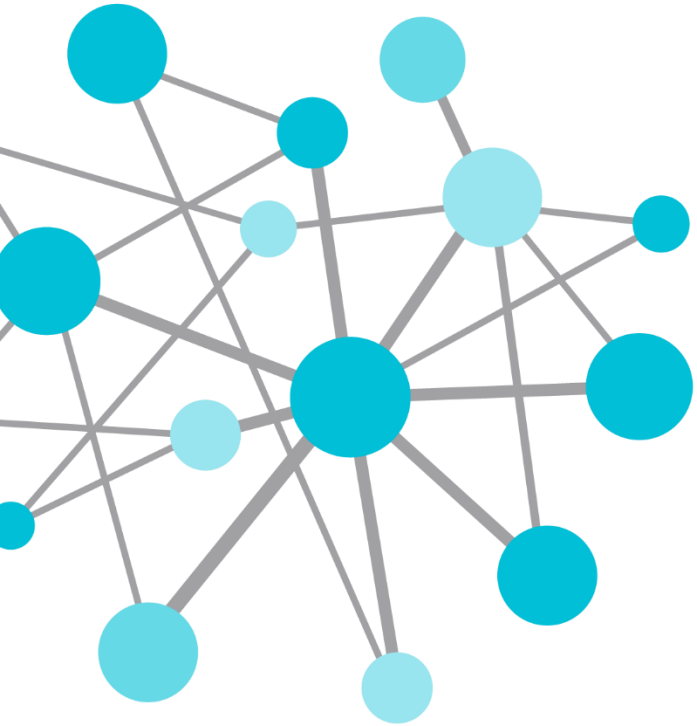


WELCOME

Brought to you by OSIsoft.

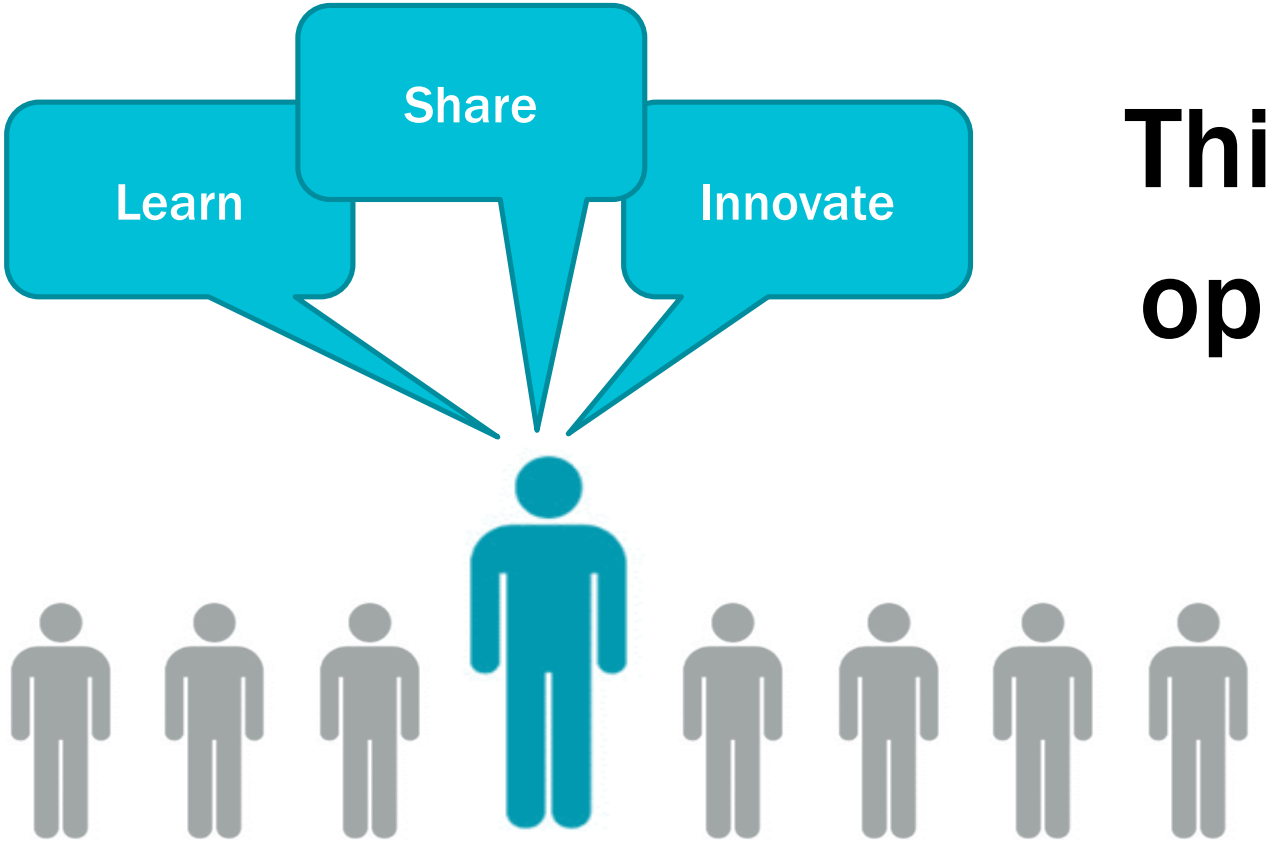
© Copyright 2014-15 OSIsoft, LLC.



The Journey To Operational Intelligence

Presented by **Pasha Ahmad, General Manager, Middle East and Africa**

© Copyright 2014-15 OSIsoft, LLC.



This is your opportunity!

© Copyright 2014-15 OSIsoft, LLC.

Agenda

Journey To Operational Intelligence

Megatrends Influencing Operations

Innovating for the Art of the Possible

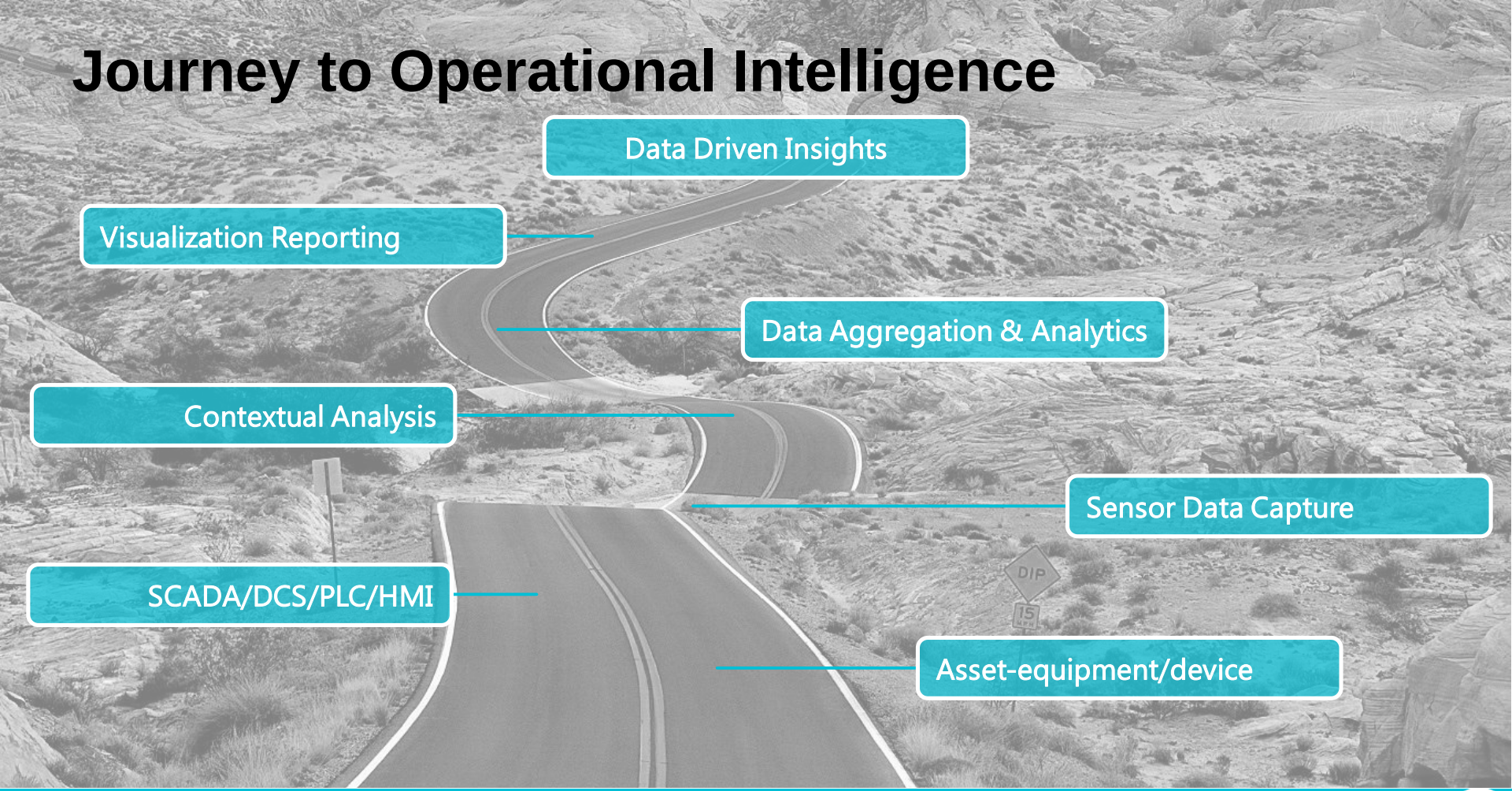
© Copyright 2014-15 OSIsoft, LLC.

Real-time Operations Data Created Everywhere

- Creating islands of systems
- Demanding we connect data, to systems, to people, to actions
- Availability and accessibility of this data is critical

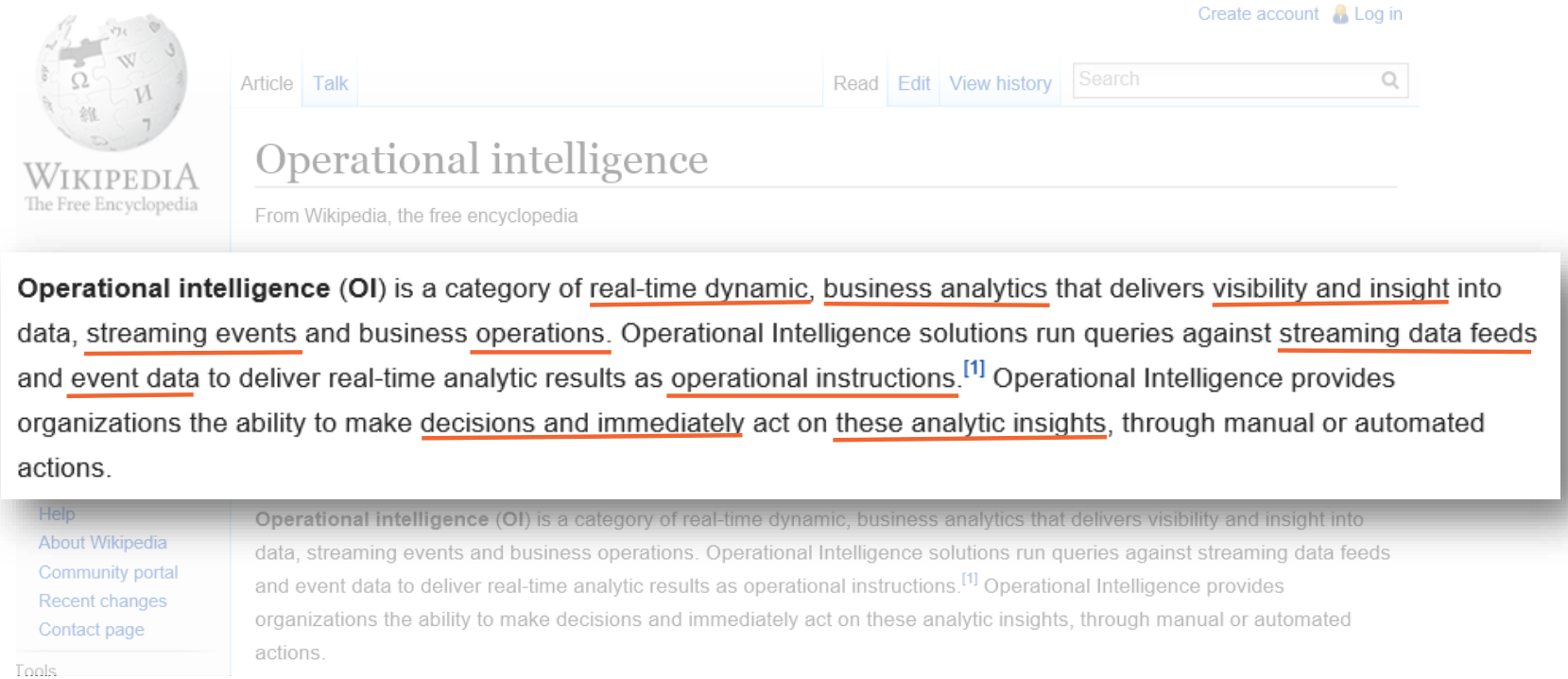
© Copyright 2014-15 OSIsoft, LLC.

Journey to Operational Intelligence



© Copyright 2014-15 OSIsoft, LLC.

Operational Intelligence



Create account Log in

Article Talk Read Edit View history Search

WIKIPEDIA
The Free Encyclopedia

Operational intelligence

From Wikipedia, the free encyclopedia

Operational intelligence (**OI**) is a category of real-time dynamic, business analytics that delivers visibility and insight into data, streaming events and business operations. Operational Intelligence solutions run queries against streaming data feeds and event data to deliver real-time analytic results as operational instructions.[1] Operational Intelligence provides organizations the ability to make decisions and immediately act on these analytic insights, through manual or automated actions.

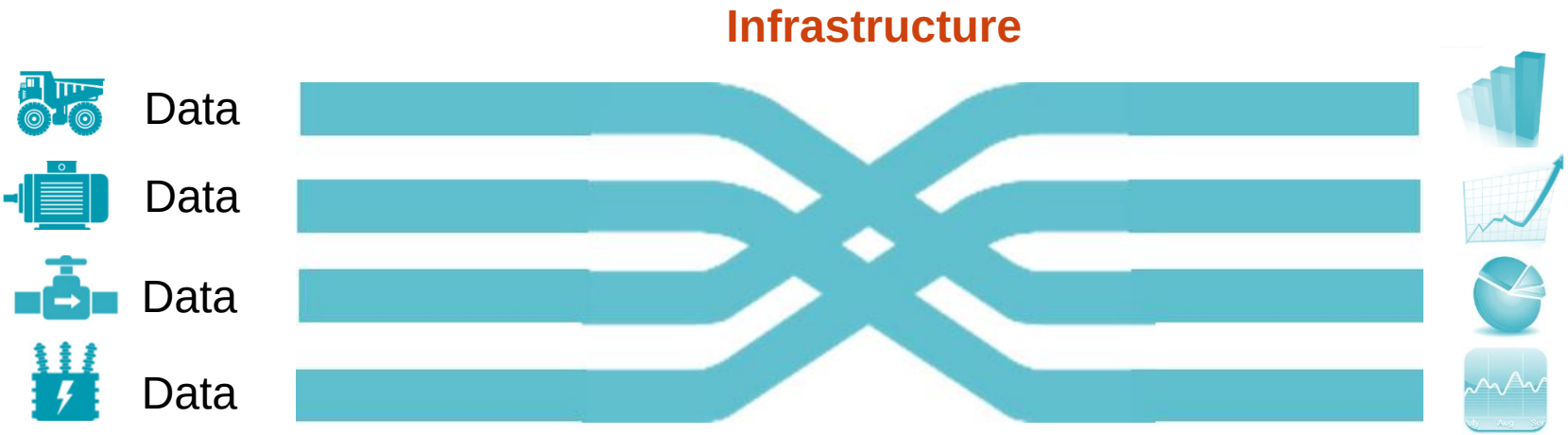
Help
About Wikipedia
Community portal
Recent changes
Contact page

Tools

Operational intelligence (**OI**) is a category of real-time dynamic, business analytics that delivers visibility and insight into data, streaming events and business operations. Operational Intelligence solutions run queries against streaming data feeds and event data to deliver real-time analytic results as operational instructions.[1] Operational Intelligence provides organizations the ability to make decisions and immediately act on these analytic insights, through manual or automated actions.

© Copyright 2014-15 OSIsoft, LLC.

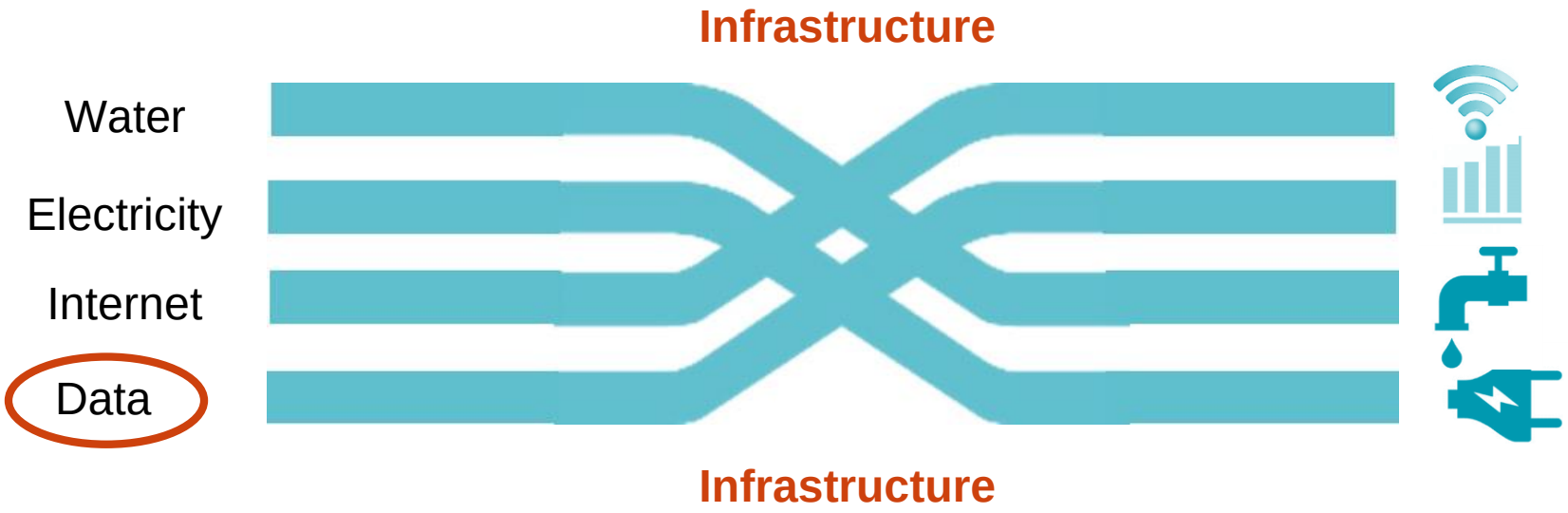
The Solution- Enterprise Infrastructure



Connect the right data to the right people in the right context
for the right decisions in real-time

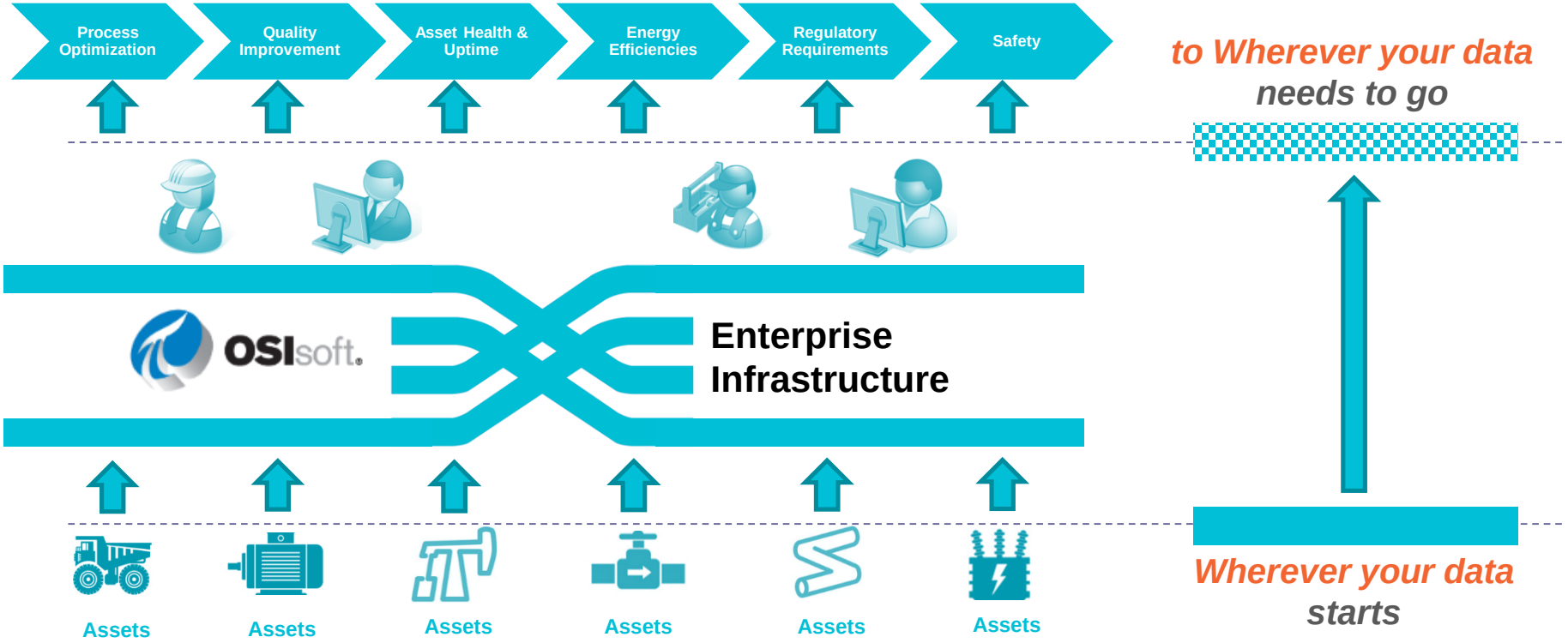
© Copyright 2014-15 OSIsoft, LLC.

Data is Critical to Your Infrastructure



© Copyright 2014-15 OSIsoft, LLC.

An Enterprise Infrastructure



© Copyright 2014-15 OSIsoft, LLC.

Partner Ecosystem for Infrastructure Excellence

Infrastructure

185+ Partners

- Integrations
- Services
- Embedded

© Copyright 2014-15 OSIsoft, LLC.

Agenda

Journey To Operational Intelligence

Megatrends Influencing Operations

Innovating for the Art of the Possible

© Copyright 2014-15 OSIsoft, LLC.

Global Megatrends: Why?

IOT

- Predictive behaviors
- Operational efficiency
- Asset management

Cloud

- Connecting distributed sites
- Lower cost of owner ship
- Easier/faster deployment

Mobility

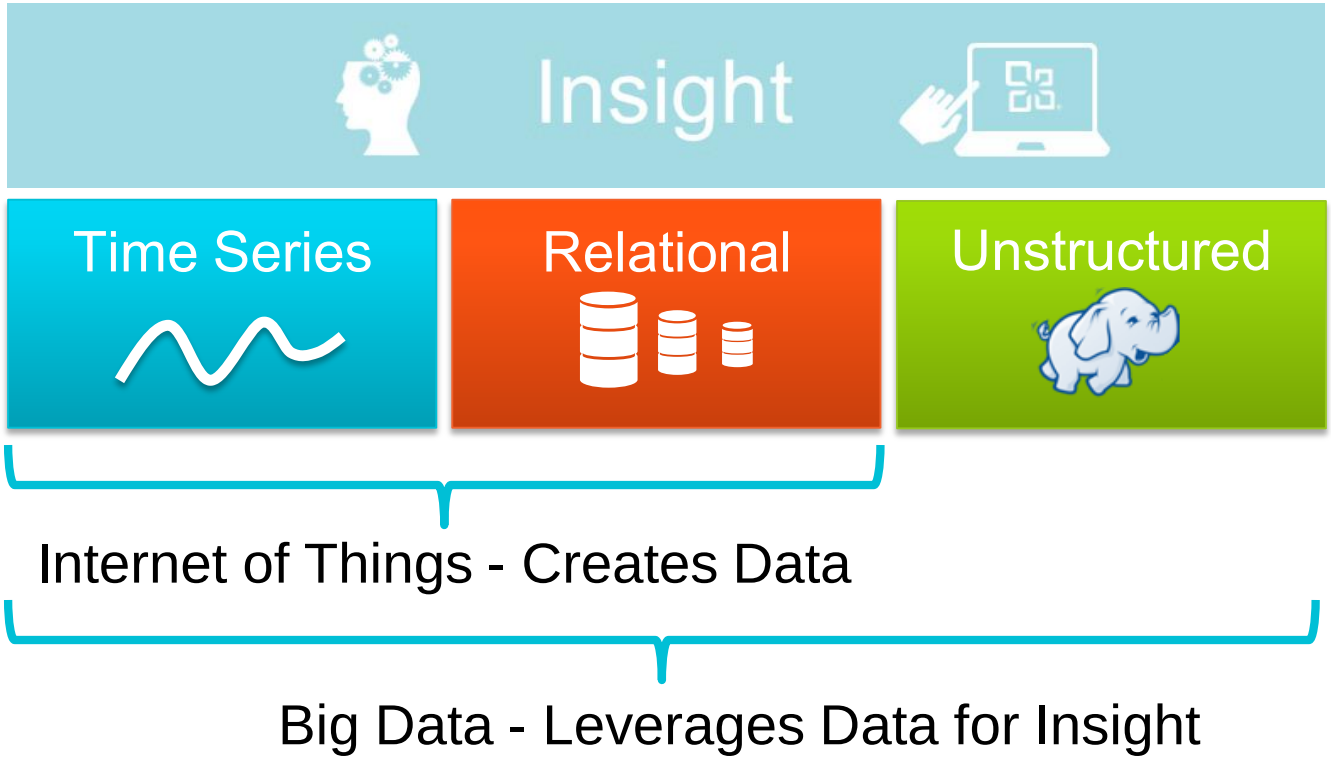
- Connecting people
- Real time context
- In situ decisions

Big Data

- Combined business and operations insights
- Wide scale analytics

© Copyright 2014-15 OSIsoft, LLC.

Your PI Infrastructure is Essential for Big Data



© Copyright 2014-15 OSIsoft, LLC.

Agenda

Journey To Operational Intelligence

Megatrends Influencing Operations

Innovating for the Art of the Possible

© Copyright 2014-15 OSIsoft, LLC.

OSIsoft PI System 2015 Developments

Predictive Analytics / Simulations

Integration with Big Data Analytics

Integration with Business Systems

© Copyright 2014-15 OSIsoft, LLC.

Columbia Pipeline

Columbia Pipeline Group℠

- Company specialized in the transportation of natural gas
- Established of a strategy of Operational Intelligence in 2011
  - *Internal code name Enterprise Analytics*
- The project was accelerated by the Enterprise Agreement of OSIsoft

"Columbia Pipeline kept the east of the United States warm during the last difficult winter"

© Copyright 2014-15 OSIsoft, LLC.

Partnership for Innovation

Carnegie Mellon University + OSIsoft + Microsoft

- Collecting real time data using the **OSIsoft PI System**
- Integrated with **Power BI for Office 365, Azure Machine Learning (ML)**
- Predicting energy consumption and equipment faults across buildings
- Predictions stored as “Future Data” in PI 2015 (CTP).
- Real-time Visualization on PI Coresight
- Documented up to 30% energy savings

Case Study: http://bit.ly/1kcqxAA

“With OSIsoft and Microsoft data and cloud technologies, we can integrate almost any device interface and data type.”

Bertrand Lasternas, Researcher
Carnegie Mellon

© Copyright 2014-15 OSIsoft, LLC.

Step Ahead

Example: Fault Detection and Diagnostic (Predictive Maintenance)

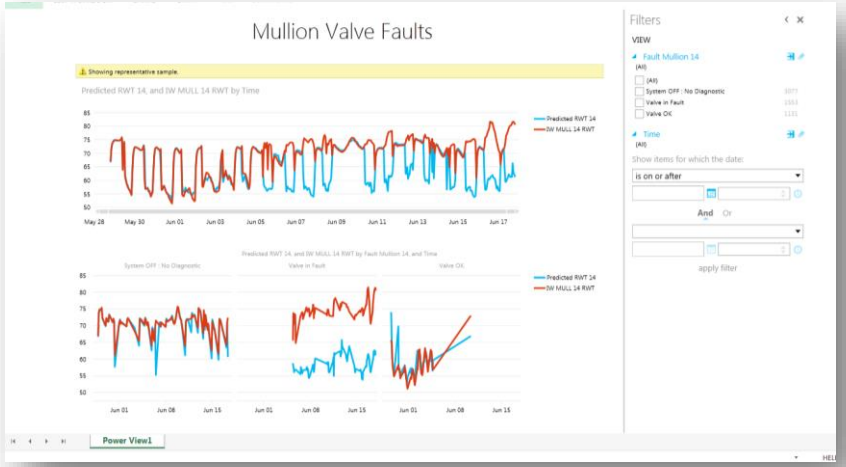
1/Collect Data Real-Time

2/ Train Model against baseline

3/ Predict (project) baseline behavior

4/ Measure variation between prediction and measured behavior

5/ Trigger notification, corrective actions



Microsoft Power BI

© Copyright 2014-15 OSIsoft, LLC.

Summary: Operational Intelligence

- It’s a Journey
- Accelerated by the right infrastructure
- Megatrends taking us to new places

“Intelligence without data is the slowest path to success. Data without intelligence is the noise before failure”

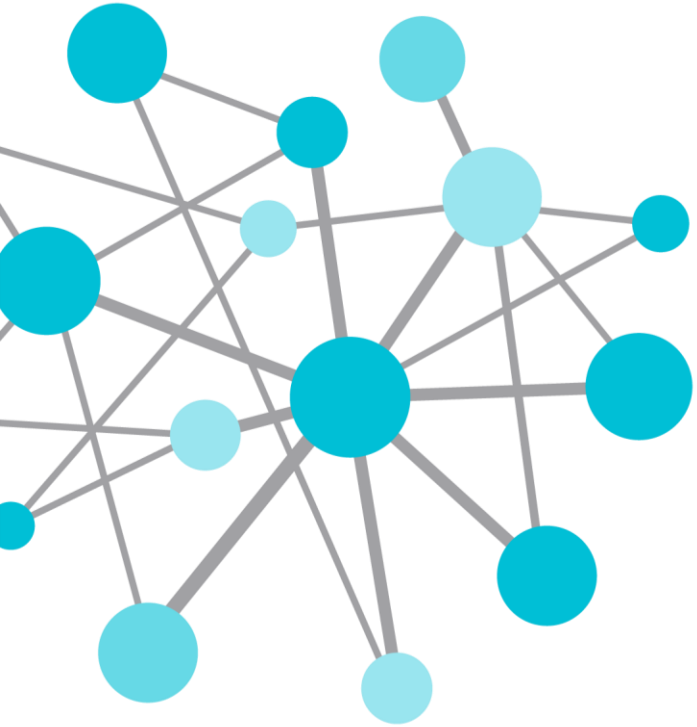
© Copyright 2014-15 OSIsoft, LLC.

Questions

Please wait for the **microphone** before asking your questions

State your **name & company**

© Copyright 2014-15 OSIsoft, LLC.



THANK YOU

Brought to you by OSIsoft.

© Copyright 2014-15 OSIsoft, LLC.