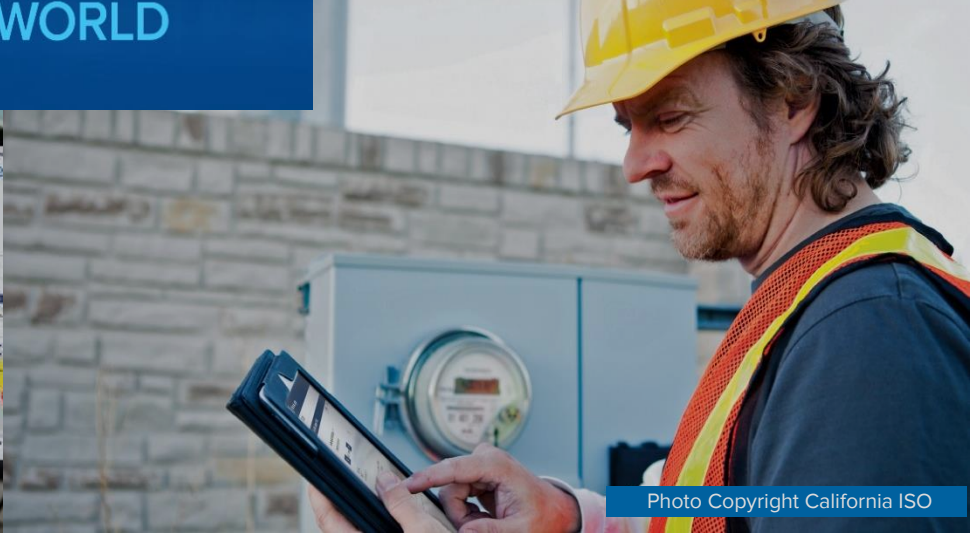


TRANSFORM  
YOUR WORLD



# Digital Transformation with Today's PI System

Eric Moorehead, Business Development  
Manager

October 11<sup>th</sup>, 2016

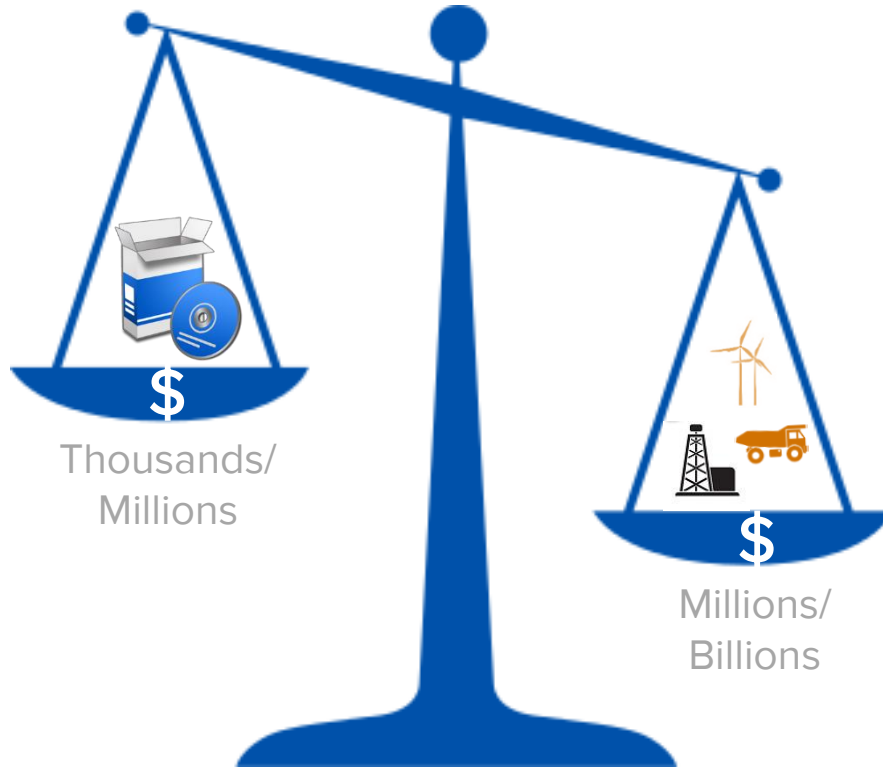


The slide features five decorative blue spheres. One large sphere is in the top-left corner, another large one is in the top-right corner. In the bottom-left corner, there is a medium-sized sphere. In the bottom-right corner, there are two smaller spheres, one slightly larger than the other, positioned diagonally from each other.

People with data will transform their world



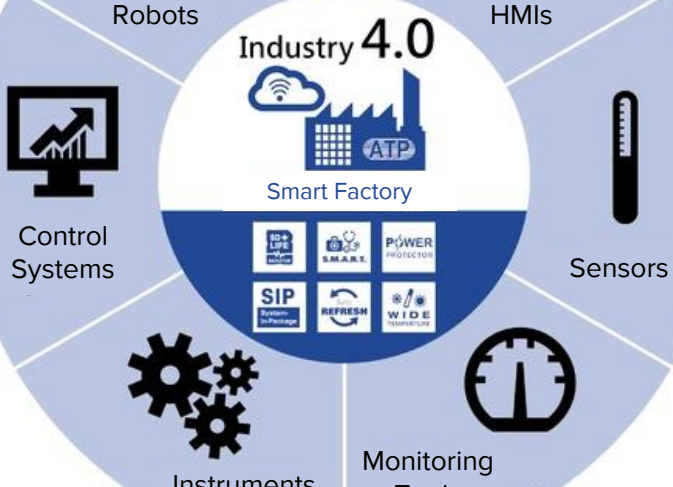
# Today is a Great Time to Look at Your Data



Today, the PI System can allow you to use the data you already have to

- Increase production
- Extend the life of equipment
- Reduce energy costs

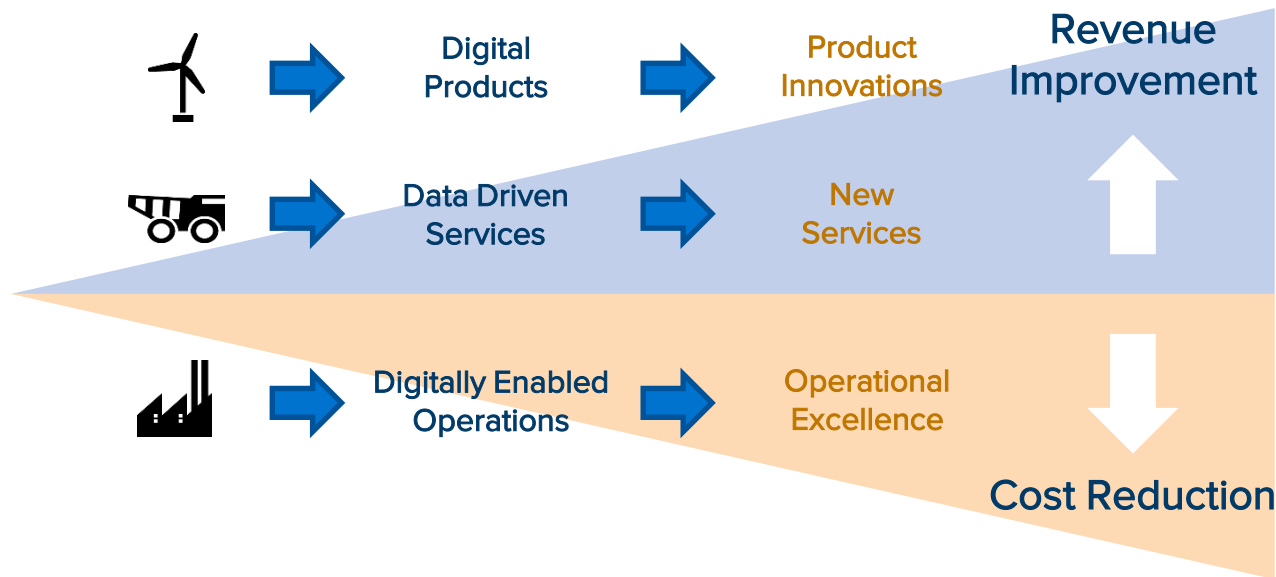




# Where Are PI System Users Headed In the Near Future?

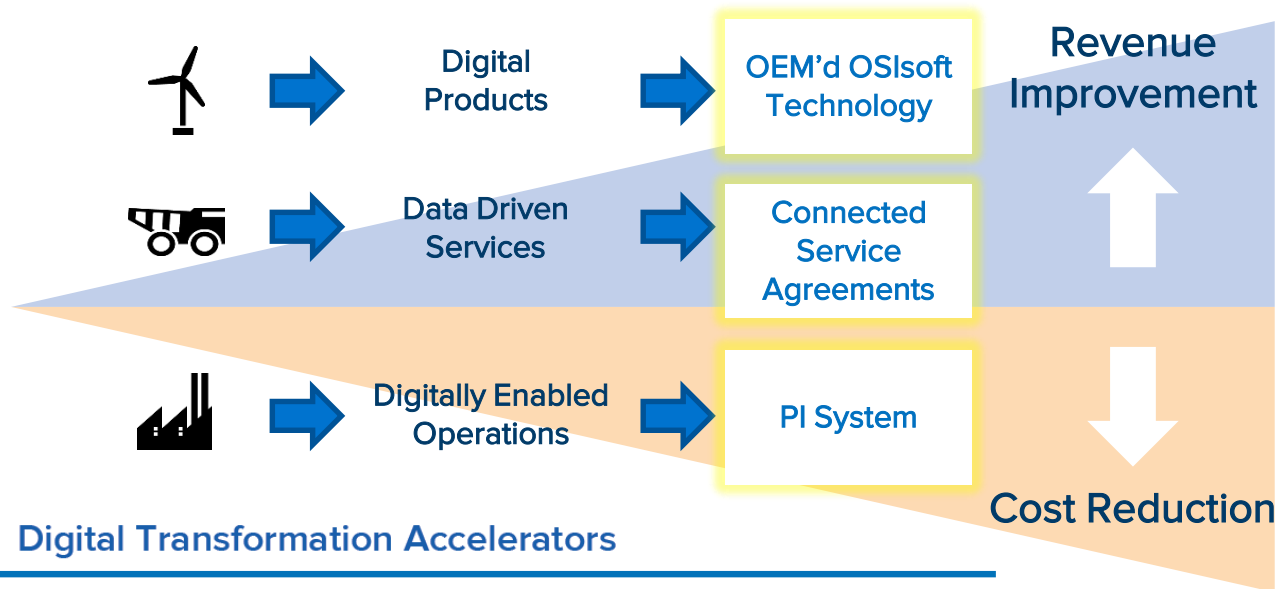
What is Today's Digital Transformation Opportunity?

## Digital Transformation



# The PI System is Positioned To Help!

## OSIsoft Offerings



Integrators



Marketplace Solutions



Cloud Services



OSIsoft Services



# IoT is Nothing New to the PI System!

## What's “New” From IoT

More data **sources**

More data **protocols**

Faster data **collection**

Larger data **volumes**

More **destinations** for data



## What the PI System Excels At

**Aggregating** data sources

**Translating** data protocols

Collecting data at high **speed**

Efficiently **archiving** data

**Delivering** data to users





# We Should Be Excited About What IoT Can Bring!

Your PI Systems have **already** been connecting sensor-based data to decisions for over **30 years!**

In our new Internet of Things report, we project there will be **34 billion** devices connected to the internet by **2020**, up from 10 billion in 2015

*Business Insider, Nov 2015*

'Internet of Things' Connected Devices to Almost Triple to Over 38 Billion Units by 2020

*Juniper Networks, July 2015*

Gartner indicates the market for Internet of Things devices is poised to explode and will reach nearly **21 billion** connected devices by **2020**

*Gartner, Q4 2015*

Looking to the future, Cisco IBSG predicts there will be 25 billion devices connected to the Internet by 2015 and **50 billion** by **2020**

*Cisco, April 2015*



# The PI System is Already Accommodating IoT

Existing PI Interfaces and PI Connectors already accept streaming data from IoT solutions from Arduino, Qualcomm, Cisco, Dell, and others

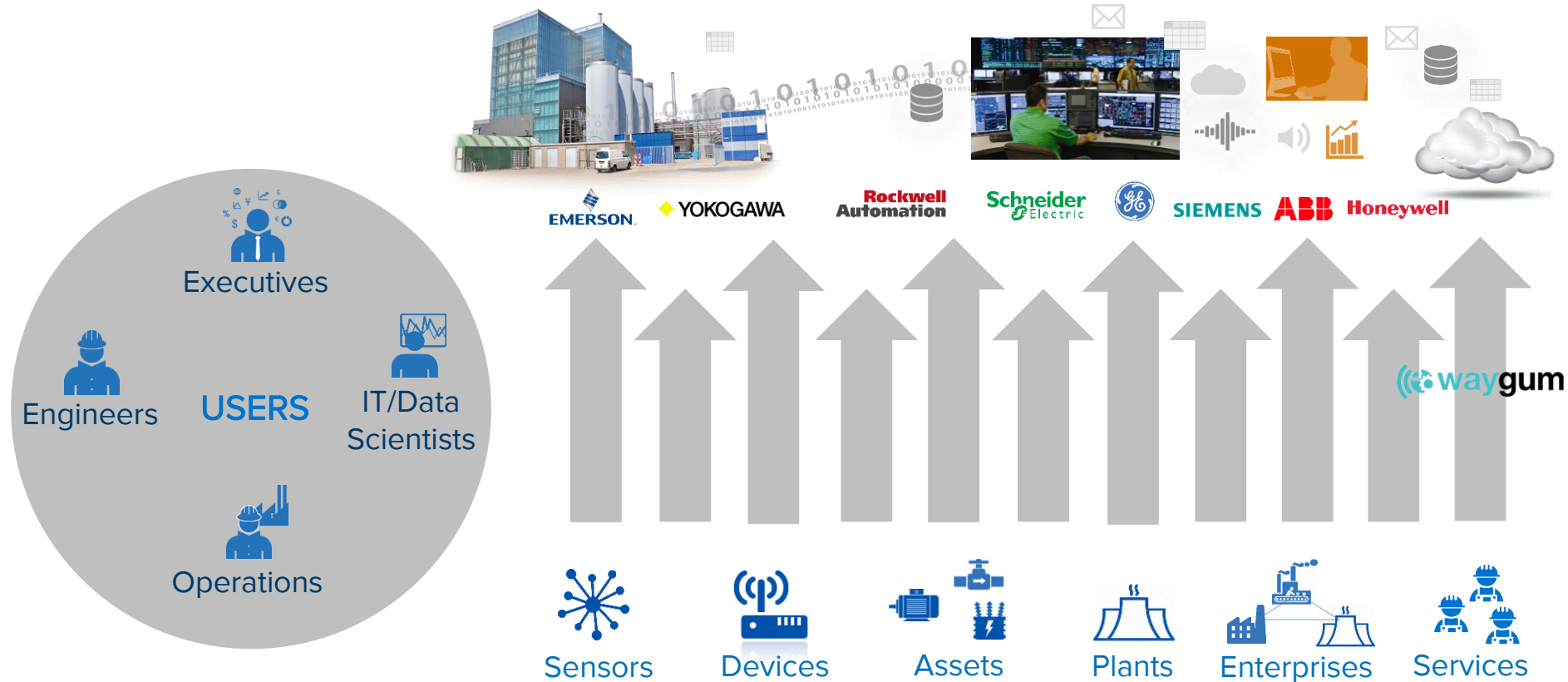
- Cisco routers running an embedded PI Connector for DNP3
- PI Connector for UFL accepting sensor JSON data from National Instruments CompactRIOs, Qualcomm DragonBoards, and more



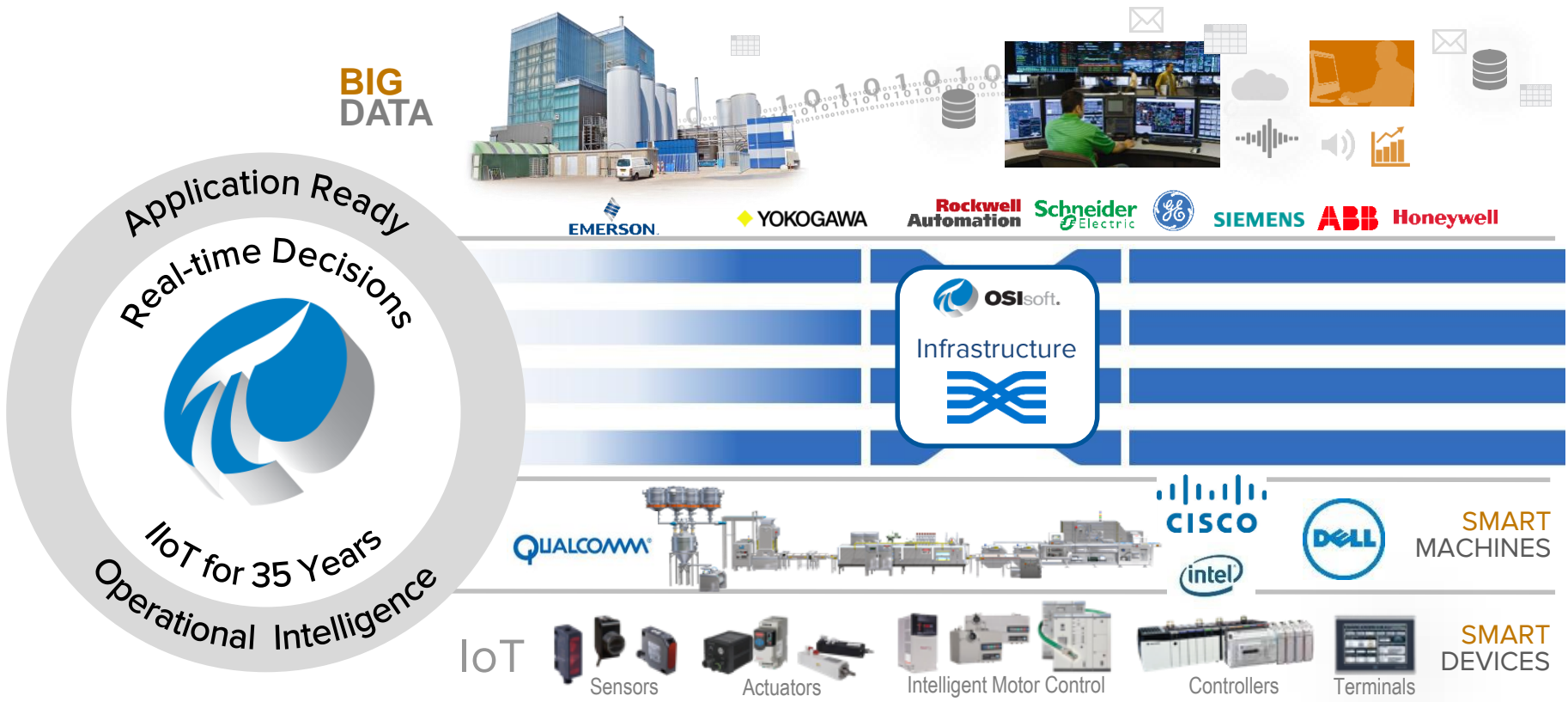
OSIsoft's Engineering Team is applying our industry-leading data collection expertise to develop Interfaces and Connectors suited for IoT

- OSIsoft Messaging Format initiative
- Cross-platform Interfaces and Connectors
- Integration with third-party IoT Hubs

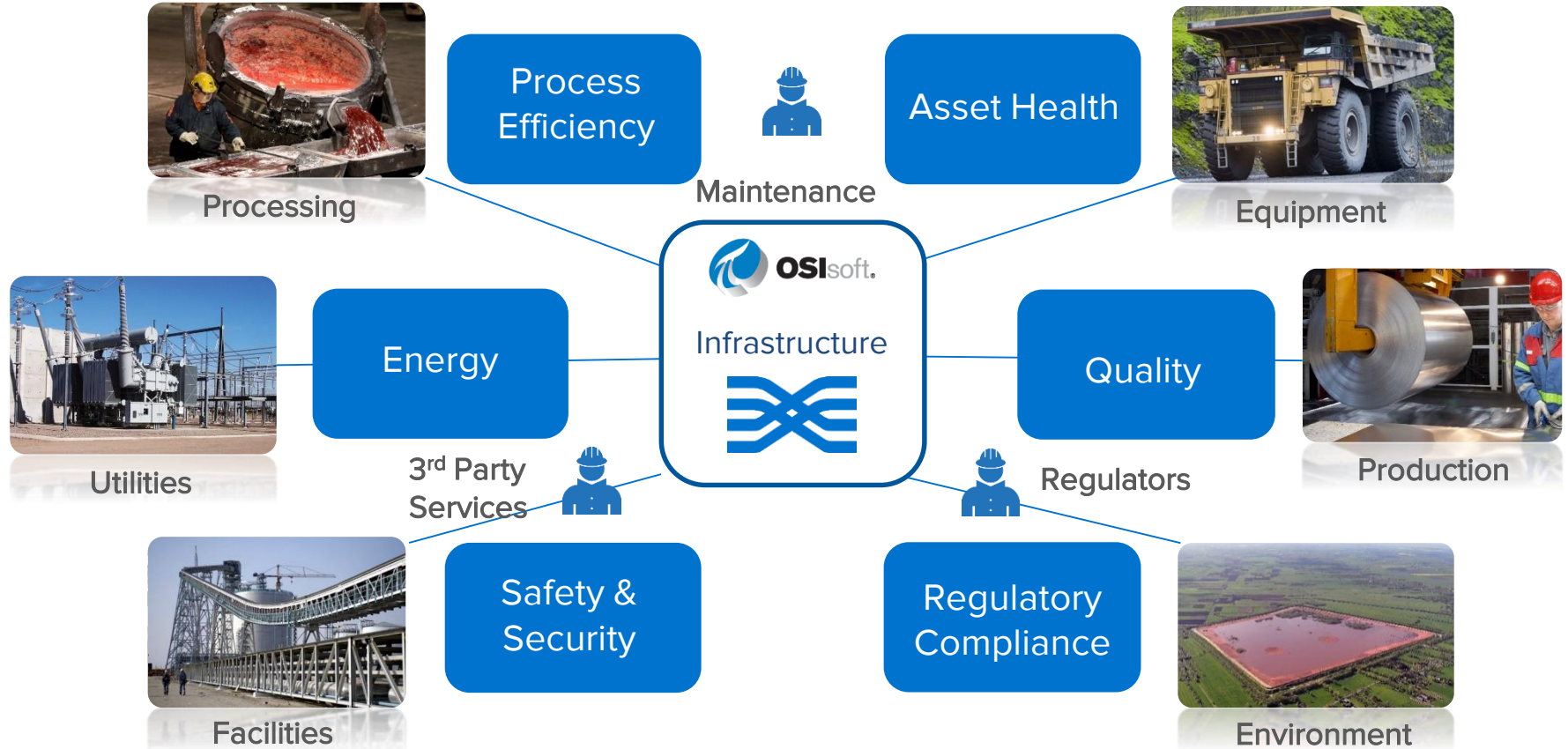
# The Digital Challenge



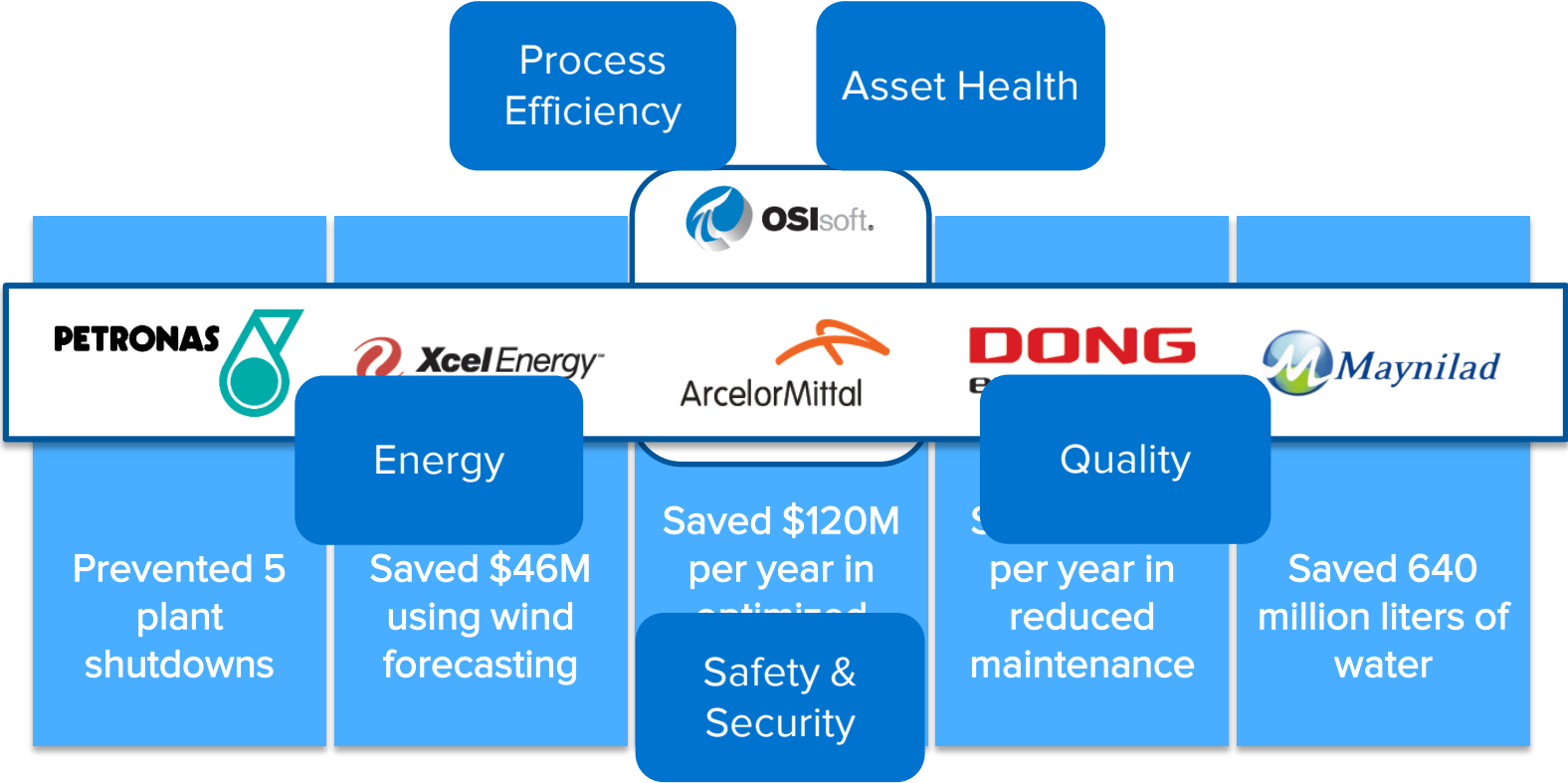
# OSIsoft Provides Data Infrastructure for Digital Transformation



# Data Infrastructure: Improving Your Ongoing Journey



# Data Infrastructure: An Agent for Business Transformation





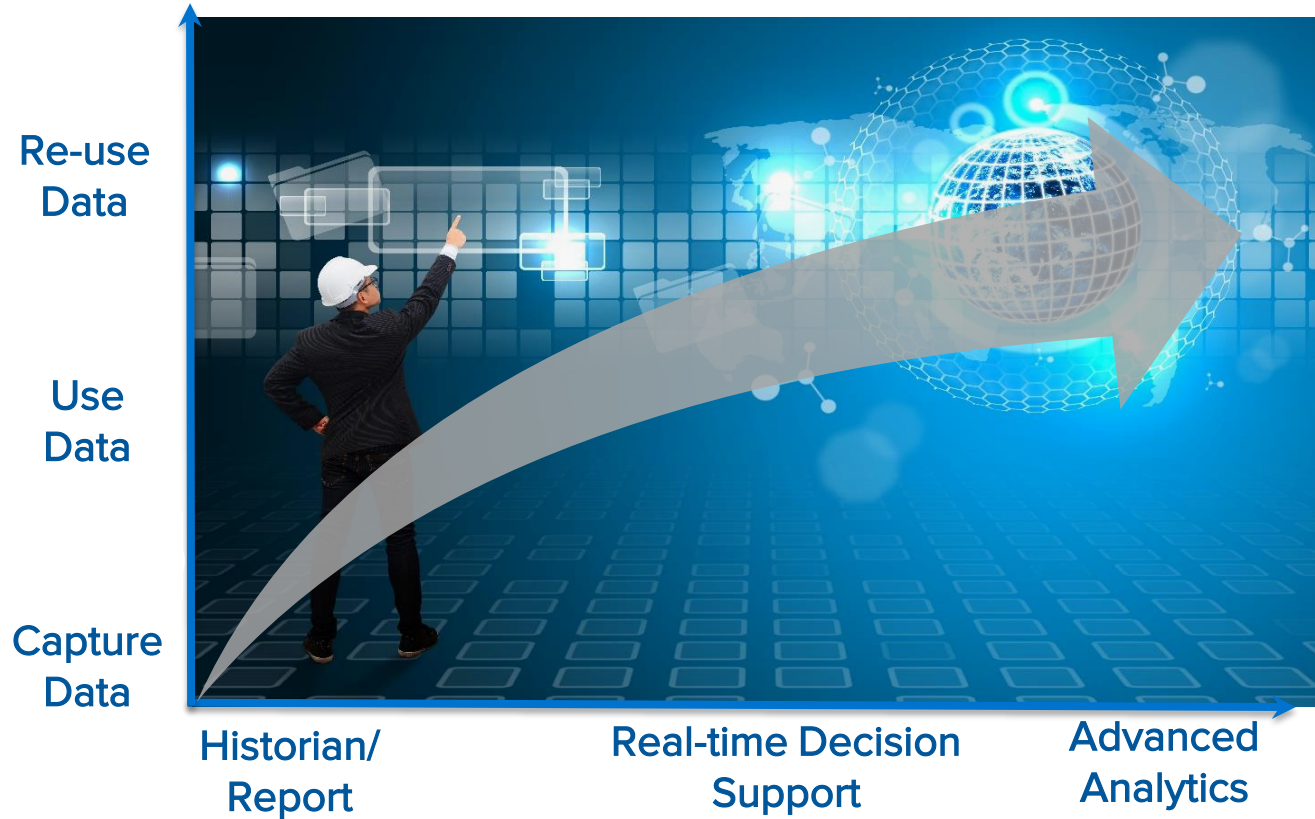
# Up Next: Introducing the Data Transformation Journey



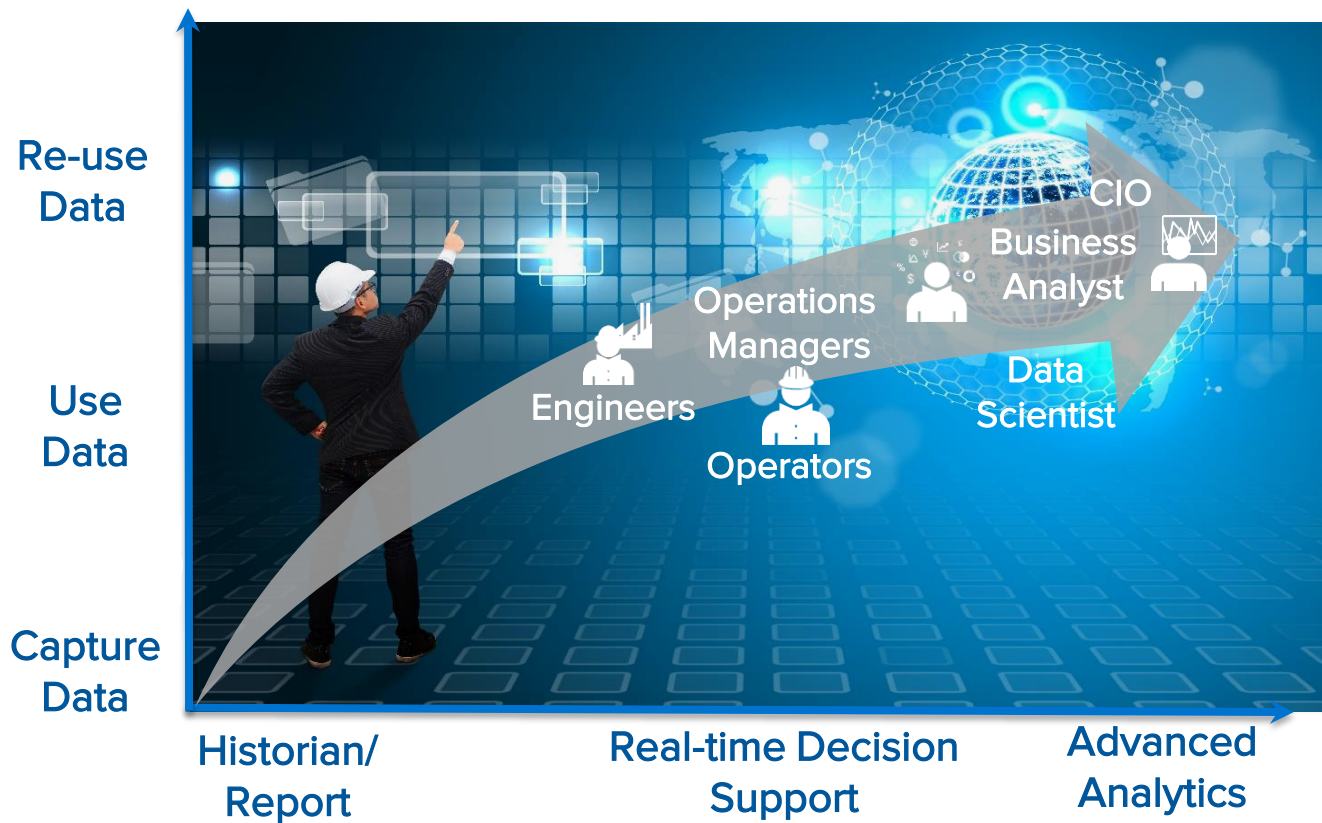
Larry Schutzberg, CIO, Evergreen Packaging



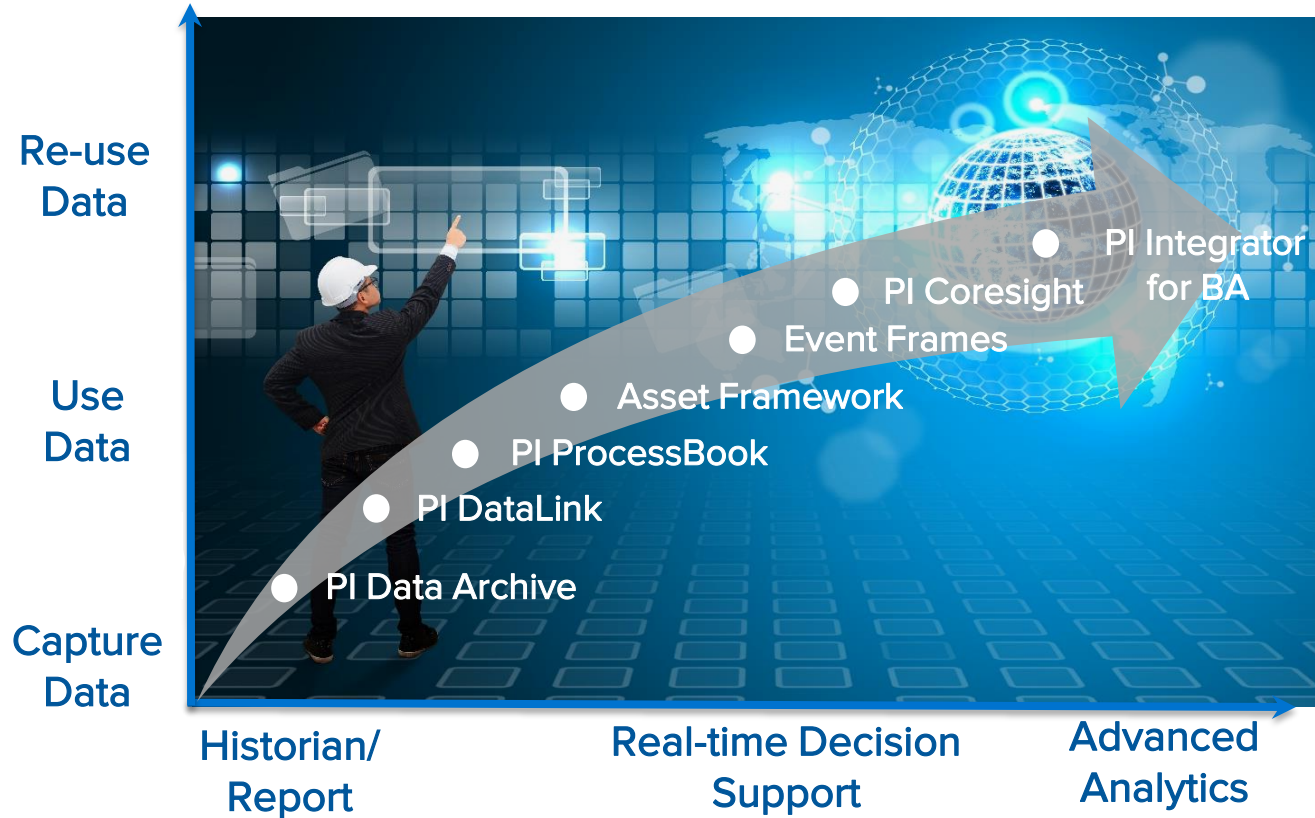
# Steps Along The Data Transformation Journey



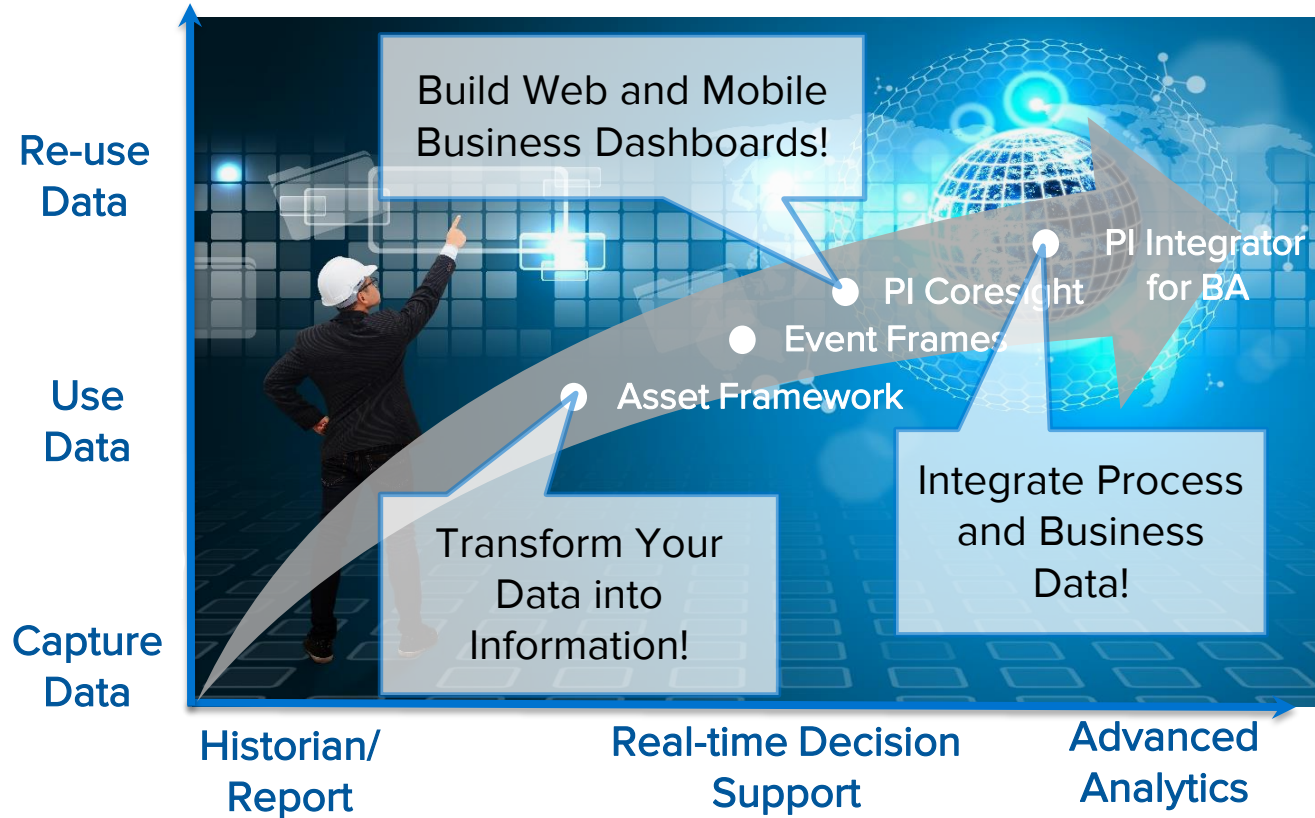
# The Data Transformation Journey: Meeting Specific User Needs



# Software to Support Your Transformation Journey



# Highlights Today to Watch For



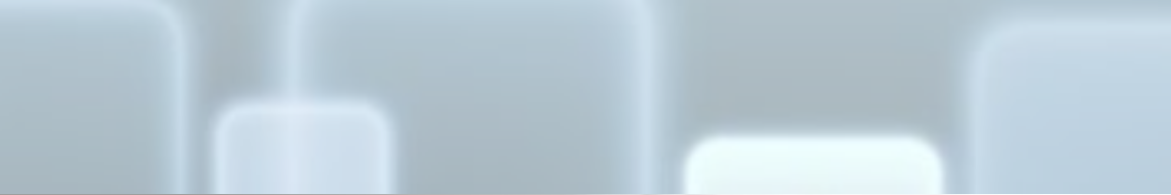




Unleash your Infrastructure  
with the **PI System**



Enhance your Intelligence with **PI Advanced Integrations**



Advance Your Ecosystem  
with **OSIsoft Marketplace**



Expand Your World with  
**OSIsoft Cloud Services**



Accelerate Your Transformation  
with **OSIsoft Services**



# Single platform:

## Today



**PI ProcessBook**

Display Editor  
Process Monitoring →



**PI Coresight**

Ad Hoc Analysis  
PB Display Viewer →



**PI WebParts**

Dashboards →

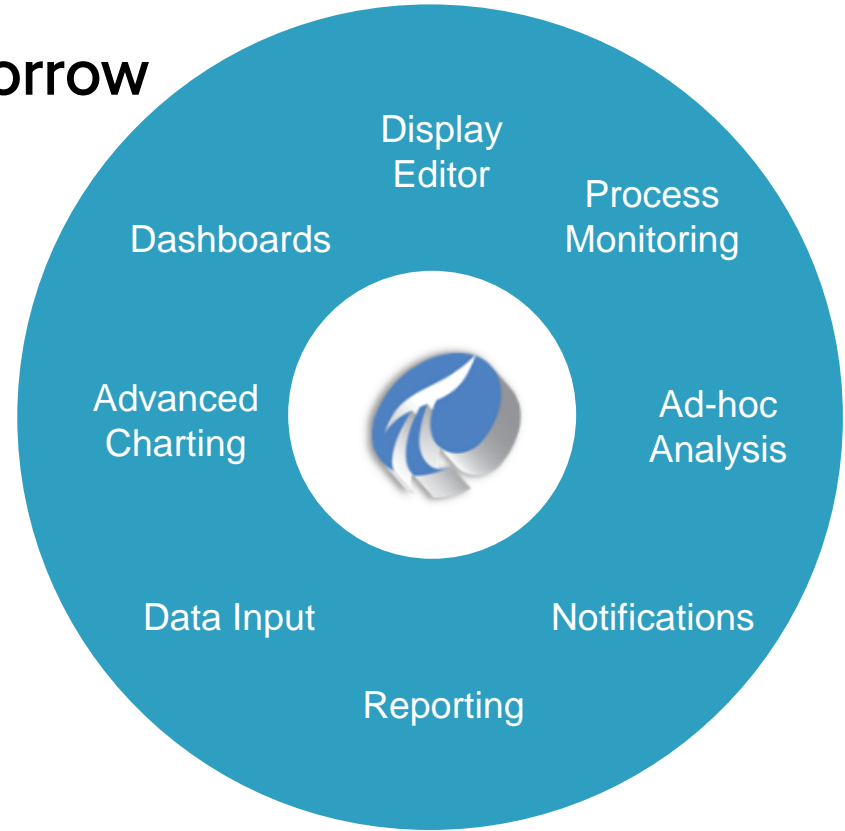


**PI Manual Logger**

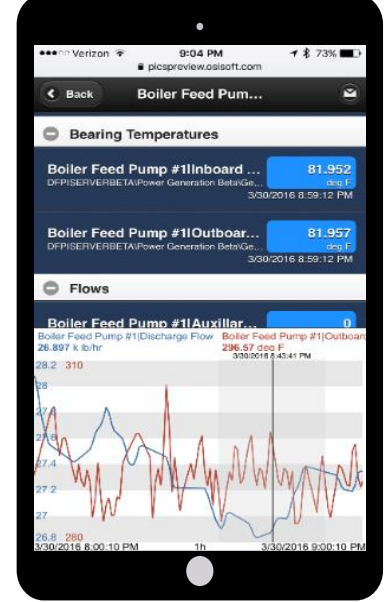
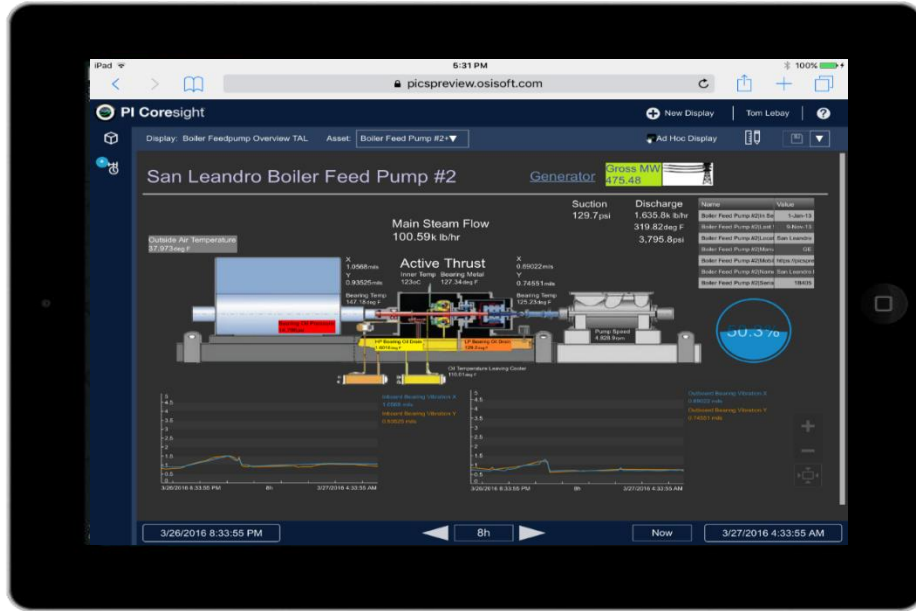
Manual Data Entry →

# All Your Visualization Needs

## Tomorrow

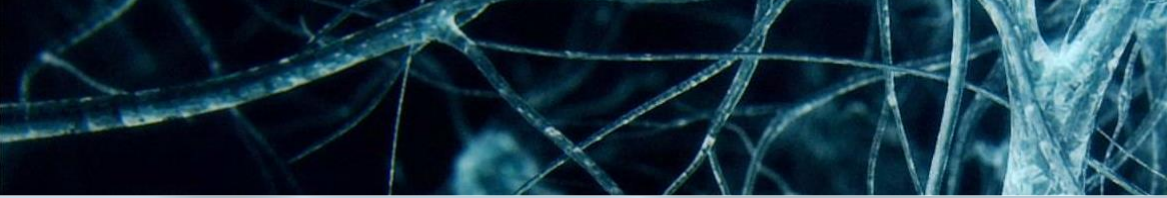


## Coresight 3.0: Anyone, Anywhere, Anytime, Any Device

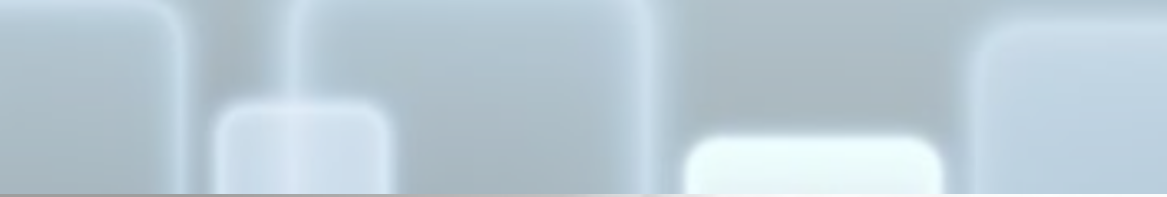




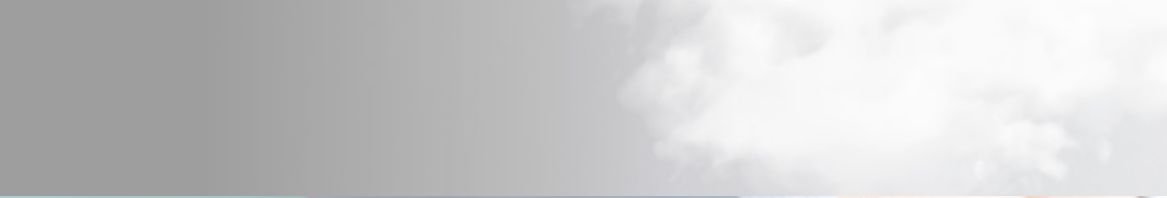
Unleash your Infrastructure  
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**OSIsoft Cloud Services**



Accelerate Your Transformation  
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# Evolving Data Goals:

## Real-Time Decision Support (OT)

### Monitoring

Real-time visibility

### Process Optimization

Real-time and historical view  
across all assets

## Enterprise Analysis

### Benchmarking

Fleet-wide performance  
comparison

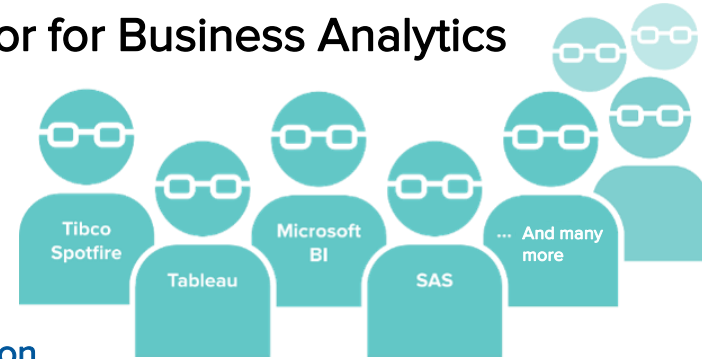
### System Optimization

Combining data sets for  
system intelligence

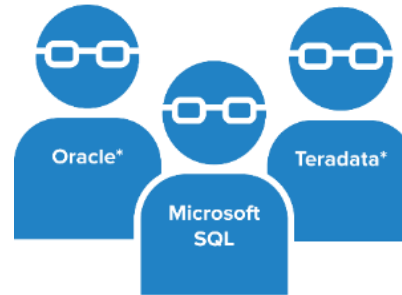


## OSIsoft's Solution:

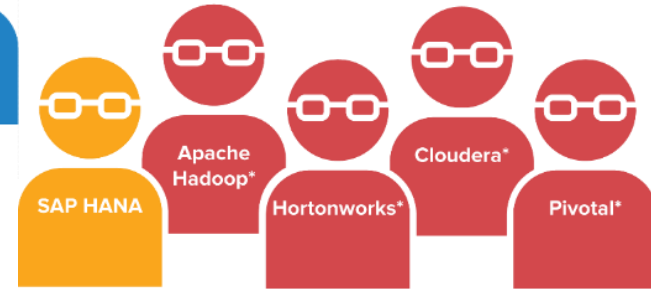
### PI Integrator for Business Analytics



### Data Warehouse Edition



### Big Data Edition\*



# You've Told Us That Advanced Integrations Matter!

*In a recent survey...*



32% of responding users **are using** or plan to soon use BI analysis tools



## Visualization Tools Analysis Databases

Specifically, respondents use or plan to use:

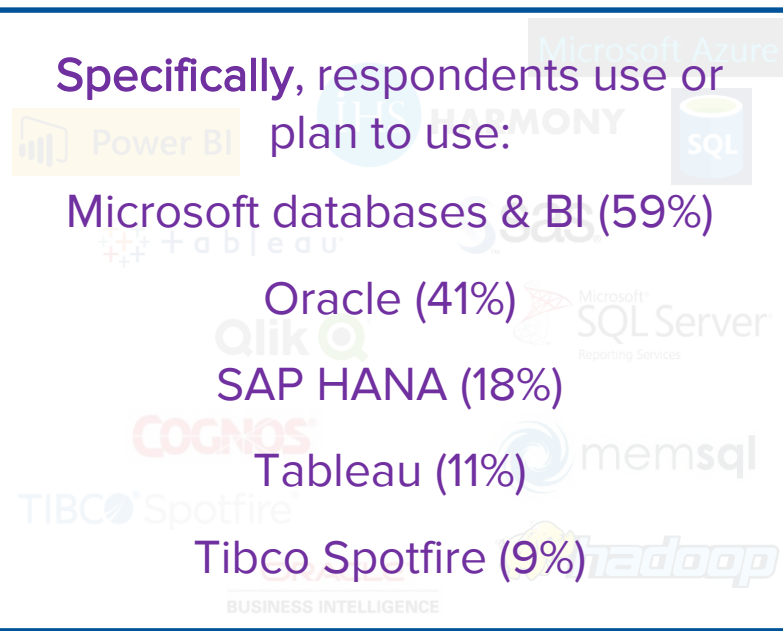
Microsoft databases & BI (59%)

Oracle (41%)

SAP HANA (18%)

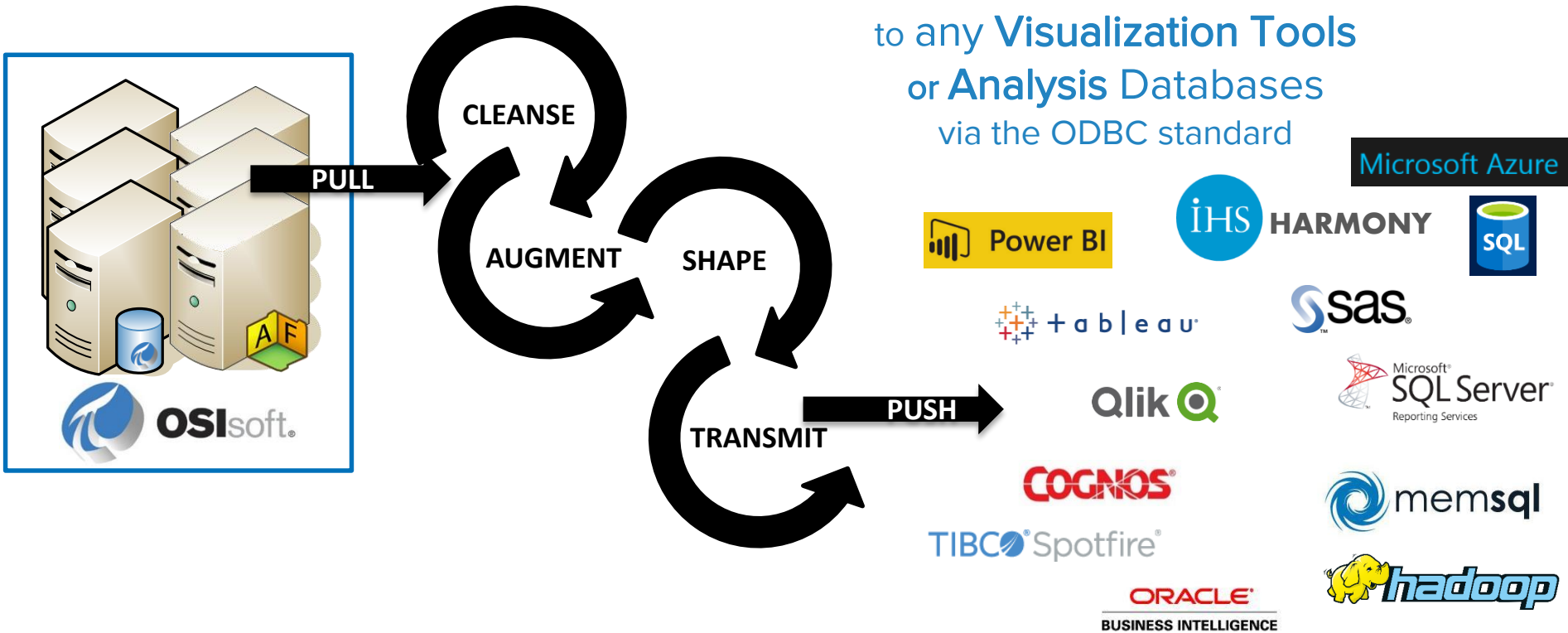
Tableau (11%)

Tibco Spotfire (9%)





# PI Integrators Let You Prepare and Deliver Process Data



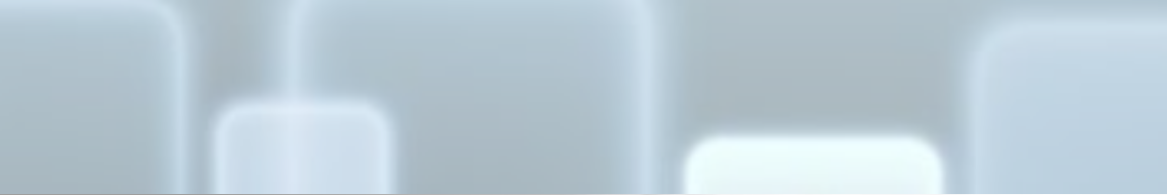




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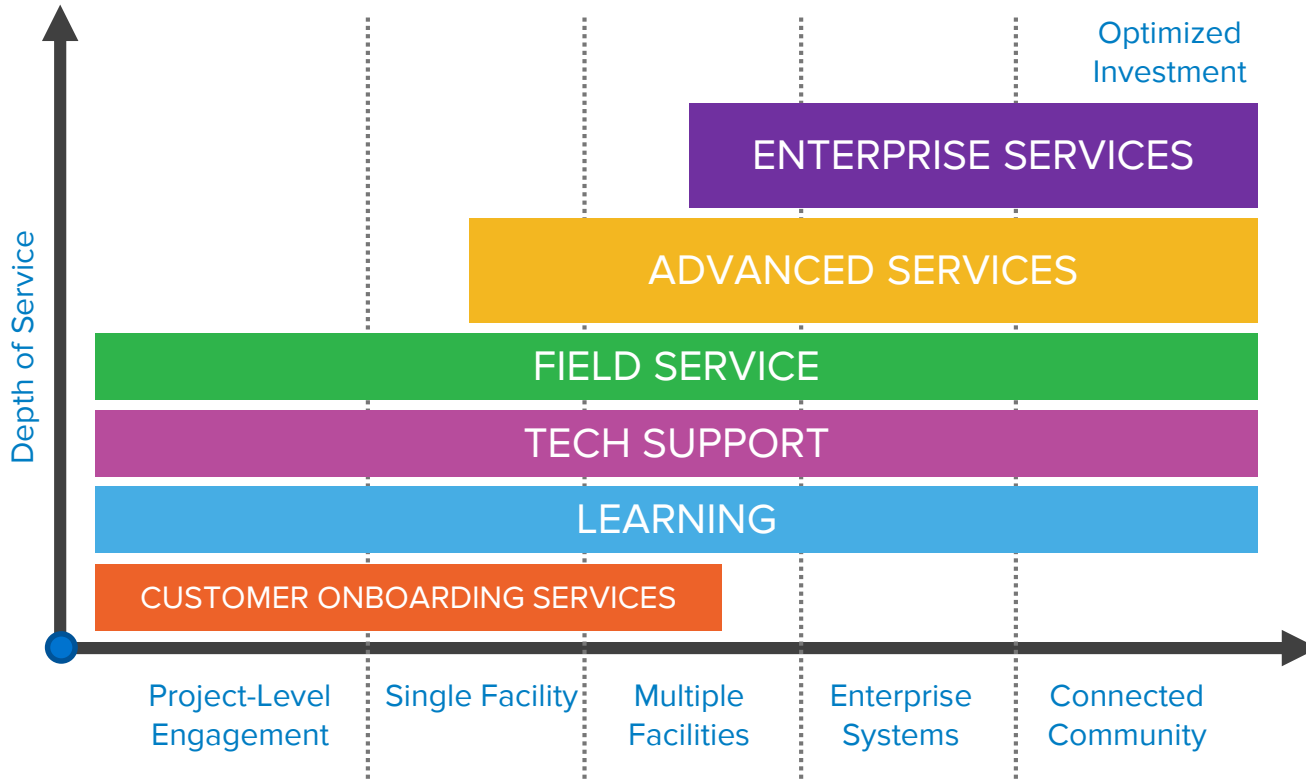
Expand Your World with  
**OSIsoft Cloud Services**



Accelerate Your Transformation  
with **OSIsoft Services**



# OSIsoft Services Help You Get the Most Out of Your Investment



# The PI System: Value Today, Agility for Tomorrow



You have the data and infrastructure that can make a difference

- Get your data ready
  - Upgrade your PI System
- Empower your workforce with mobile data
- Leverage your data with advanced analytics
- Embrace IoT when you are ready



# Contact Information

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[emoorehead@osisoft.com](mailto:emoorehead@osisoft.com)

Business Development Manager

OSIsoft, LLC



# Questions

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



State your  
**name & company**

# Please remember to...

Complete the Survey  
for this session

**OSIsoft. REGIONAL SEMINAR**  
Safeco Field – Seattle, WA – September 20, 2016

**Evaluation Form**

Name: \_\_\_\_\_ Company: \_\_\_\_\_  
Email: \_\_\_\_\_

**Quality of presentations**

	Poor	Good	Excellent	N/A
1. Digital Transformation with Today's PI System – OSIsoft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. PI Coresight 2016: New Vision, New Display Editor, New Look and Feel – OSIsoft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Monitoring Health and Performance of Grid-Scale Energy Storage Systems – UniEnergy Technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Using PI Integrators to Improve the Value of your PI Data – OSIsoft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. PI Asset Framework Ties Together Enterprise OEE for Clearwater Paper – Clearwater Paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Solving Business Initiatives with the PI System – OSIsoft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. PI Analytics and Coresight for Business Process Improvement – Arista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Seeq helps customers get even more value from their OSIsoft PI System – Seeq Inc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. What's Really Going on with your Beer's Fermentation? – Deschutes Brewery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Quality of seminar**

	Poor	Good	Excellent	N/A
1. Presentation topics meeting your needs or interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Time allowed for lunch/breaks/discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Pace and time allocated to the presentations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



# Thank You



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