

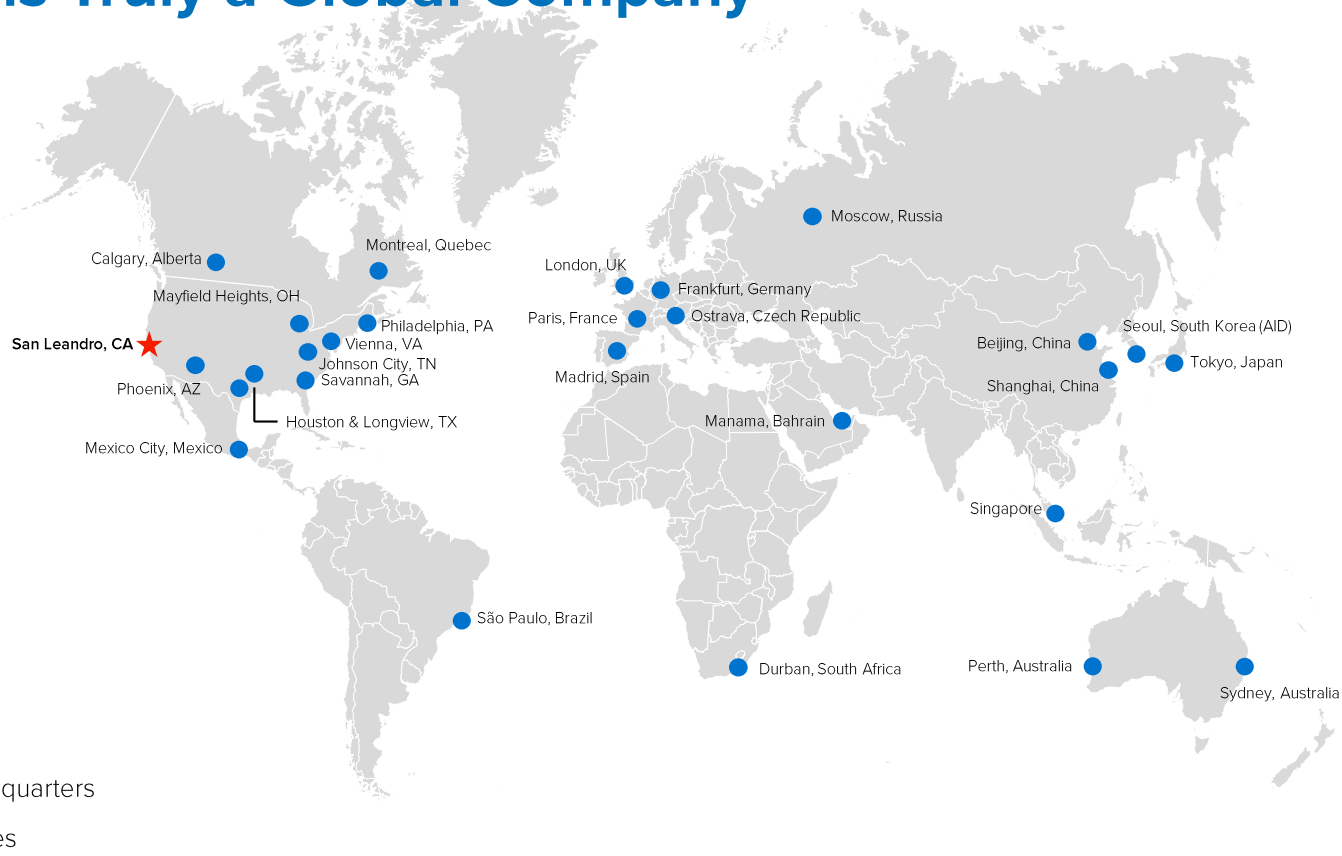
OSIsoft and the PI System

Steve Sarnecki
ssarnecki@osisoft.com
VP, Federal Sales

Feb 18, 2016



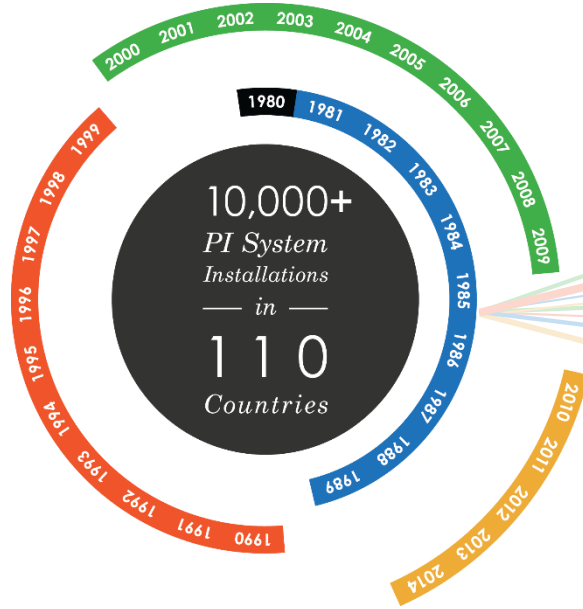
OSIsoft is Truly a Global Company



OSIsoft.

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A Unique and Proven Vision

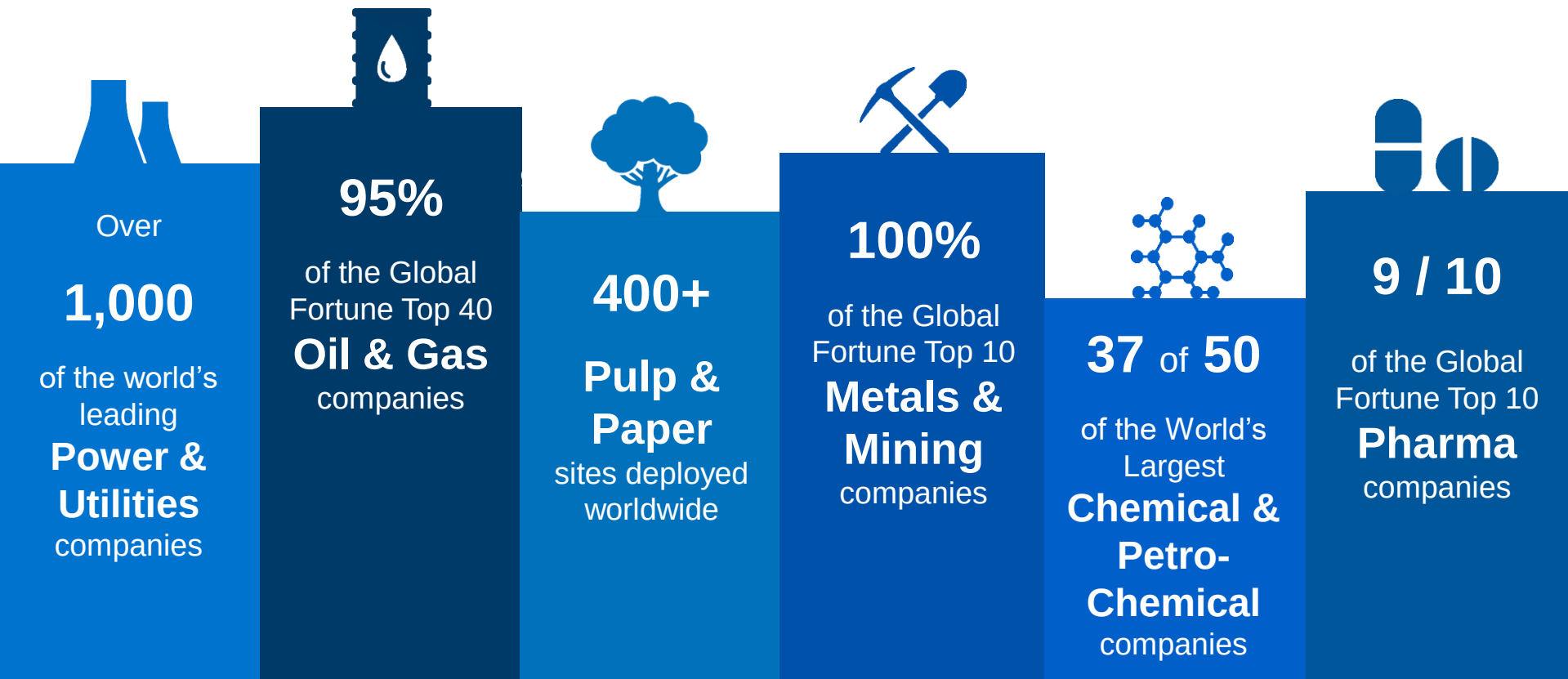


For over 30 years OSIsoft has:

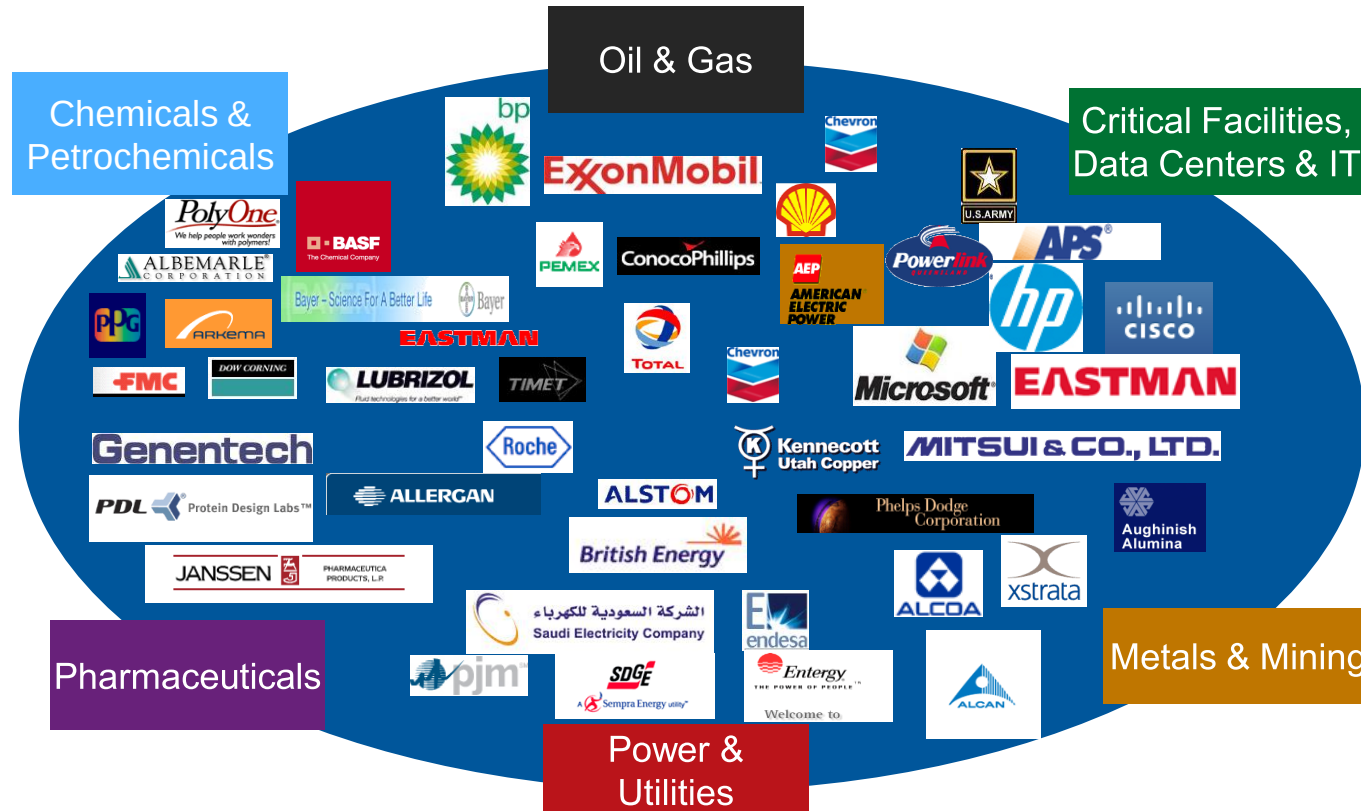
- Infrastructure for consolidation and centralization of sensor based data
- Open infrastructure to support best of breed ecosystems
- Scalability from small deployments to enterprise deployments
- Infrastructure for change
- Infrastructure for empowering people



OSIsoft is trusted by the world's leading companies



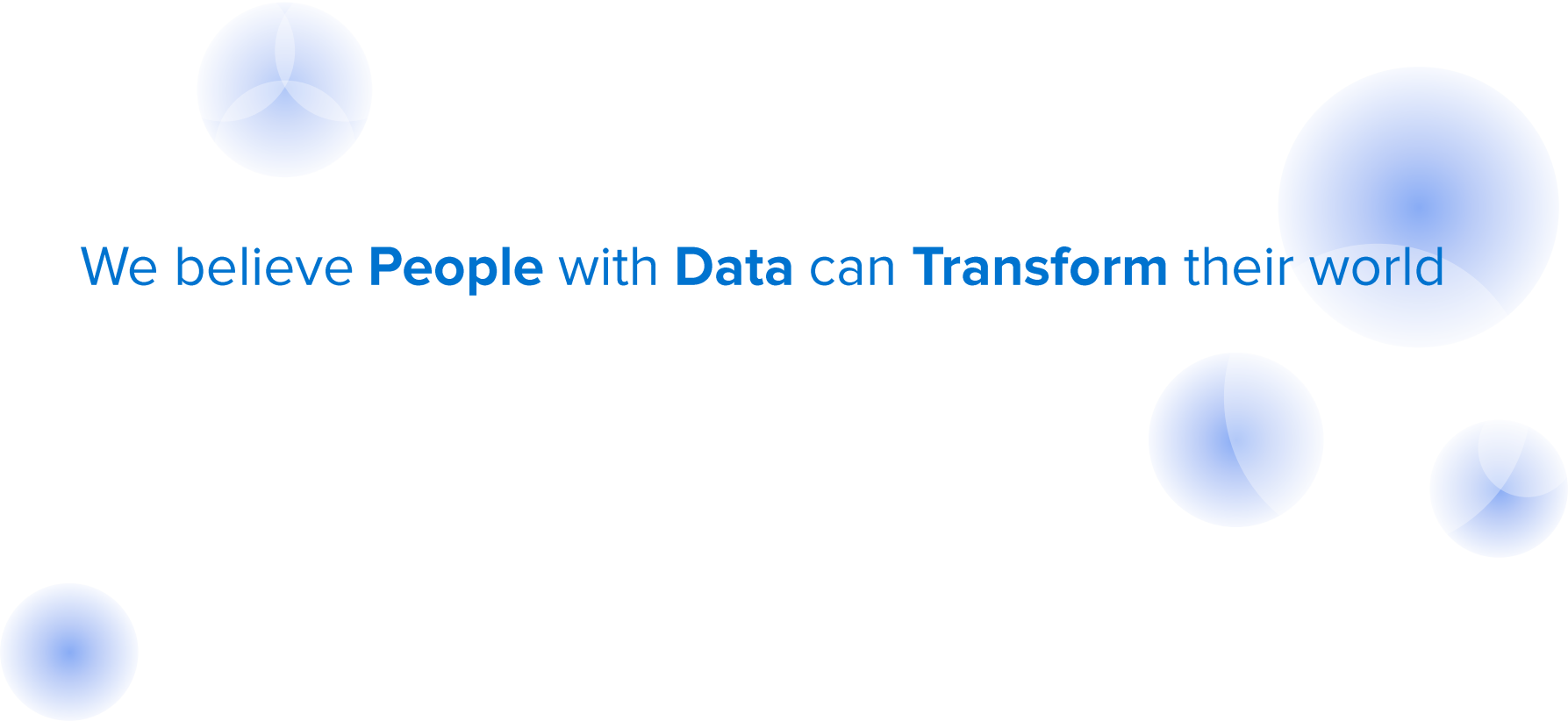
OSIsoft - Customer Base



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We believe **People** with **Data** can **Transform** their world



SUPPORTING ASSET & INCIDENT INVESTIGATIONS

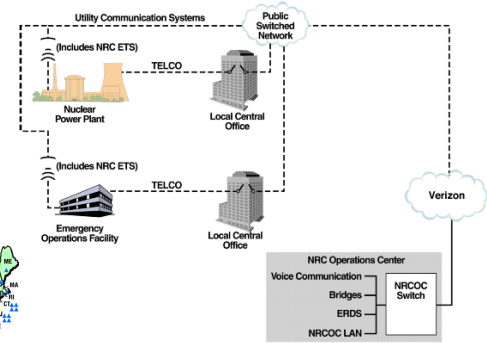
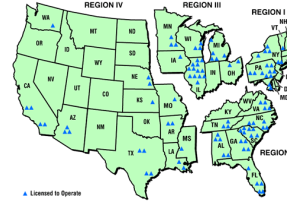
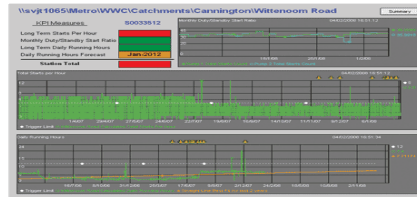


Figure 2: Proposed NRC Emergency Telecommunications System



osi soft.

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Our Customers Gain Value



SUPPORTING OPERATOR & MAINTENANCE ROUNDS



PI Manual Logger Mobile

DEMO TOUR

Instructions

CV101 TAIL END - IS THE V-PLOW SITTING PROPERLY ON THE CONVEYOR BELT. ENSURE FRONT AND BACK ARE DOWN AND SCRAPING BELT AS DESIGN.

Low: High: Delta:
LoLo: HiHi:

Data Comment Group History Log Audit

Tag Go Value Time View Help

PI Manual Logger Mobile

DEMO TOUR

ML TEST POINT 3 BAD / GOOD

3/4

OK

Bad

OK

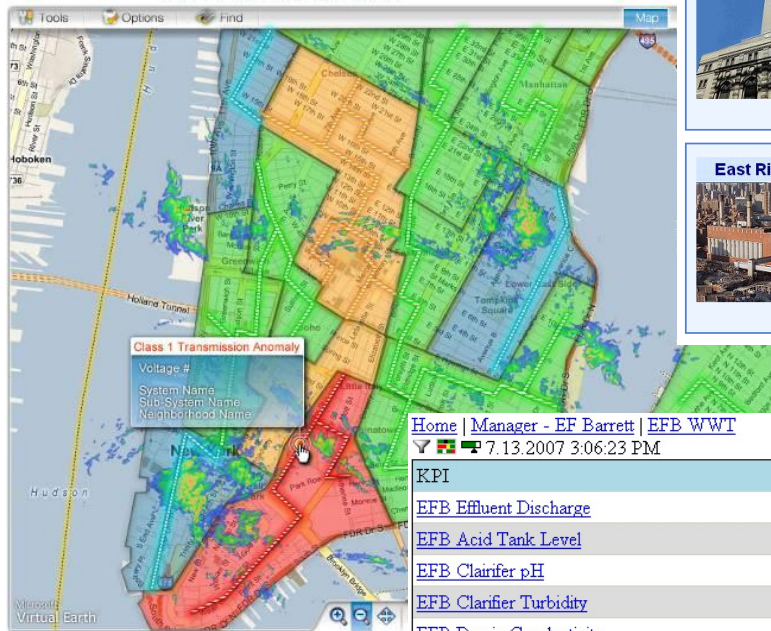
Low: High: Delta:
LoLo: HiHi:

Data Comment Group History Log Audit

Tag Go Value Time View Help

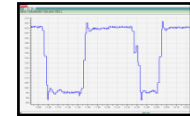
Evaluating & Capturing
Equipment Inspection Status

Providing Situational Awareness



Home | Manager - EF Barrett | EFB WWT
7.13.2007 3:06:23 PM

KPI		Actual
EFB Effluent Discharge	↓	.18
EFB Acid Tank Level	●	11.43
EFB Clarifier pH	●	9.015
EFB Clarifier Turbidity	●	67.3
EFB Demin Conductivity	●	258.5
EFB Holding Pond Level	●	4.325
EFB Neutralization Tank Level	●	6.823
EFB Reactor Tank pH	●	10.54
EFB Surge Pond Level	●	4.057



GLOBAL INFRASTRUCTURES / CRITICAL INFORMATION



What is the PI System?

Mark McCoy
Federal Solutions
Architect

Feb 18, 2016



010010010110100001000000110100101100101
001100001001000010110100010110101100101
001000000011001010110101101010011000010110
011011000101000101010100001010000101010101
01000000110011001100001011000110110000000
0011010001010000100001011010000100000000
00110100010100101000010100000100010000
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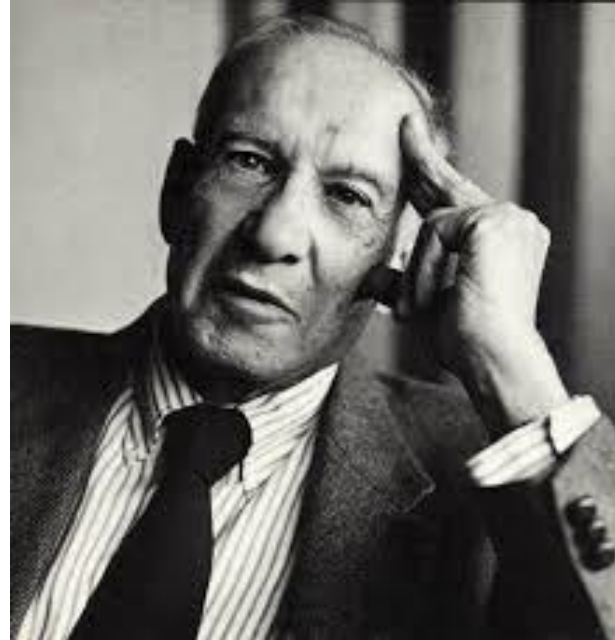
What is the PI System?



OSIsoft - The PI System

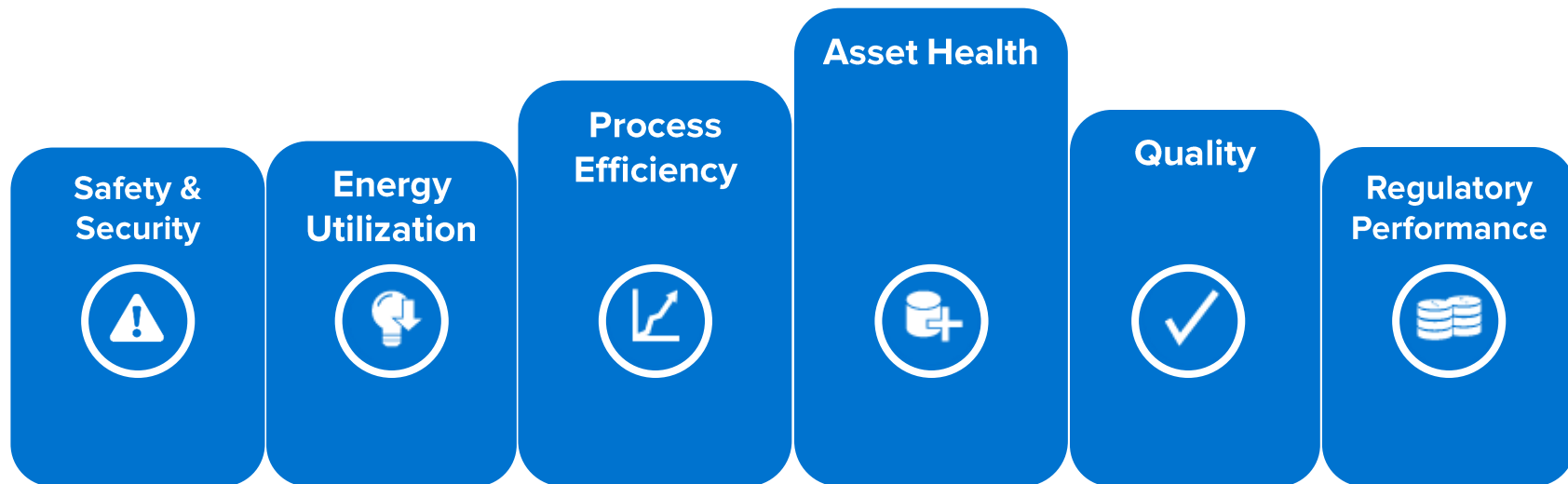
Transforming your world with Data

“The important and difficult job is never to find the right answers, it is to find the right question”



Peter Drucker,
The Practice of Management

Our Customers Gain Value



Our Customer's Challenge:

What is the forecast of productivity?

COO

I need a monthly rollup of energy use for these buildings

Plant Manager

The turbine is not working – what's the problem?

Maintenance Technician

I need to know the *moment* it goes out of tune

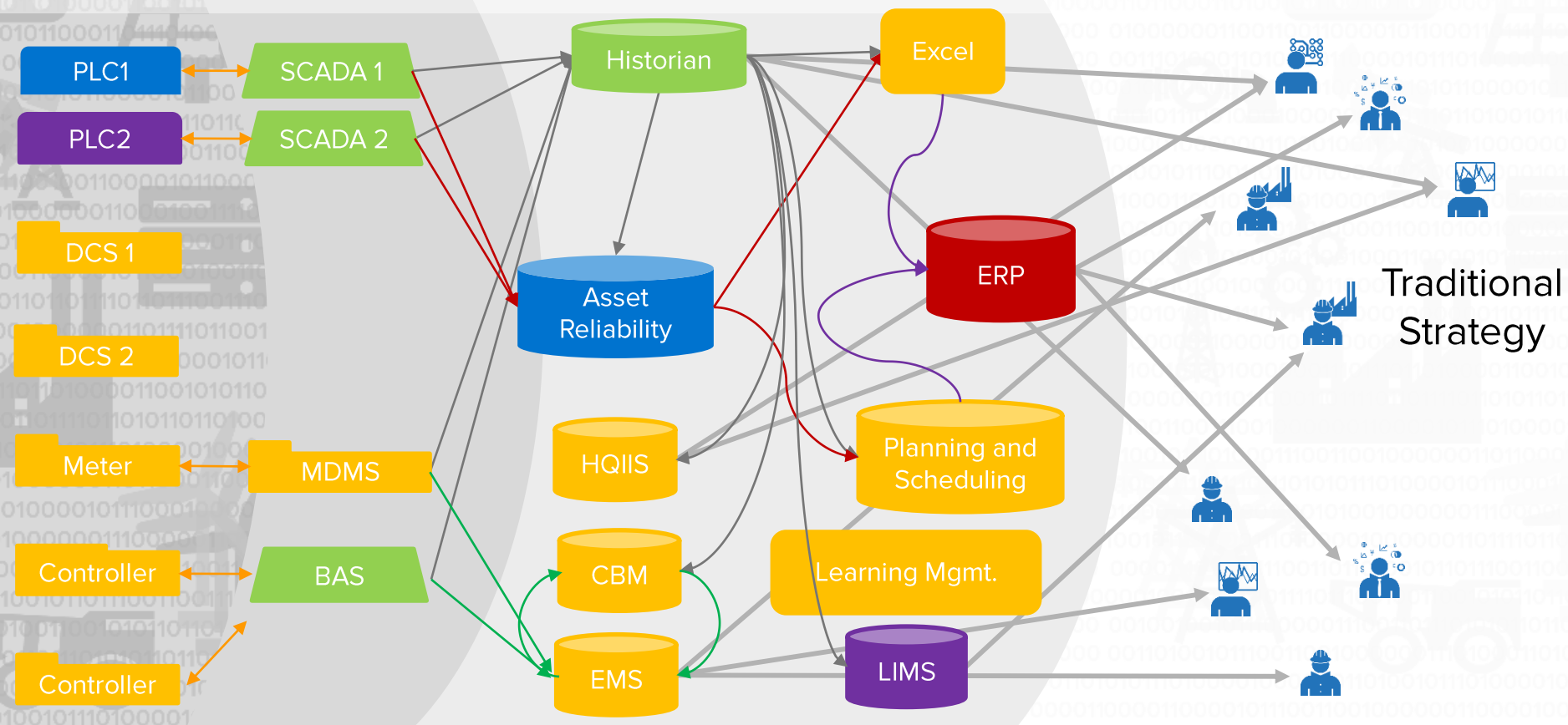
Engineer



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Silos to Standards / Complexity to Simplicity



Silos to Standards / Complexity to Simplicity

The diagram illustrates a process flow from various input systems to end-users, organized into three main stages: Collect, Enhance, and Deliver.

Input Systems (Left):

- PLC1, SCADA 1
- PLC2, SCADA 2
- IPC 1, IPC 2
- Meter, MDMS
- Controller, BAS
- Controllers

Processing Stages (Center):

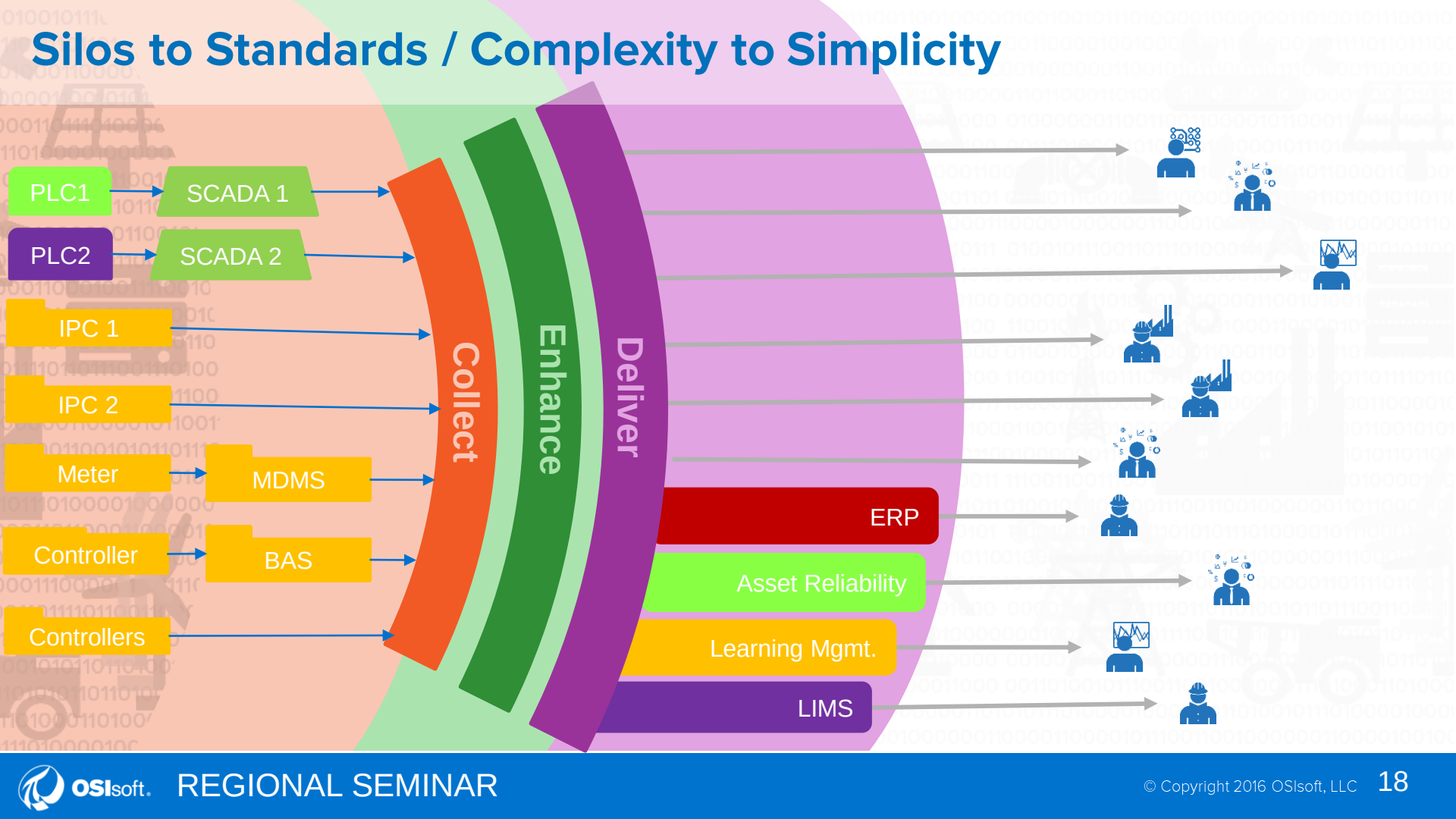
- Collect** (Orange curved band)
- Enhance** (Green curved band)
- Deliver** (Purple curved band)

Output Systems (Right):

- ERP (Red box)
- Asset Reliability (Light Green box)
- Learning Mgmt. (Yellow box)
- LIMS (Dark Purple box)

End-Users (Far Right):

Icons representing different user roles: a person with a QR code, a person with a gear, a person with a line graph, a person with a factory, a person with a gear, a person with a gear, a person with a line graph, and a person with a factory.



The PI System has 3 Layers

Collect

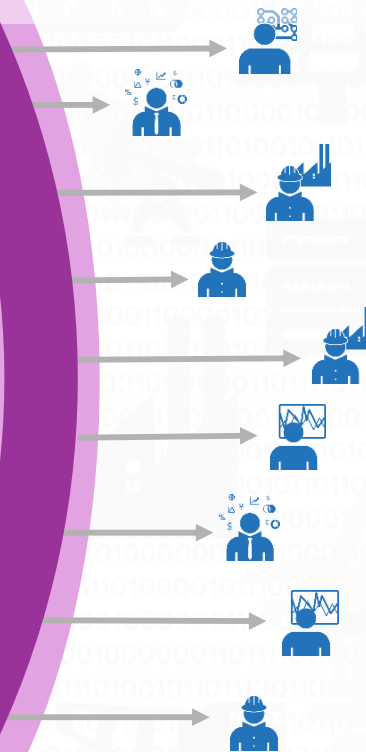
PI Interfaces

**Manage
Enhance**

PI Server

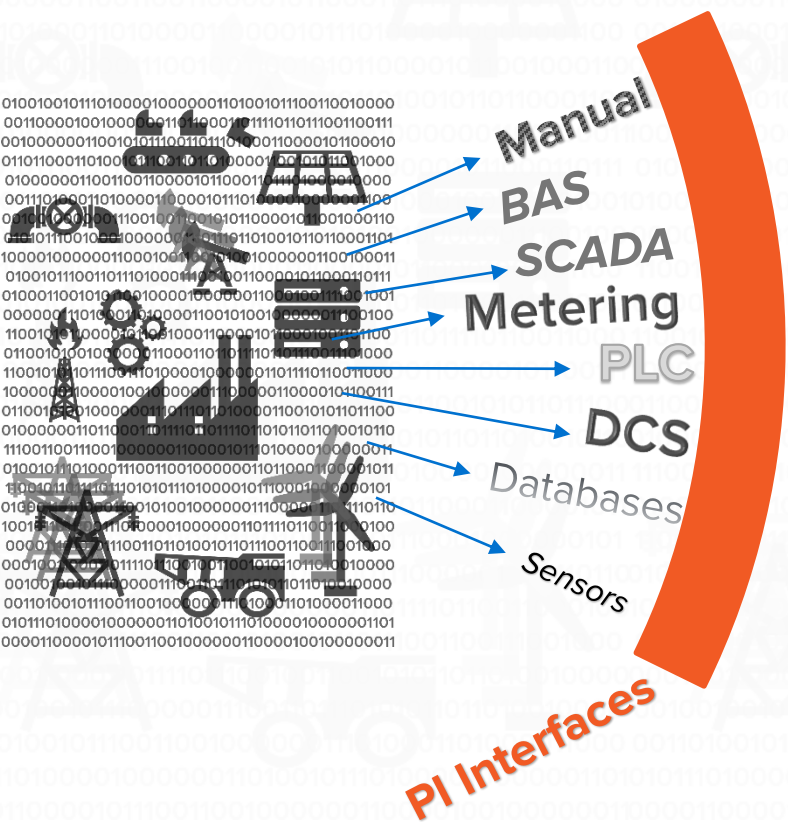
Deliver

PI Tools



Pervasive Connectivity

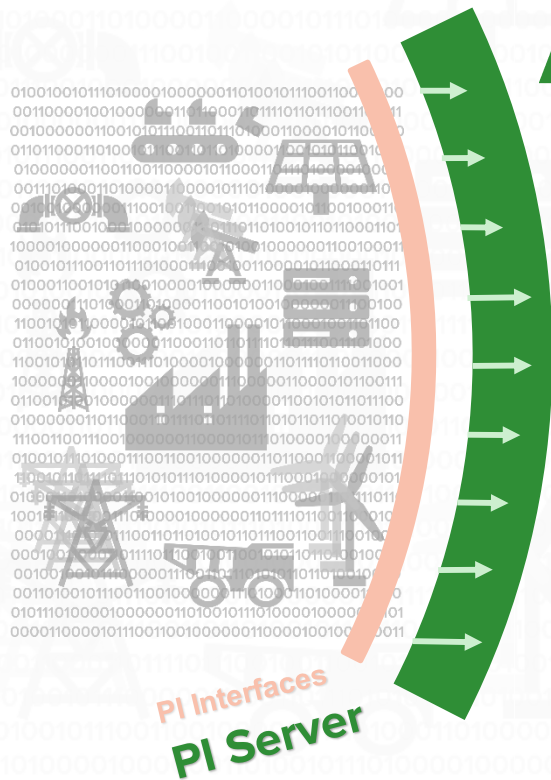
PI Interfaces



Directly connects to more data sources than any other operational data collection system

Proven Engine

PI Server



A PI Server is:

System of Record
Real-time Processing
Data Calculations
Alerting Engine
Metadata Layer
Event Tagging

COMMON PI SERVER
~20 M WRITES/DAY

BIG DATA CLUSTER
100+ MACHINES
9 B WRITES/DAY

HIGH PERFORMANCE
PI SERVER
43 B WRITES/DAY

Enhance your data

Real time capabilities



PI Asset Framework



Status: Running
Speed: 5 mph
Oil Temp: 200 °F

Fit your users

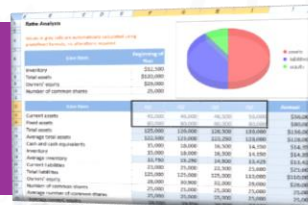
PI Visualization Tools

PI Interfaces
PI Server
PI Tools



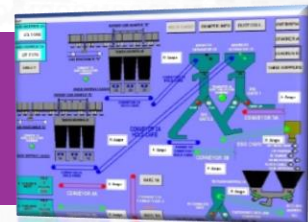
PI DataLink
Access data from Excel

Video: What is
PI DataLink



PI ProcessBook
Visualize process in real time

Video: What is
PI
ProcessBook



PI Coresight
Anywhere, Anytime

Video: What is
PI Coresight



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Coresight Video and Demo



Boundless

Open data export



PI Integrators

Move data between business and geographic boundaries.



PI System Access

Programmatic access to build anything on PI



**Partner
Applications**



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OSIsoft - The PI System

Transforming your world with Data

Nowadays people
know the price of
everything and the
value of nothing



Oscar Wilde (1854 - 1900)

It is a very bad thing
that nowadays there
is so little useless
information

Thank You

Mark McCoy

Federal Solutions Architect

mmccoy@osisoft.com



OSIsoft®