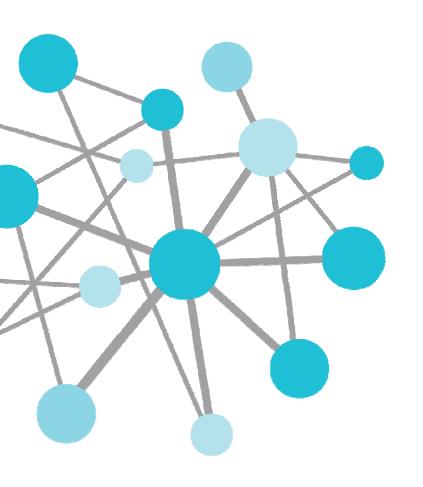**OSI**soft.

# PI SYSTEM ROADSHOW 2014

## The Power of Data

**DECISION READY IN REAL-TIME**

# O C E A N I A

1

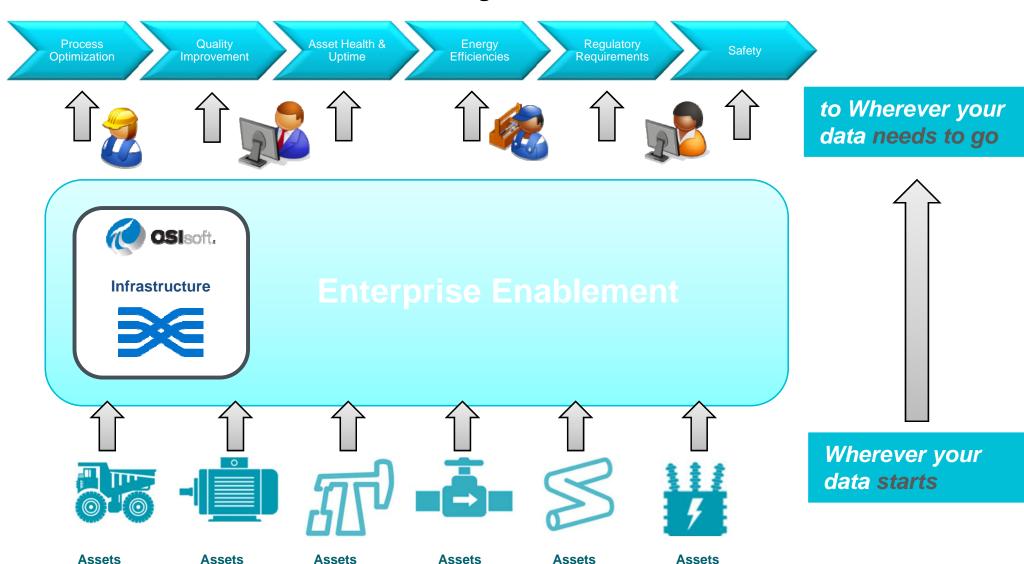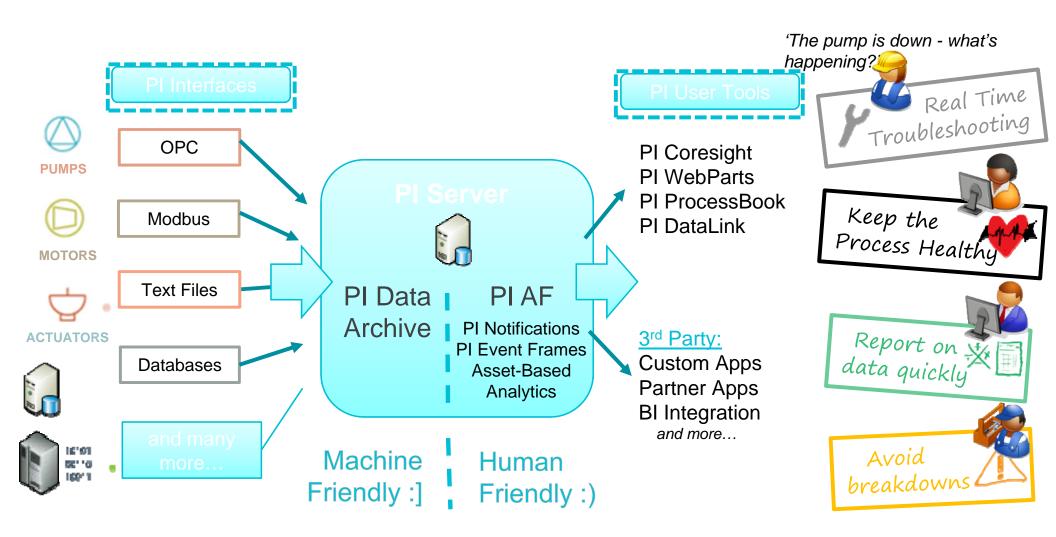# What is new with the PI System?

Presented by **Michael Luo, Technical Consultant, OSIsoft**

# An Enterprise Infrastructure

**Data Driven Insights**

| Process Optimization | Quality Improvement | Asset Health & Uptime | Energy Efficiencies | Regulatory Requirements | Safety |
|---|---|---|---|---|---|

*to Wherever your data needs to go*

**Enterprise Enablement**

**Infrastructure**

*Wherever your data starts*

**Assets**   **Assets**   **Assets**   **Assets**   **Assets**   **Assets**

# What is part of our Infrastructure…



PUMPS

MOTORS

ACTUATORS

PI Interfaces

- OPC
- Modbus
- Text Files
- Databases
- and many more…

**PI Server**

PI Data Archive | PI AF

PI Notifications
PI Event Frames
Asset-Based
Analytics

Machine Friendly :] | Human Friendly :)

PI User Tools

PI Coresight
PI WebParts
PI ProcessBook
PI DataLink

3rd Party:
Custom Apps
Partner Apps
BI Integration
*and more…*

*'The pump is down - what's happening?'*

Real Time Troubleshooting

Keep the Process Healthy

Report on data quickly

Avoid breakdowns

# Asset-Based Analytics

- Easy – empower users to build their own calculations

- Reuse and standardize

    - Clarity and correctness

- KPIs and Rollups

- Automatic Event marking
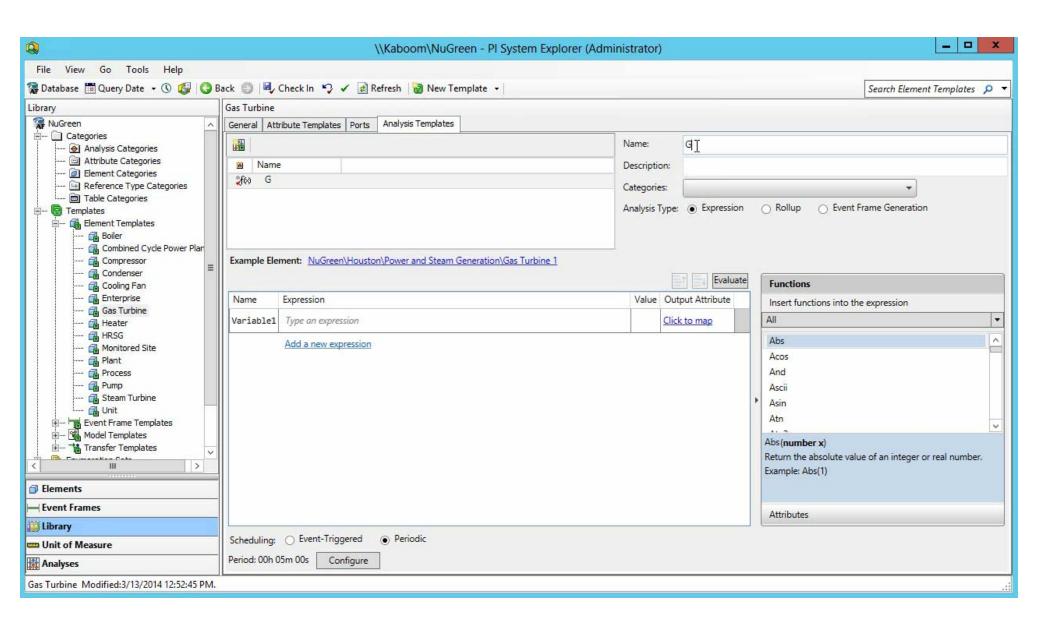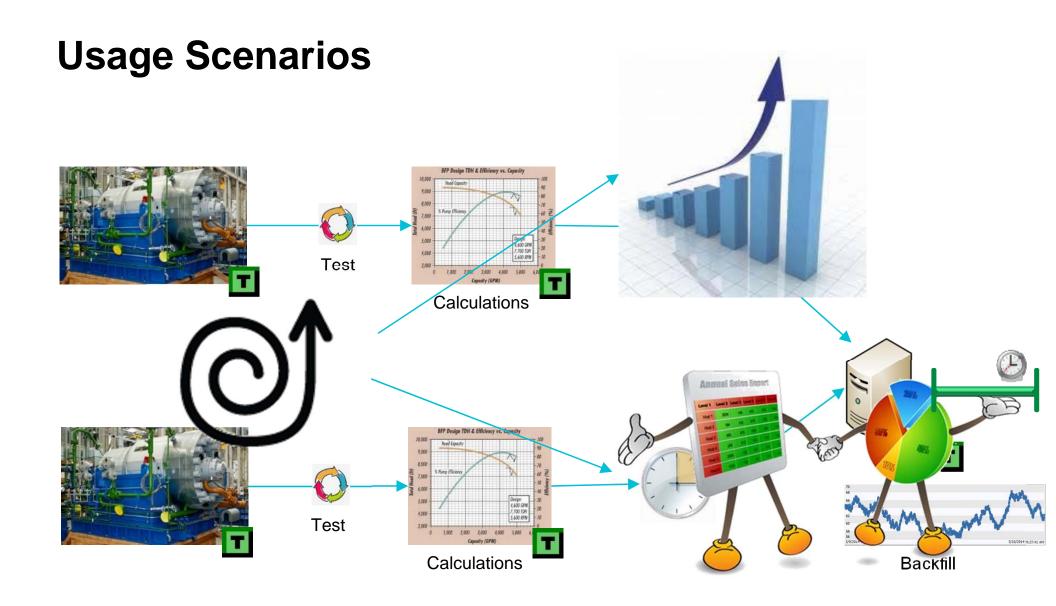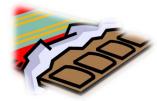
- And of course, *Performance and scalability*

# Usage Scenarios



Test

Calculations

Test

Calculations

Backfill

# PI Event Frames

*Events Shorten the Time to Insight*

**Too High!**  **Downtime**  **Batches**

## Information
## Challenges

# EF Customer Survey: Most Important EF Visualization

**(1) Trend: Time Leading up to EF Start**
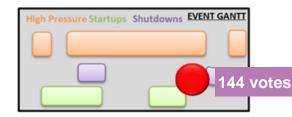


232 votes

**(2) Trend: EF Start to EF End**



214 votes

**(3) Event Overlay Trend**



170 votes

**(4) View Event Attributes in Table**



154 votes
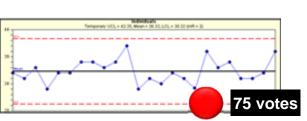
**(5) Gantt Chart (aligned w/trend)**



144 votes
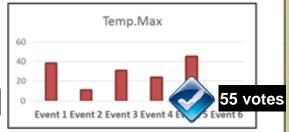
**(6) Manual Creation of Events**



80 votes

**(7) SQC Chart**



75 votes
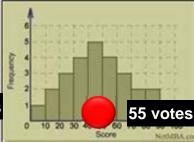
**(8) Line / Column Chart (Event x-axis)**
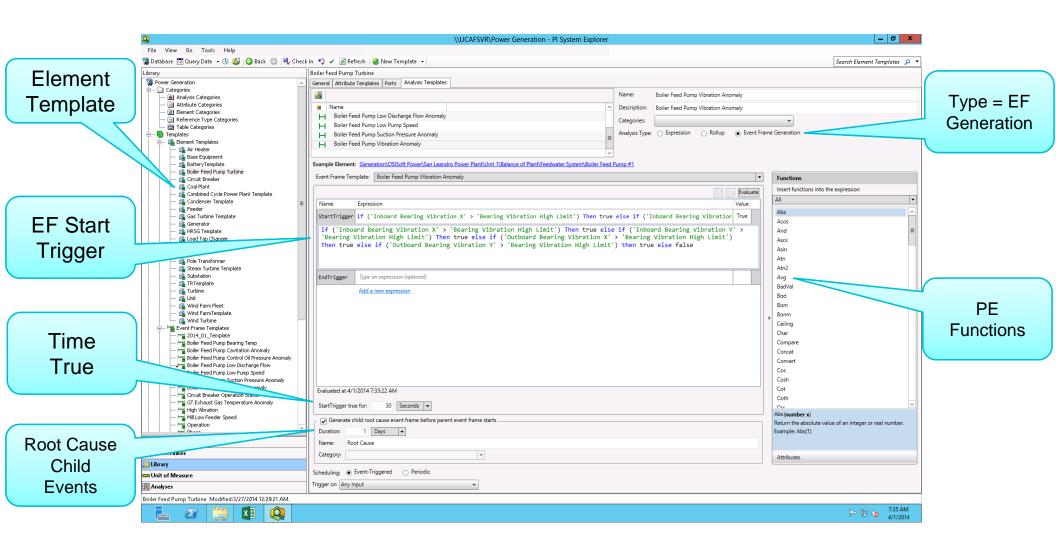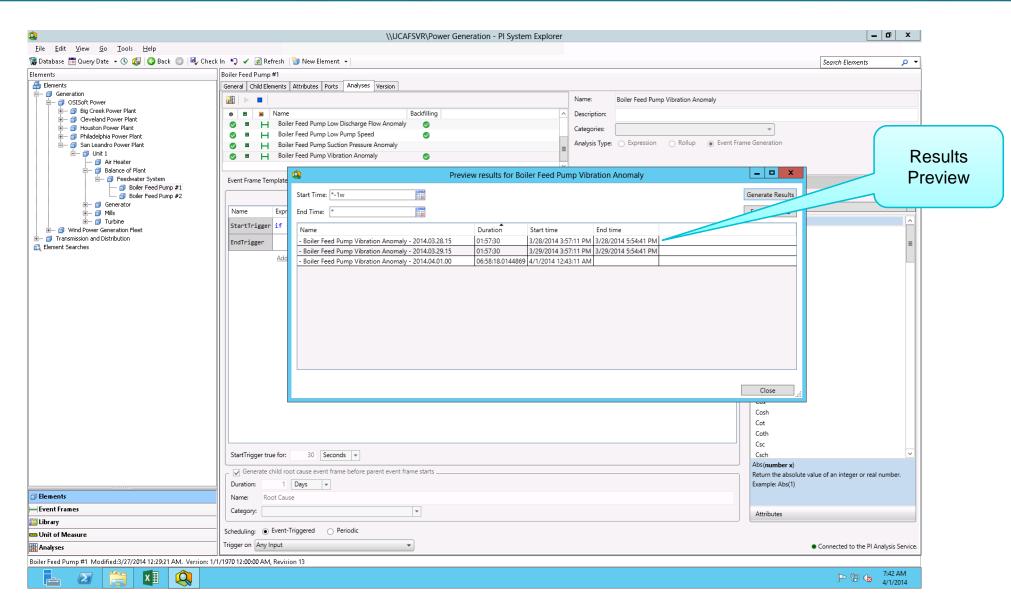


55 votes

**(9) Histogram**



55 votes
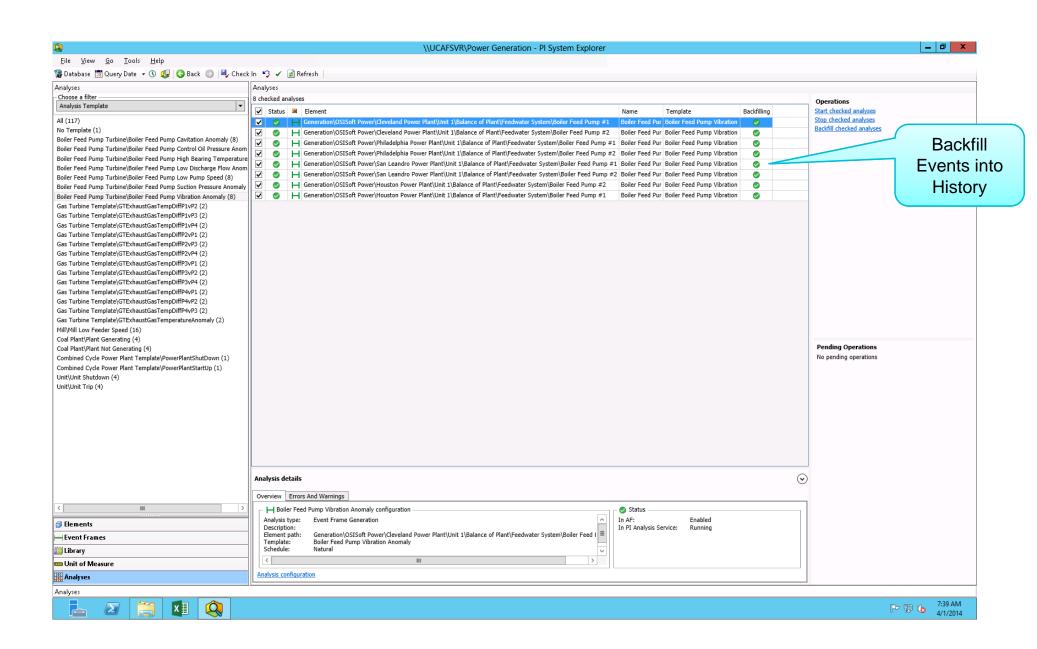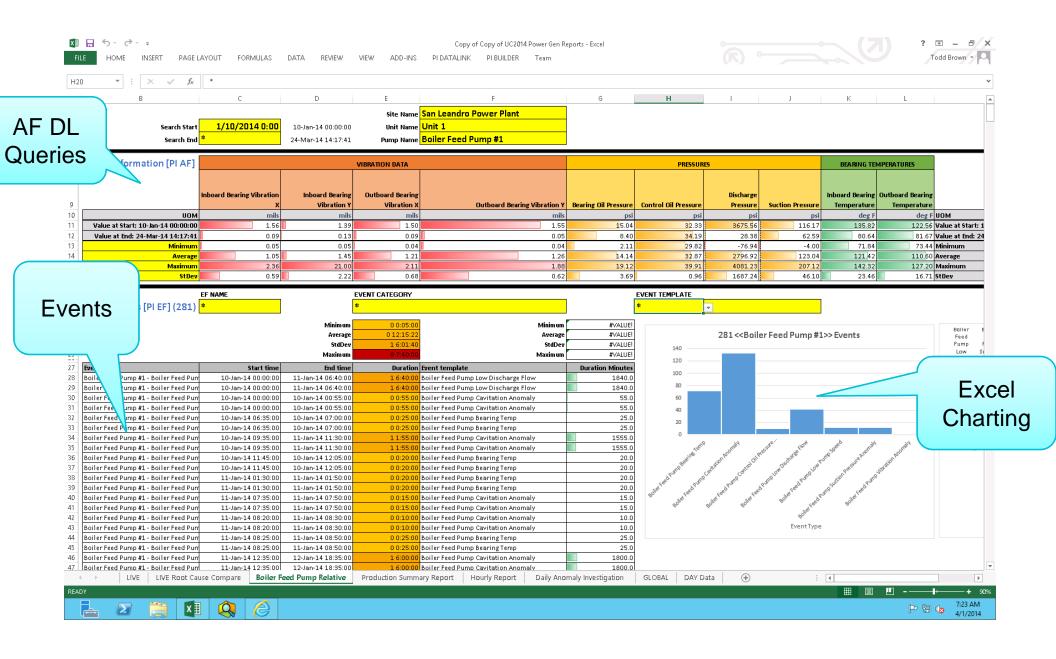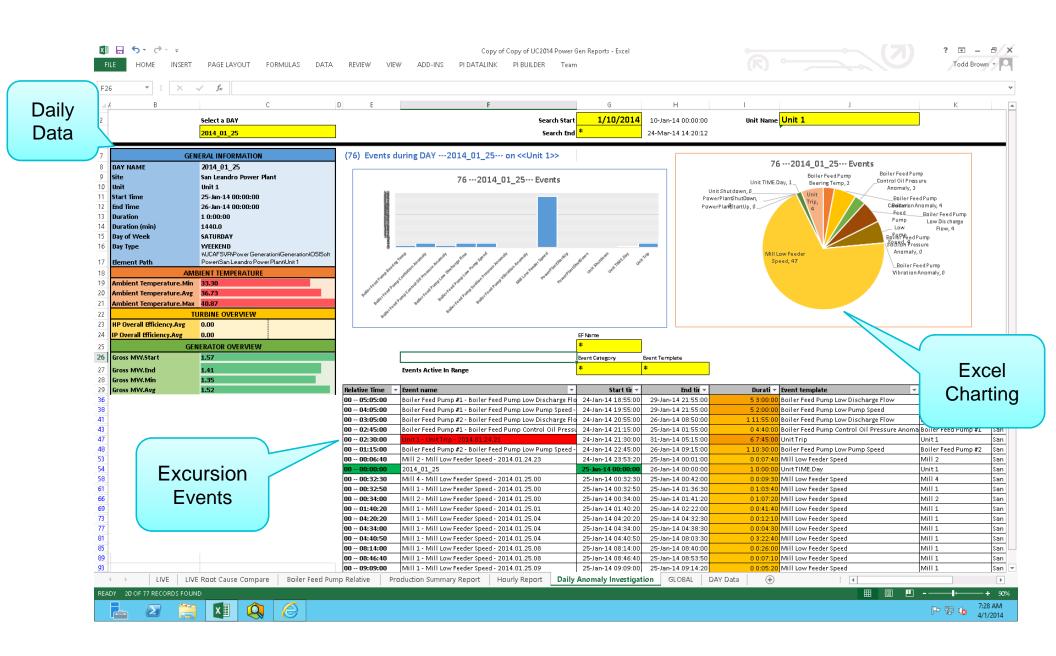
# PI DataLink 2014 – Daily Anomaly Report
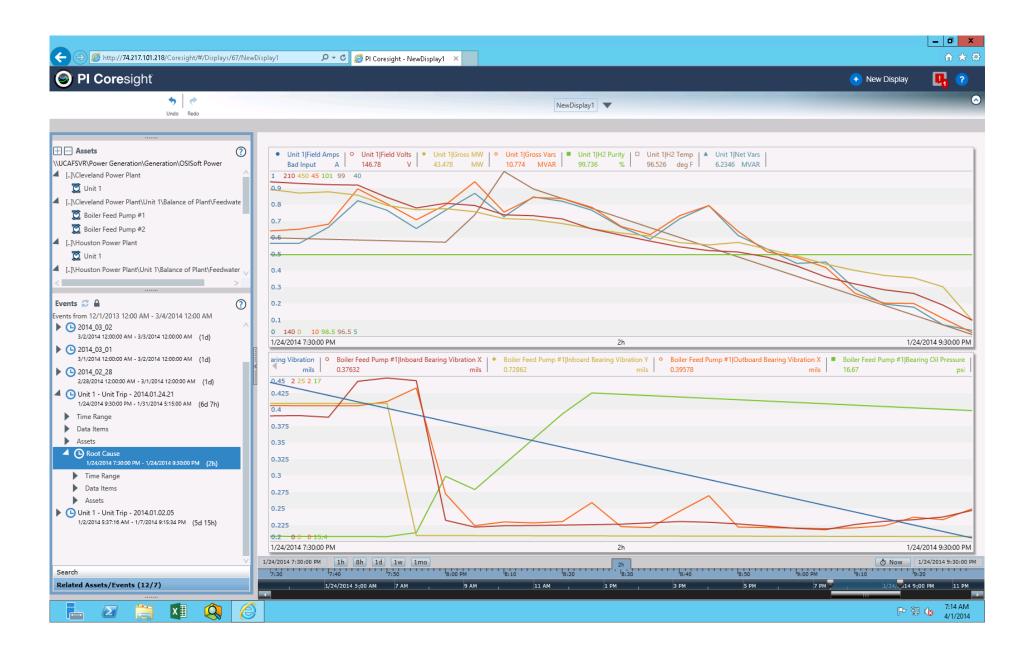
# PI Coresight – Root Cause Event Trending
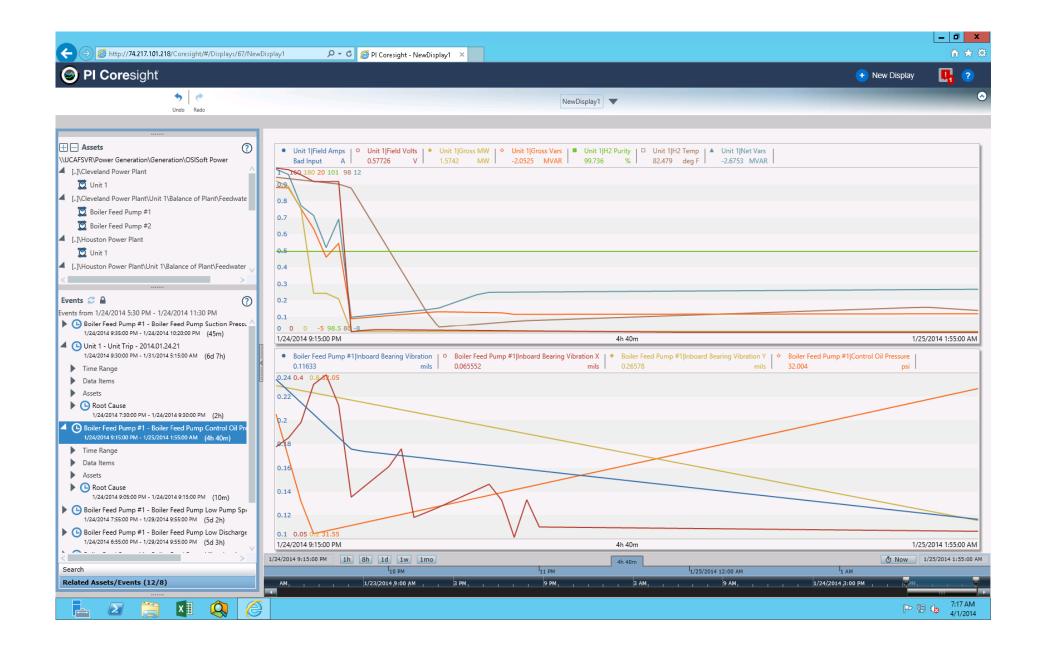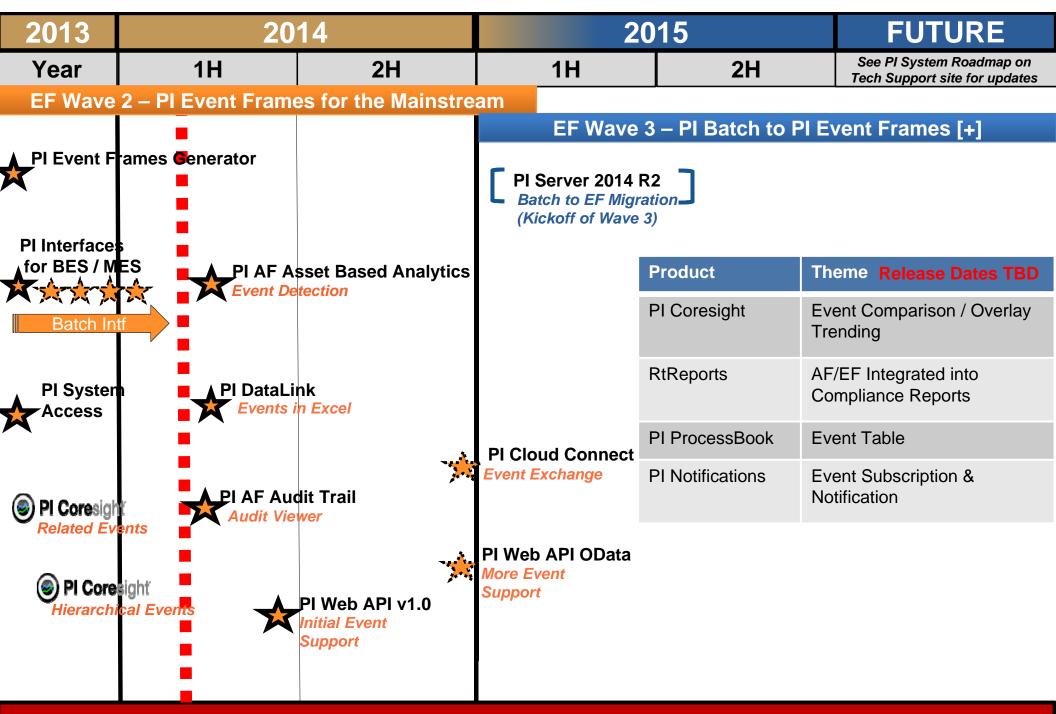
# PI Coresight 2014

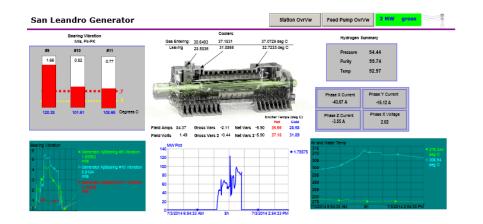I need to access my graphic displays and real-time data using any modern browser so that I can trouble shoot problems without special software installed.

PI ProcessBook Display Viewing

- Viewable on any modern browser
- Displays organized by import folder
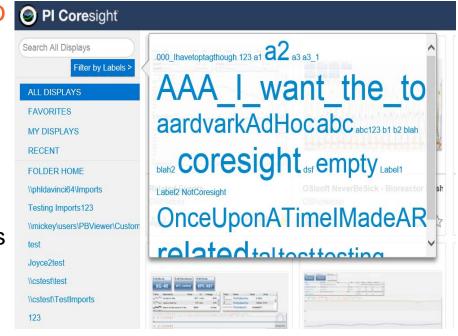- No special software needed on the client machine

# PI Coresight 2014

I need to quickly filter the list of displays to see only the ones I am interested in so I don't waste time hunting for what I want.

New Home Page

– Available using any modern browser
– Find and open native Coresight or PB displays
– Organize displays with folders or labels
– Administrator can manage any display

# PI Coresight 2014

I need access to my data and displays from anywhere and with any device, so I can solve problems even before I get there.
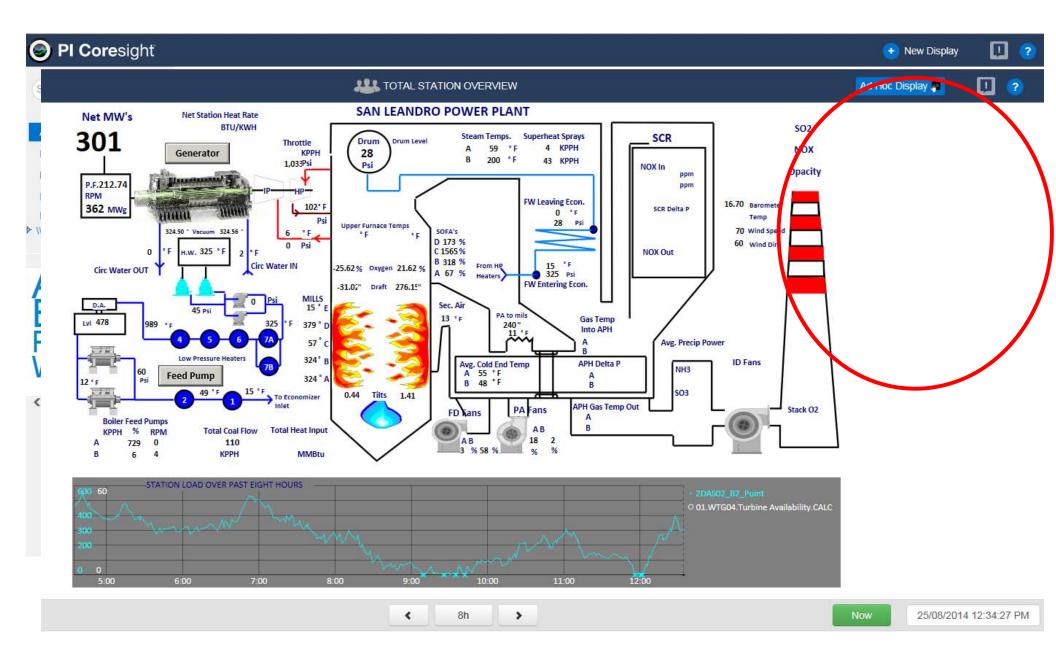
Mobile site

- Automatically displayed on small screen devices
- Find and display native Coresight and PB displays
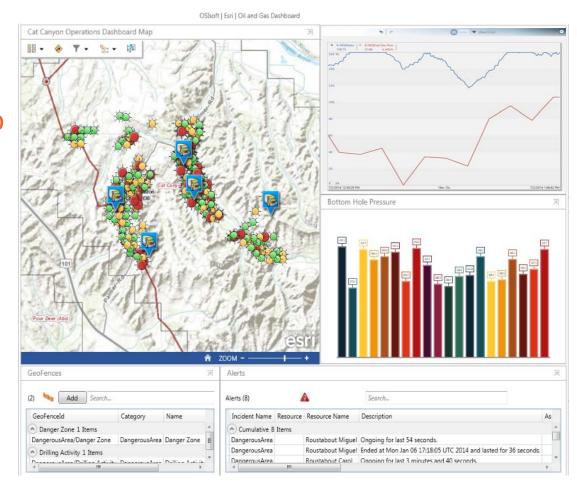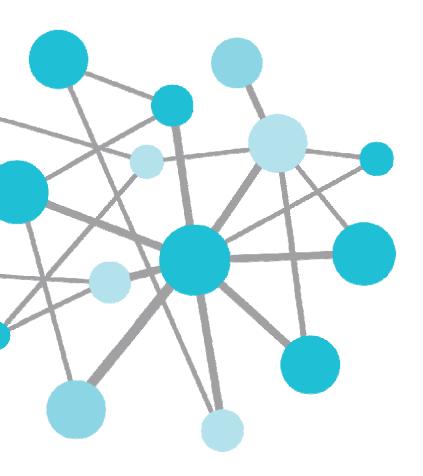- Full display, data item, and asset search

OSIsoft. PI SYSTEM ROADSHOW 2014

# PI Coresight 2014

I need to integrating PI Coresight with business applications and portal sites to get a complete view of operations.
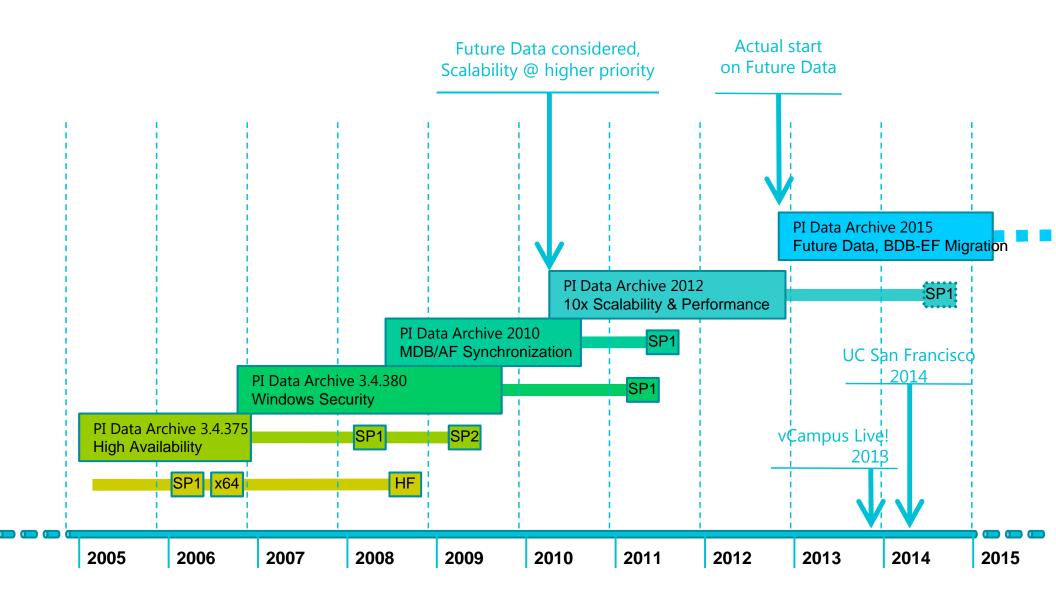
New URI parameters

– Hide Toolbar, Timebar

– Set element of interest for PB displays

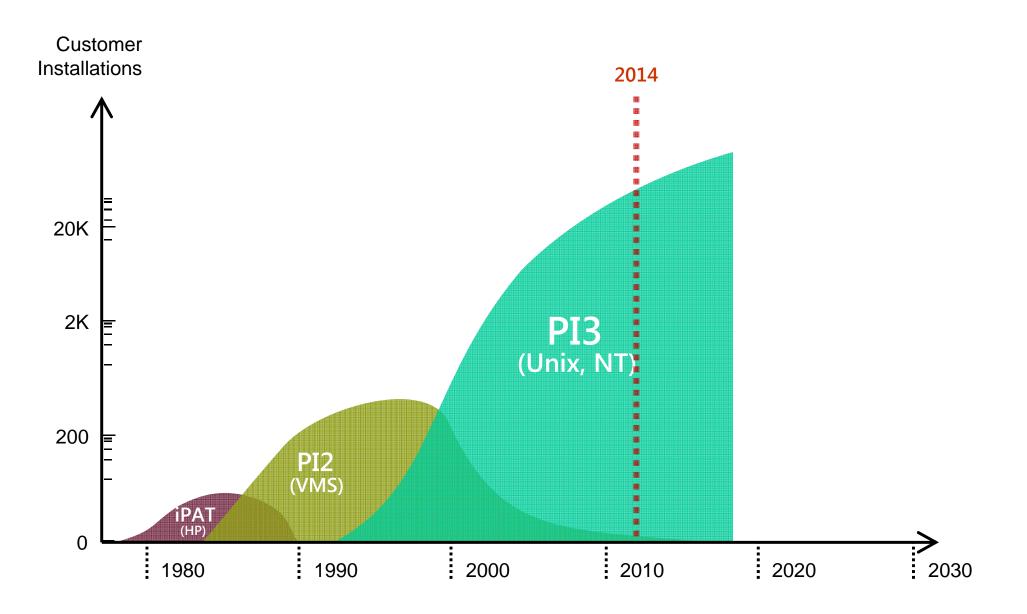– Set time zone for the current display
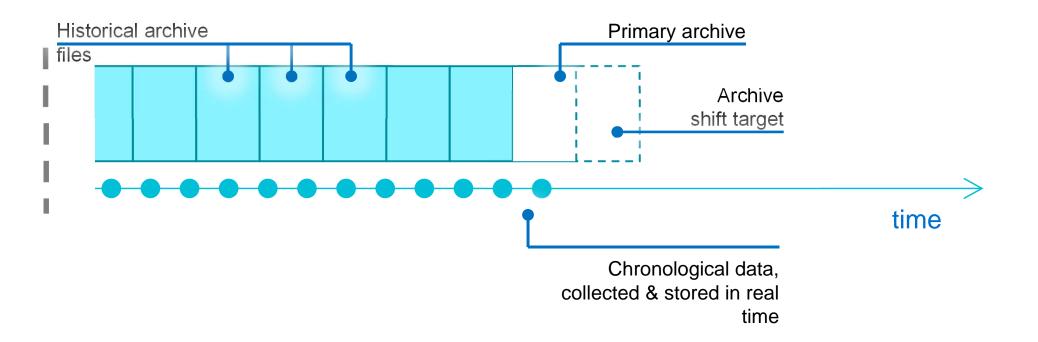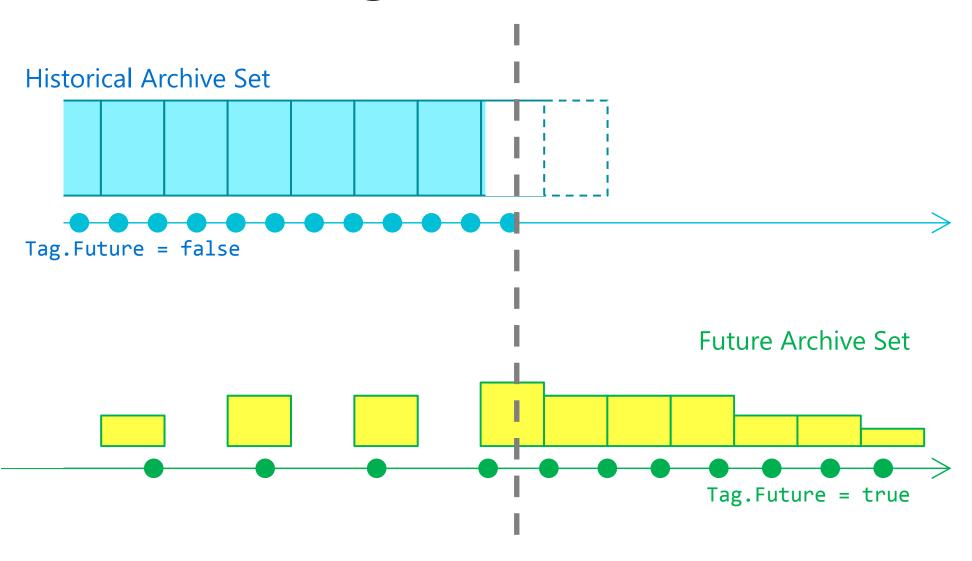
# Future Data
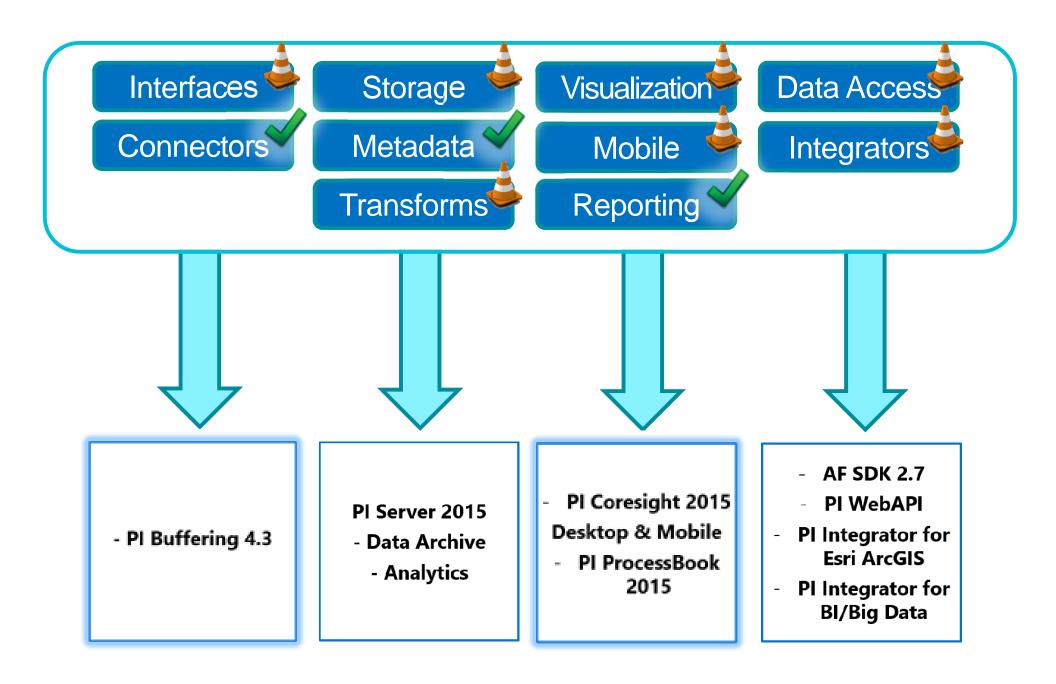
# Does it still matter?

# More Than Meets the Eye

# Storing "Historical" Data…



Historical archive files

Primary archive

Archive shift target

time

Chronological data, collected & stored in real time

# …And Storing "Future" Data

Historical Archive Set

Tag.Future = false

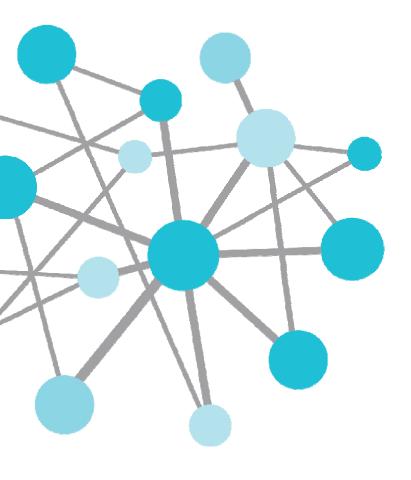Future Archive Set

Tag.Future = true

# Michael Luo

mluo@osisoft.com

Technical Consultant

OSIsoft Australia Pty Ltd

PI System Roadmap
https://techsupport.osisoft.com/Products/Product-Roadmap

# THANK YOU

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