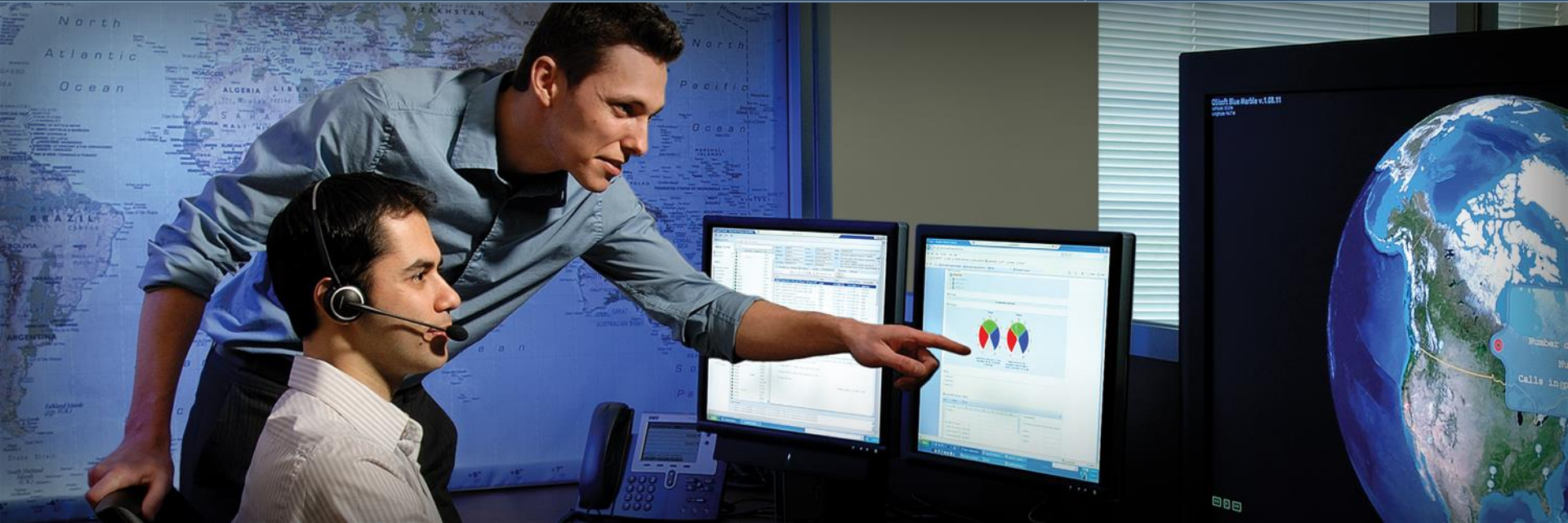




OSIsoft®

Regional Seminar Series



Critical Facilities Introduction - NYC Sept 15, 2009

Mike Mihuc - Regional Manager OSIsoft

Lines of Business/ Operations

IT Infrastructure

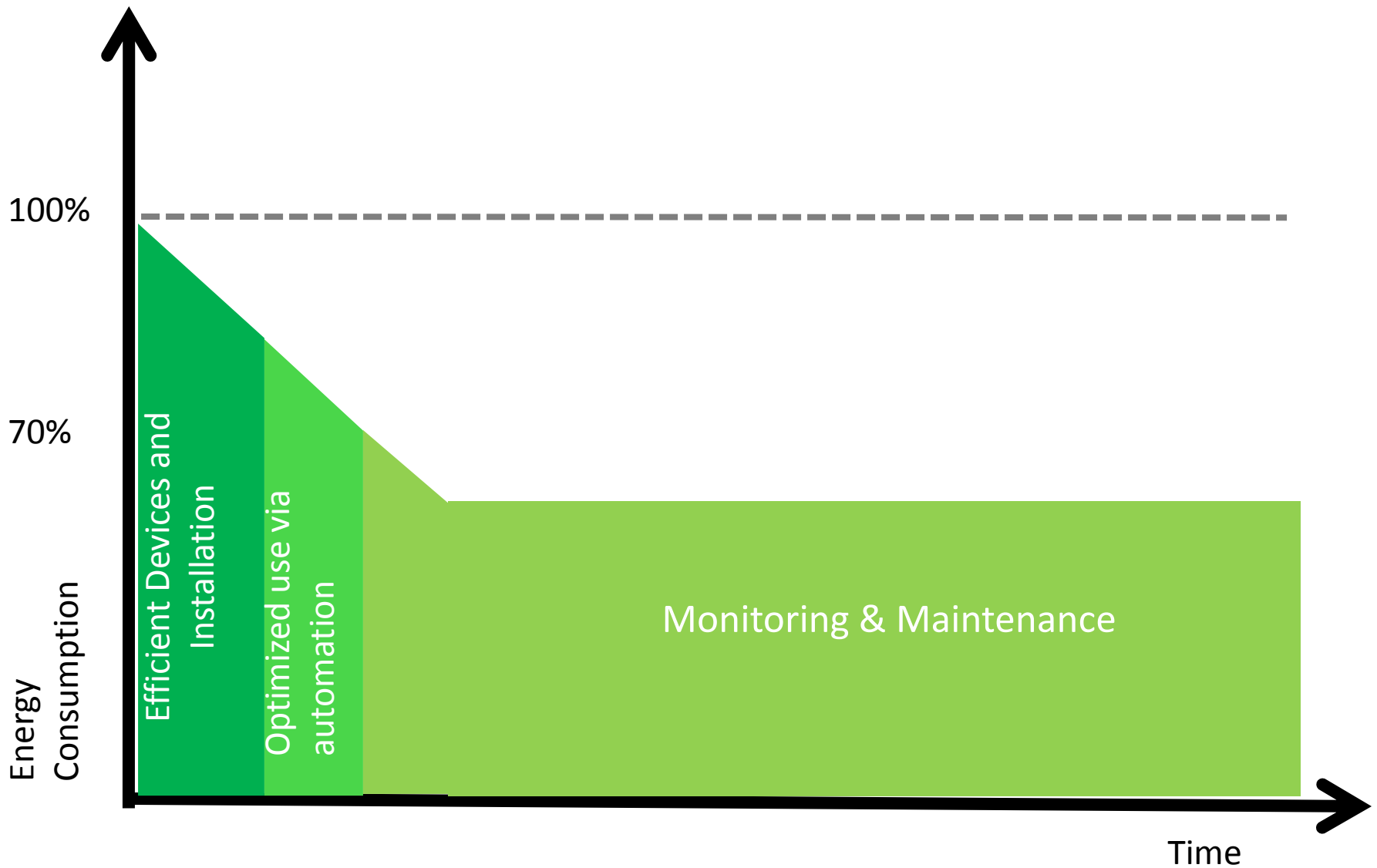
Data Center Infrastructure

Facility Infrastructure

PI for Critical
Facilities - Value
Chain

- Maintaining Availability Still the Top Priority
- Reducing Operational Costs
- Improving Energy Efficiency
- Compliance with Government Regulations

Energy Management



Customers using Pi for Critical Facilities



Facility Customers



Kodak

IBM



CISCO

Data Center Customers



accenture
High performance. Delivered.



BUSINESS SITUATION

Kodak Park wanted to find a way to present real-time energy data on their portal in order to lower the cost of curiosity and significantly reduce their energy utilization.

BENEFITS

Significant ROI – Millions of dollars in savings . Improved demand side management and optimization of generation assets.

Continuous Process Improvement – Identified opportunities in manufacturing to implement an energy conservation mode between product runs

- Kodak Park facts

- Area > 20,000,000 Square Feet
- 11,000 Employees
- Operates its own Fire Department
- Operates its own rail road
- Performs its own water and waste water treatment
- Operates 2 power plants

Measurements

- Benefits > \$10MM !

- 600 **Electric** Distribution **Meters**
- 600 Additional Distribution **Meters** for Steam, Chilled water, Brine, Compressed air, Process water, Nitrogen, Natural gas etc.
- Significant **Metering** Used within the Power Houses to Manage the **Generation** Side

Kodak Benchmarked their Process



KODAK Workforce Portal

Welcome JAMES BREEZE

Welcome myHR KP Energy

Utilities Home | Utilities Generation | Building Usage | Ad-Hoc Trend

Steam Scorecard

Total KP Plant Steam Flow

1426 KPPH

Goal < 1350



Electric Scorecard

KPE Steam Flow to MFG & Refrigeration

497 KPPH

Goal < 400



Chilled Water Scorecard

KPW,X&M Steam Flow to MFG & Refrigeration

377 KPPH



Kodak Water Scorecard

KPS Steam Flow

79 KPPH



Compressed Air Scorecard

Exhaust Steam to Atmosphere

127 KPPH



Total Boiler Build-Up

353 KPPH



260# Steam - Tie Line Flow from B-321 to B-31

57 KPPH

Total Megawatts

98 Megawatts



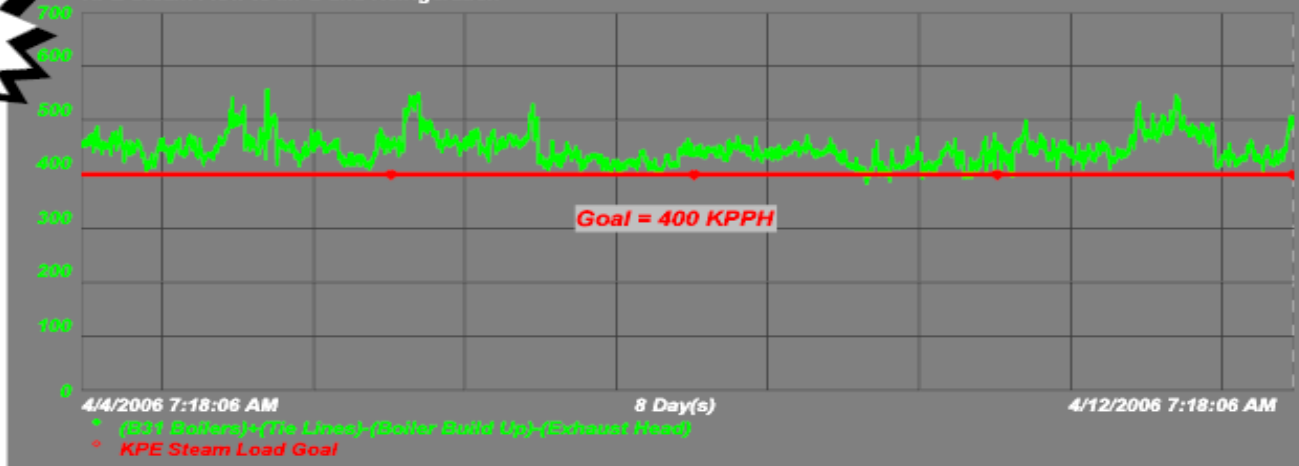
Link to "The Energy Times"

Purchased Power

14.0 MWATTS

Link to "The Energy Times"

KPE Steam Flow to MFG and Refrigeration



- First step is understanding and benchmarking your operations
- OSIsoft has interfaces for Critical Facilities and IT
- Your Account Manager would be happy to talk with you in order to understand your situation and to see how PI could create value

PI expansion update- see for yourself



UC Davis

<http://facilities.ucdavis.edu/Dashboard/>

Queen's University

<http://livebuilding.queensu.ca/>

Rochester University

<http://meters.energy.rochester.edu/rc%20sharepoint%20files/hutch%20hall%20electric.aspx>

2009 User Conference Critical Facilities Track -

[Industry Observations and Trends](#) (David Jump, Quantum Energy) - [PPT](#)

[The Daily Miracle of Internet Connectivity \(PI Data Centers\)](#) (Greg Dumas, DST Controls, Ernest Holloway, Pamela Brigham, Equinix) - [PPT](#)

[Real time Data for Data Center and Lab Energy Efficiency](#) (Chris Nolan, Cisco Systems, Ken Morikawa, OSIsoft) - [PPT](#)

[The Data Center Dashboard](#) (Steven Berkovich, Teresa Tung, Accenture) - [PPT](#)

[Understand How PI is being used at Microsoft in the 10min. Wrap](#) (Scott Mauvais, Microsoft Technology Center) - [PPT](#)



Thank you

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