OSIsoft.

REGIONAL SEMINAR 2011

E M E A

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Welcome

Presented by

Martin Otterson

Istanbul Regional Seminar

October 27, 2011

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About OSIsoft

- Established in 1980
- Founder - J. Patrick Kennedy
- Private
- Headquarters - San Leandro, CA
- 800 + employees
- 200 + employees in product development
- PI System Installed base
  - 15,000 + systems (excluding OEMs)
  - 110 + countries
- Footprint in:
  - 40% of Fortune 1 000 process & manufacturing companies
  - 65% of Global 500 process & manufacturing companies

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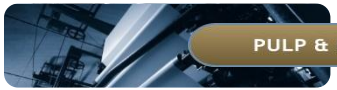
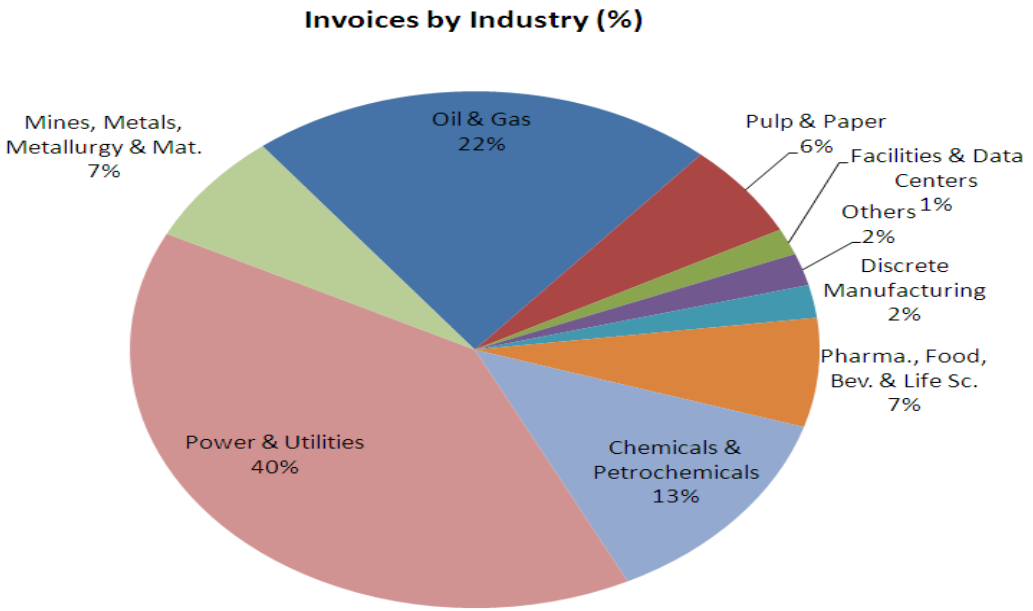
Industry Roles of the PI System





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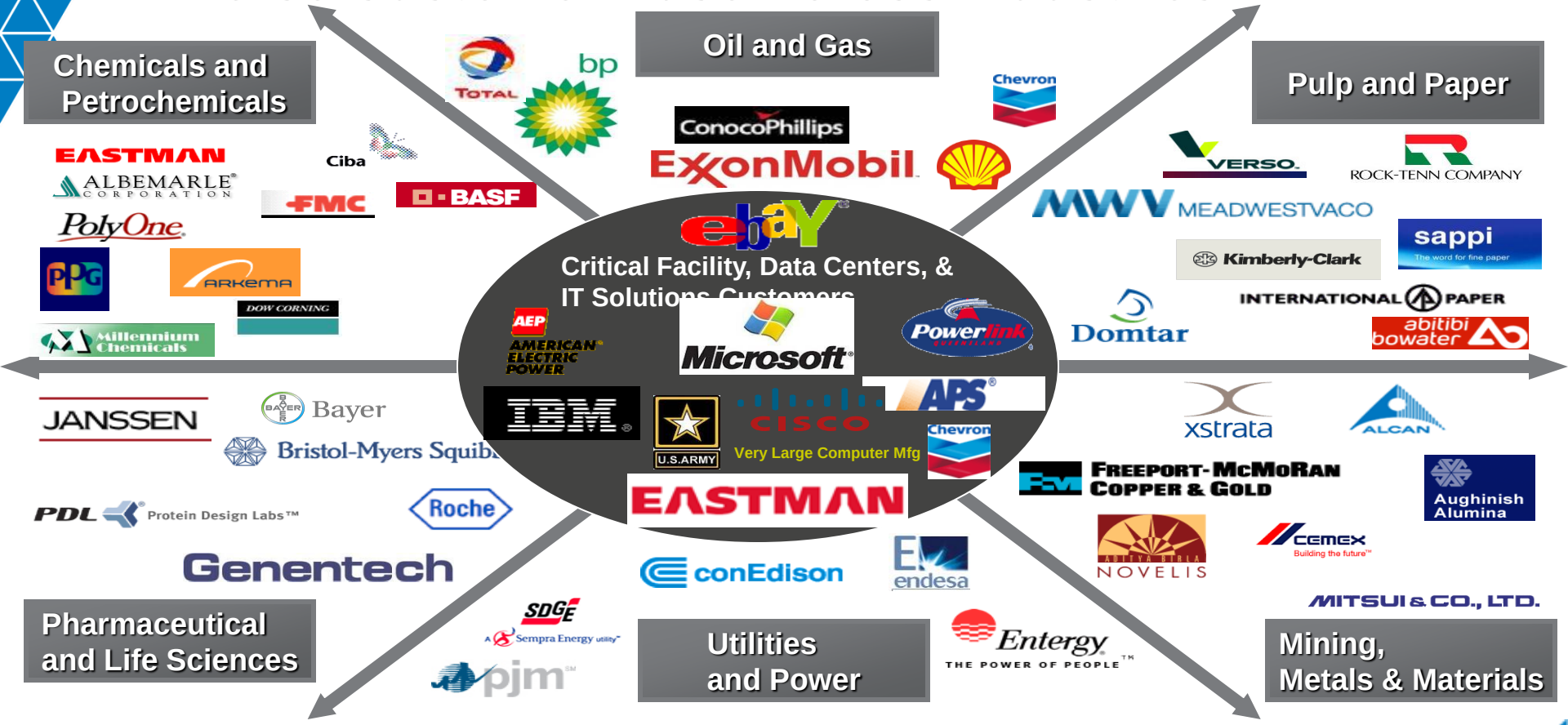
Diverse Customer Base Across Industries



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Marshall boya

akenerji
Enerjimiz Geleceğimiz

TEKSER
İNŞAAT SANAYİ VE TİCARET A.Ş.

ENERJİSA

EMERSON.

bp

AESEntek
2009 Her Hakkı Saklıdır

eren

BASF
The Chemical Company

EÜAŞ
ELEKTRİK ÜRETİM
ANONİM ŞİRKETİ

imagination at work

GE Fanuc Automatic

Eczacıbaşı

Georgia-Pacific

Ipek Kagit

ENKA

Gebze Elektrik Üretim Ltd

TÜBİTAK
Türkiye Bilimsel ve Teknolojik Araştırma Kurumu

DOĞA ENERJİ
ÜRETİM SANAYİ ve TİCARET LTD. ŞTİ.

MARSA

Roche

GAMA HOLDİNG

İZMİR ELEKTRİK ÜRETİM

OYAK
MARDİN ÇİMENTO

TEDAŞ
BİLGİ EDİNME SİSTEMİ

Cargill

Camis Elektrik Uretim A.S.

SANDOZ

SIEMENS

ZORLU

Zorlu Enerji

Unilever

Tüpraş

UNIMAR
Leaders in Obstruction Lighting™

aktek

Amylum Nişasta Sanayi

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OSIsoft Overview

EMEA – Europe Middle East Africa

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Where is OSIsoft in the world?

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EMEA (Europe Middle East & Africa)

- Europe – **Jesus Hernadez**
  - London, UK
  - Frankfurt, Germany
  - Paris, France
  - Madrid, Spain
  - Ostrava,Chez Republic
- Russia/CIS – **Alexander Tunyatkin**
  - Moscow, Russia
- Middle East/ Northern Africa/ Eurasia – **Pasha Ahmed**
  - Manama, Bahrain
  - Istanbul Turkey
- Sub-Saharain Africa/ South Africa – **Dean Trattles**
  - Dubin, South Africa

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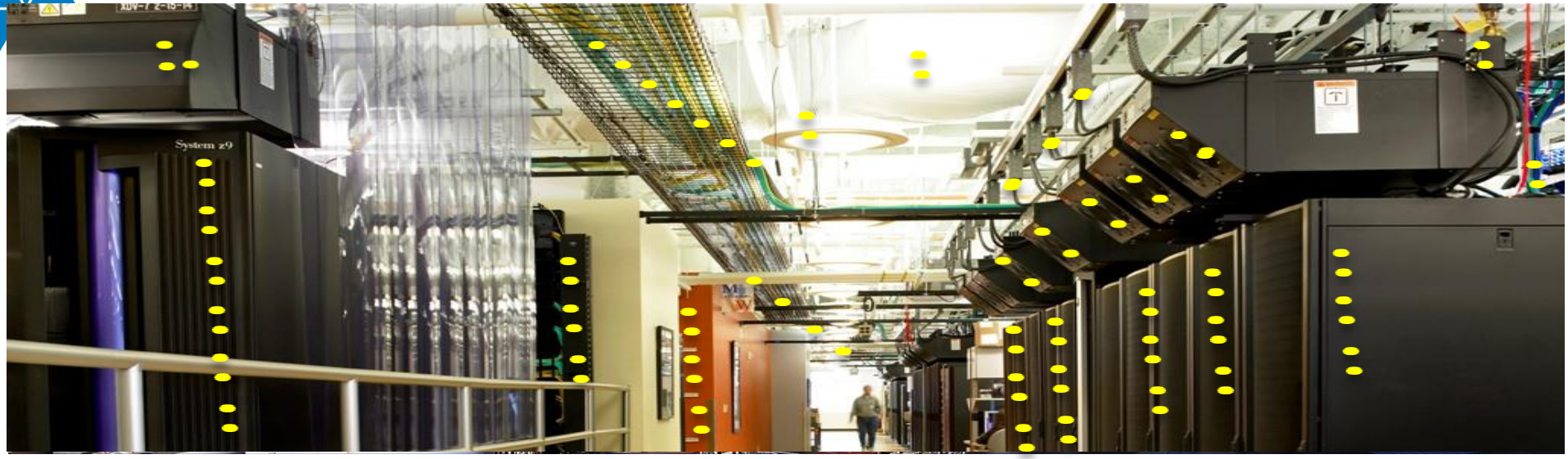
OSIsoft - What we do



PI System

COLLECT

HISTORIZE

FIND

ANALYZE

DELIVER

VISUALIZE

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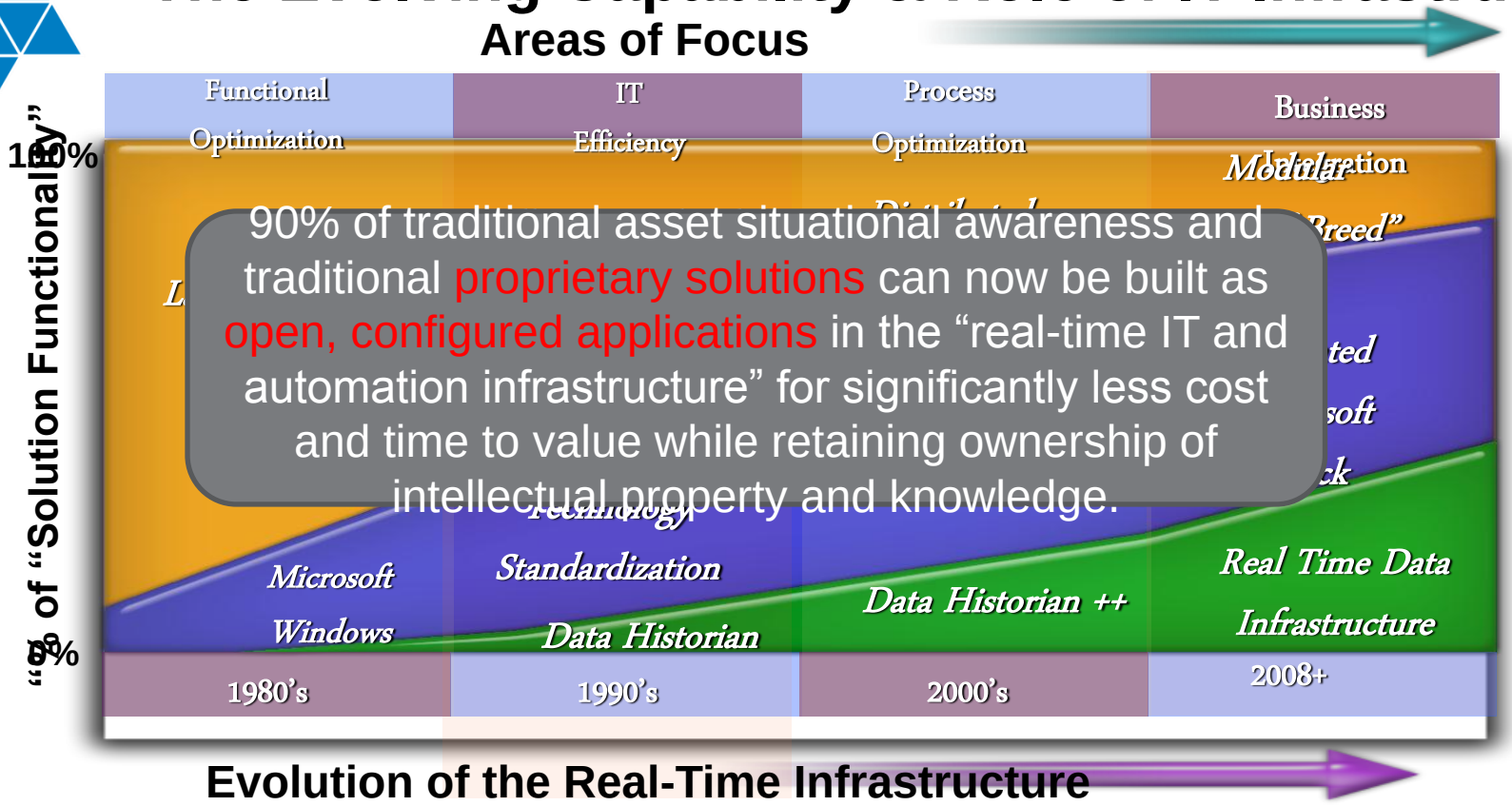
The Evolving Capability & Role of IT Infrastructure



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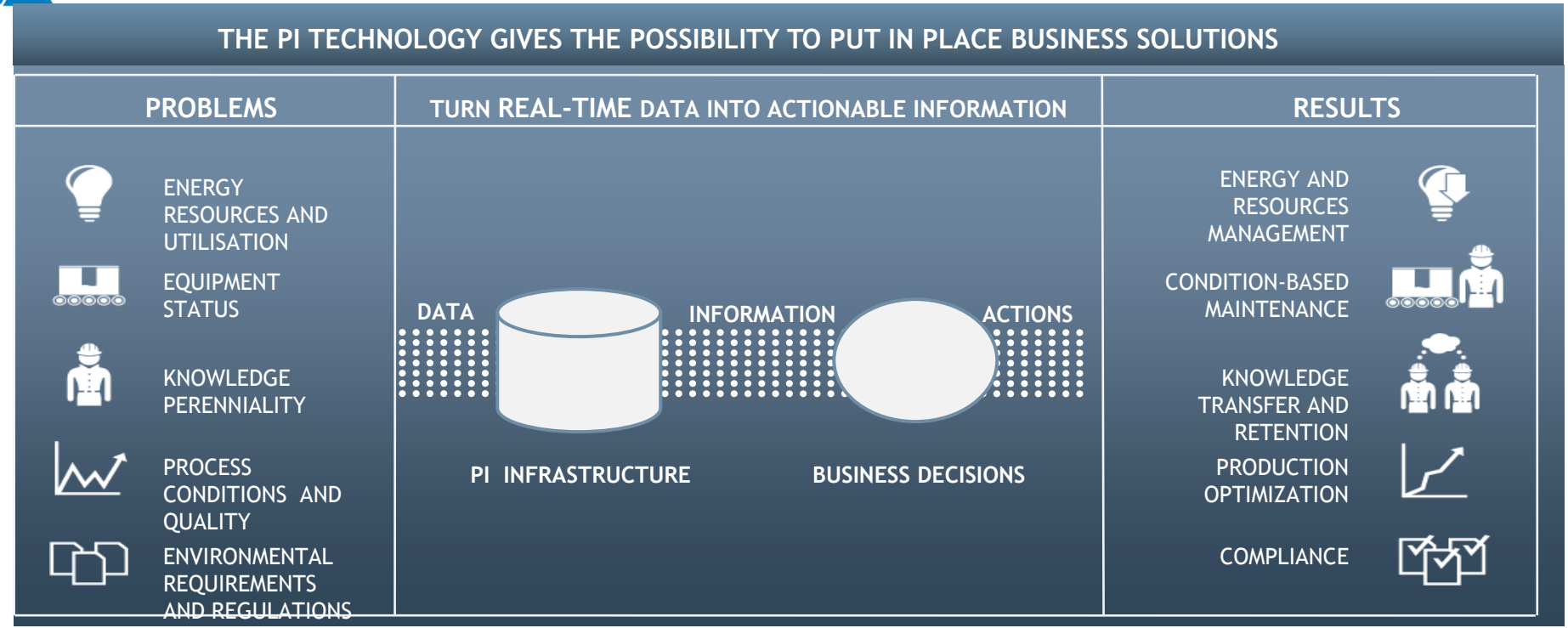
Turn Real-time Data Into Actionable Information



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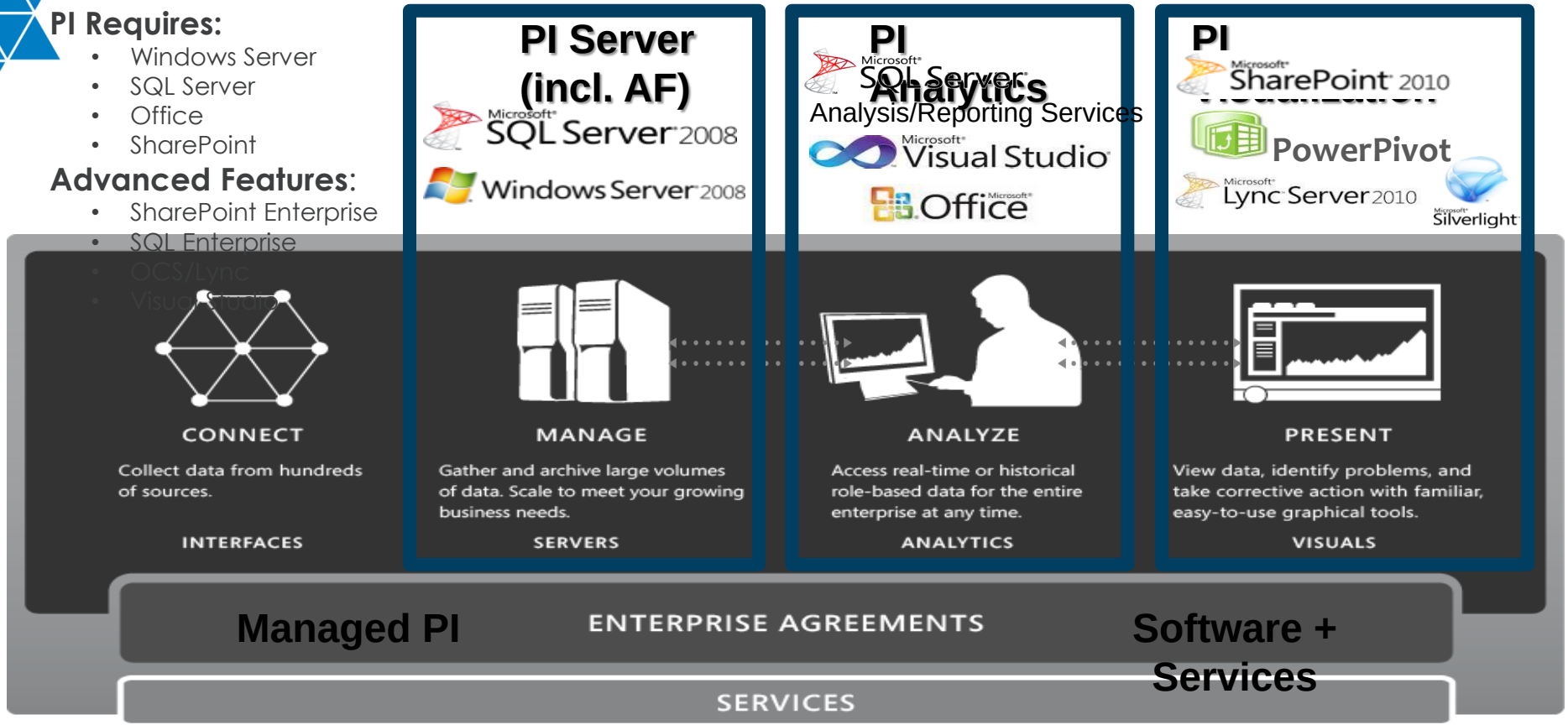
Microsoft Technologies

PI Requires:

- Windows Server
- SQL Server
- Office
- SharePoint

Advanced Features:

- SharePoint Enterprise
- SQL Enterprise
- OCS/Lync
- Visual Studio



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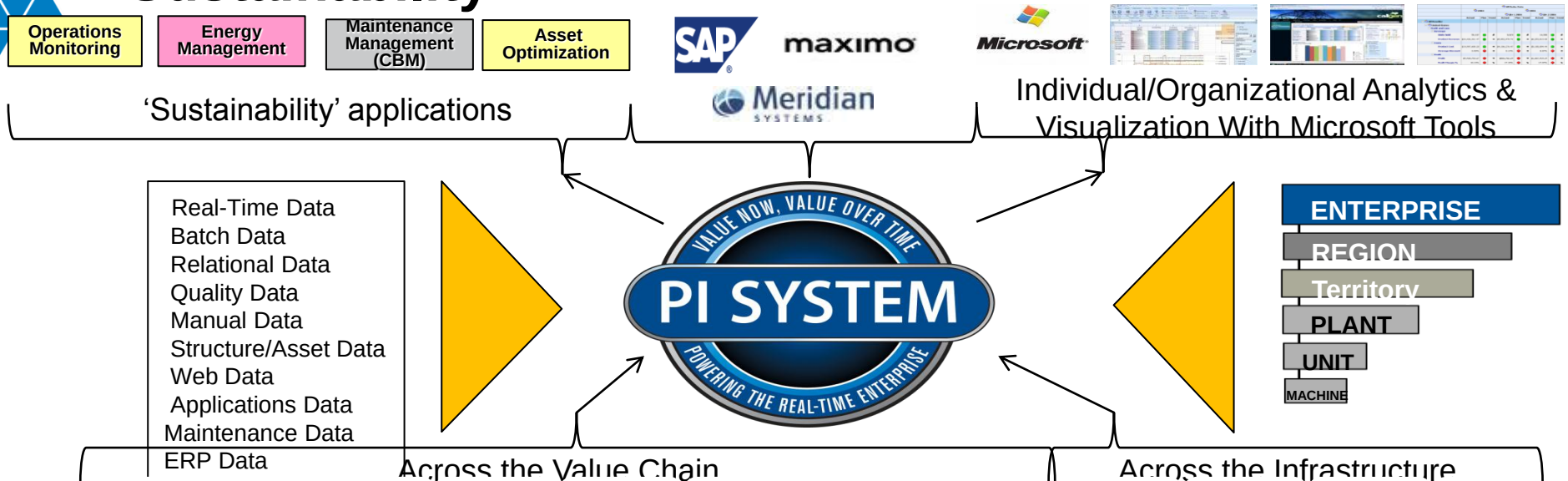
A PI System Infrastructure – Enabling Real-Time Sustainability



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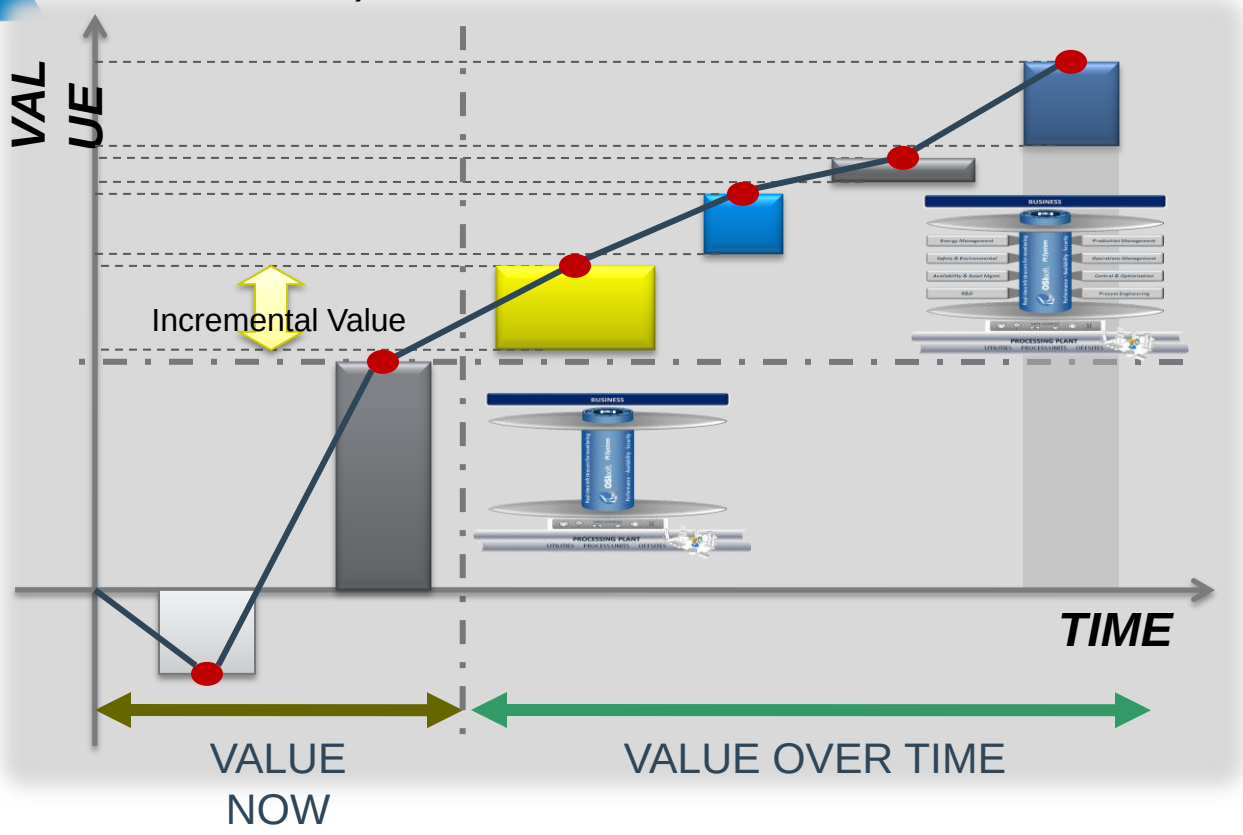
Innovative Infrastructure for Continuous Improvement

Value Now, Value Overtime



Application Benefits

- ***Operations Management***
- ***Environmental Reporting***
- ***Equipment Health Mgmt.***
- ***Performance Management***

Infrastructure Value

Initial Investment

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Microsoft & OSIsoft Alliance

- OSIsoft converted The PI System to Windows NT in 1993
- OSIsoft #3 company to sign up for VBA in 1997
- 100% Microsoft focus – we don't offer any competing technology
- Globally managed ISV Partner: One of a select few in the M&R sector
  - Christian Roller, Global BDM, Microsoft (based in Munich)
  - 25+ Solution area wins in FY11, PSP's across EMEA in FY12
- Strong Microsoft Alliance team - makes us easy to partner with
- Understand how to co-sell, willing to share information

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Energy Management - Use Case examples

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The Services Foundation

Across the company, all over the world, around the clock

Yellow box or text = pipeline

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ROI

Microsoft on OSIsoft on PI in the Data Center

"We are using the **OSIsoft PI System to monitor all the critical points within our data centers**, and in turn are laying the foundation for a **high-availability, global Live infrastructure**,"

"The return on investment is tremendous. We are enabling innovation through increased collaboration, social networking and commerce—leading to breakthroughs in software plus services. We are setting industry standards **with increased utilization of facility resources, real time business continuity, and green computing technologies**. As we continue to expand our Live services, the combination of **OSIsoft and Microsoft technologies** are bringing new levels of performance and reliability to our world-class data centers."

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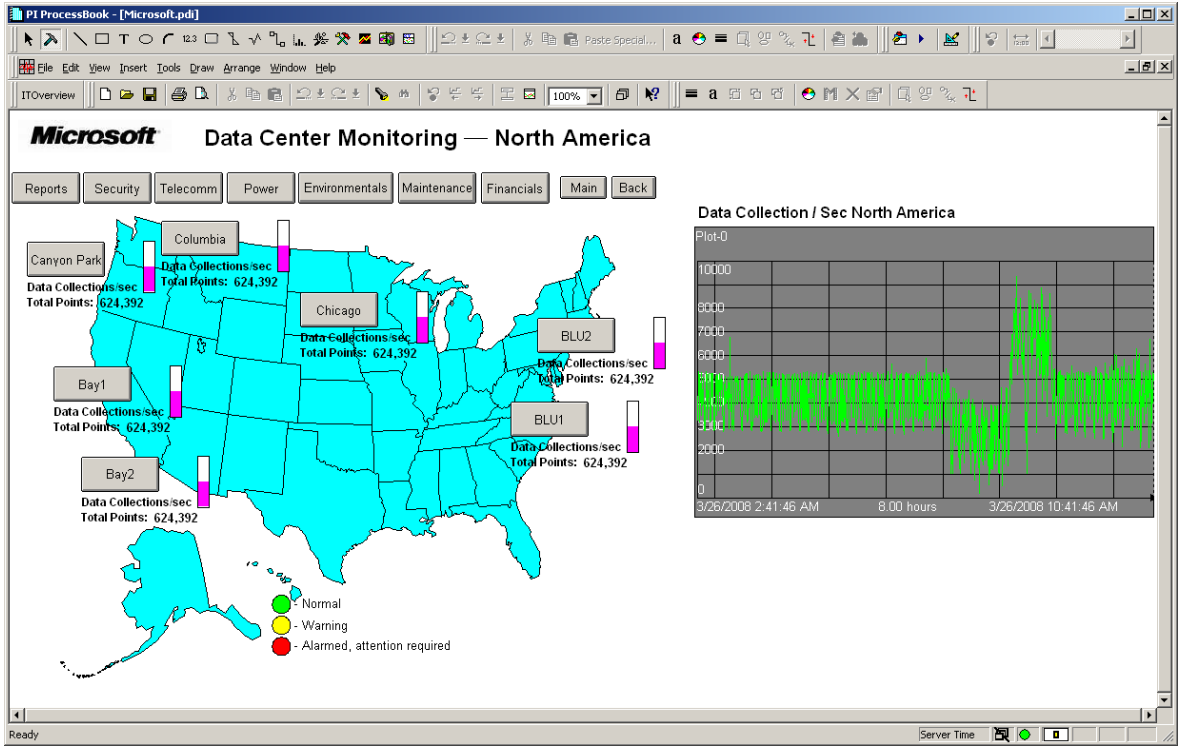

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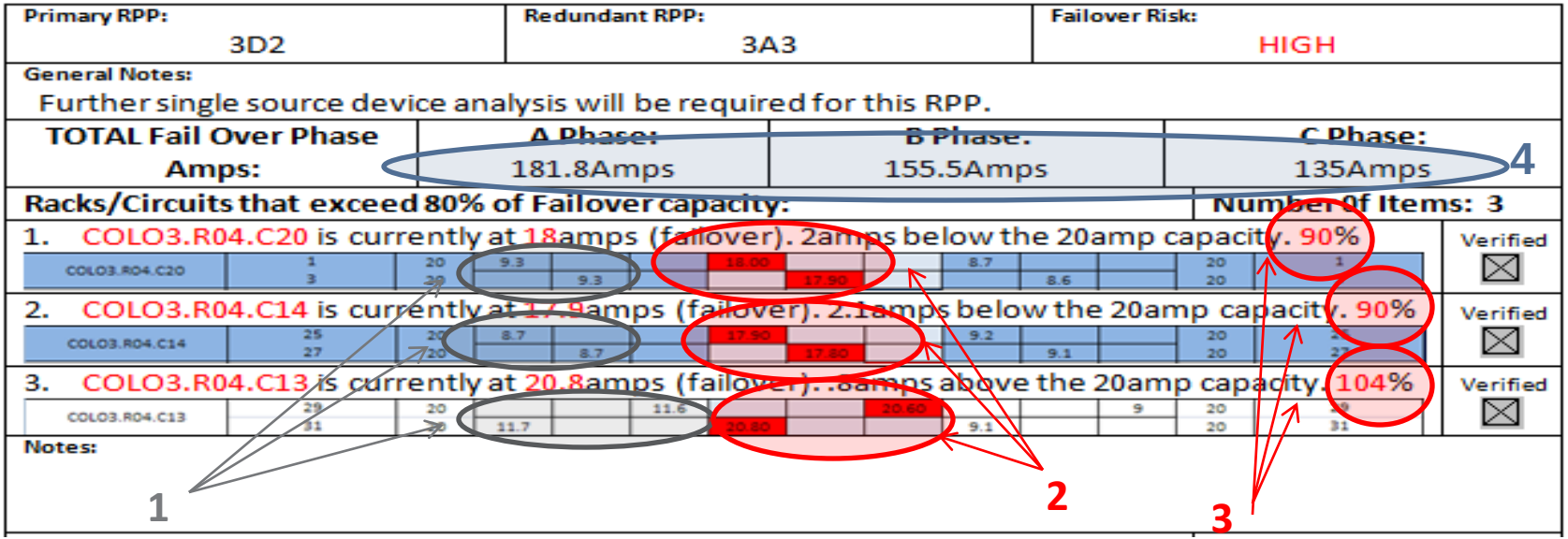
USE case PI –Datalink PDU Maintenance

Failover Report on PDU 3D, RPP 3D2



Primary RPP:	Redundant RPP:	Failover Risk:
3D2	3A3	HIGH

General Notes:
Further single source device analysis will be required for this RPP.

TOTAL Fail Over Phase Amps:	A Phase:	B Phase:	C Phase:
	181.8Amps	155.5Amps	135Amps

4

Racks/Circuits that exceed 80% of Failover capacity: **Number Of Items: 3**

1. COLO3.R04.C20 is currently at 18amps (failover). 2amps below the 20amp capacity. 90% — Verified ☒

COLO3.R04.C20	1	20	9.3			18.00			8.7			20	1	
	3	20		9.3			17.90			8.6		20		

2. COLO3.R04.C14 is currently at 17.9amps (failover). 2.1amps below the 20amp capacity. 90% — Verified ☒

COLO3.R04.C14	25	20	8.7			17.90			9.2			20	[illegible]	
	27	20		8.7			17.80			9.1		20	27	

3. COLO3.R04.C13 is currently at 20.8amps (failover). .8amps above the 20amp capacity. 104% — Verified ☒

COLO3.R04.C13	29	20			11.6			20.60			9	20	[illegible]	
	31	20	11.7			20.80			9.1			20	31	

Notes:

1 2 3

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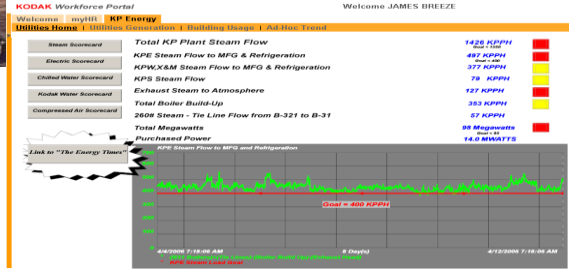
Kodak

BUSINESS SITUATION

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

Kodak Par

- 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
- Operated 2 power plants



BENEFITS

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

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

Measurements

- 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**

Over $27+$30 Million In Savings

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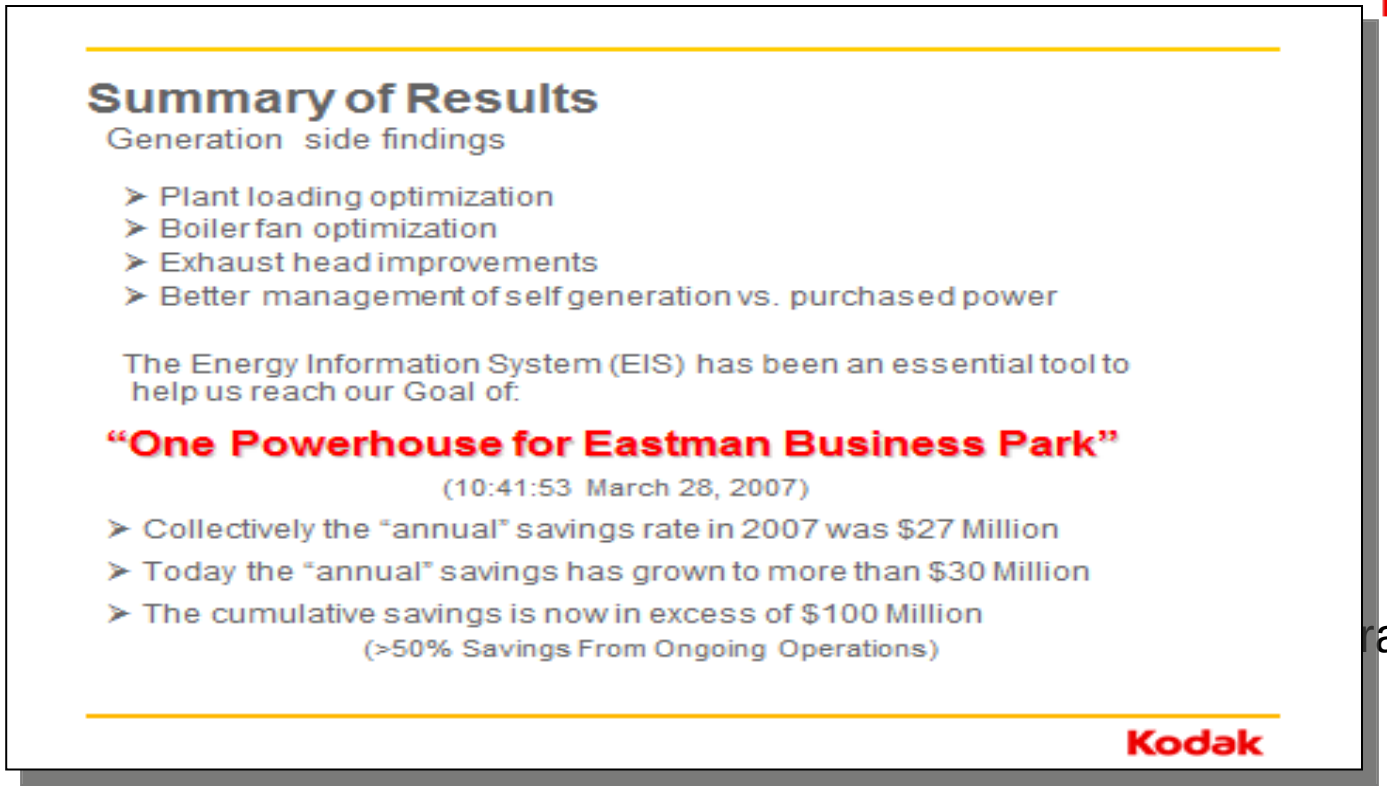
Kodak Case Study - Energy

Kodak



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ralized water

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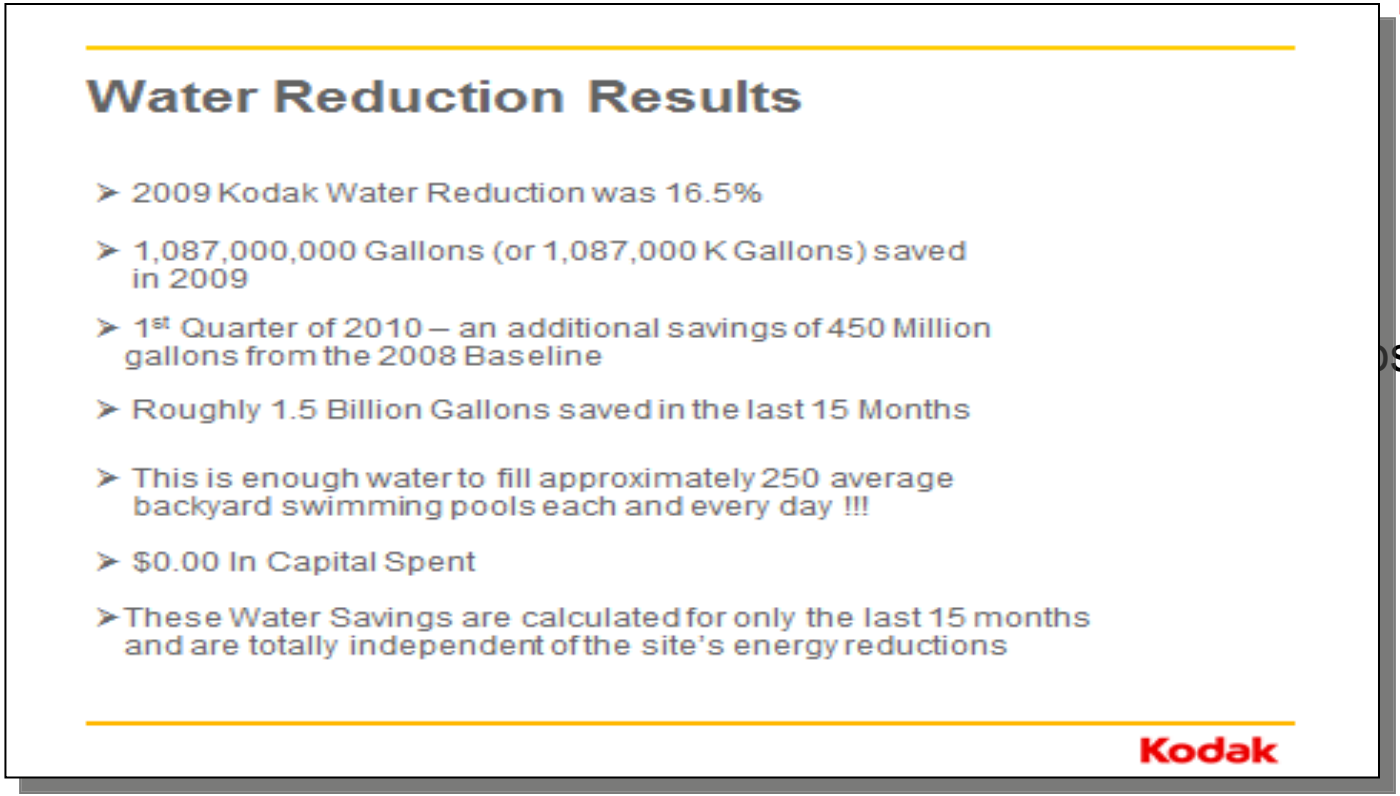
Kodak Case Study - Water

Kodak



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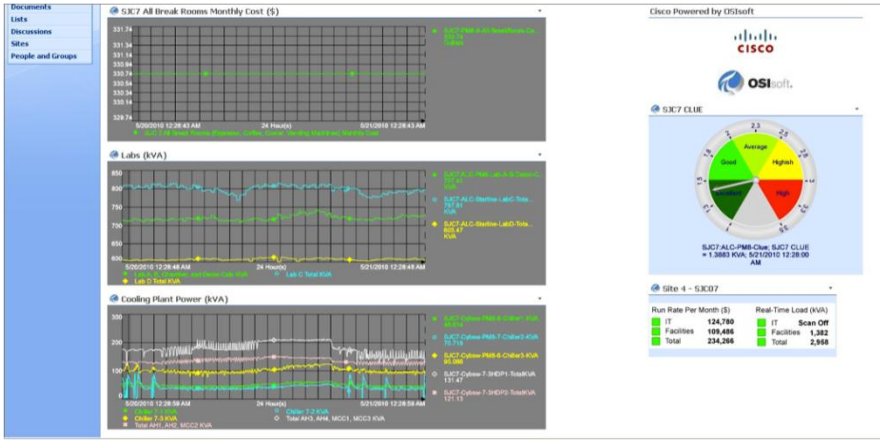
CISCO Systems

BUSINESS SITUATION

- July 2008, Publicly Announced 25% Absolute Reduction 2007-2012
- Global, Enterprise Wide Effort across Owned & Leased Properties
- $150M USD Paid for Energy in FY 2006 ~80% Labs & Data Centers



BENEFITS

- **Faster Decision Making** – Data that took a month to access available in real time. Information manually distributed to 80 cost centers now available electronically.
- **Continuous Process Improvement** – Facilities and financial analysts collaborating to make profitable decisions.
- **Reduced Costs** – Adverted transformer overload/ outage saving hundreds of thousands of dollars in single event

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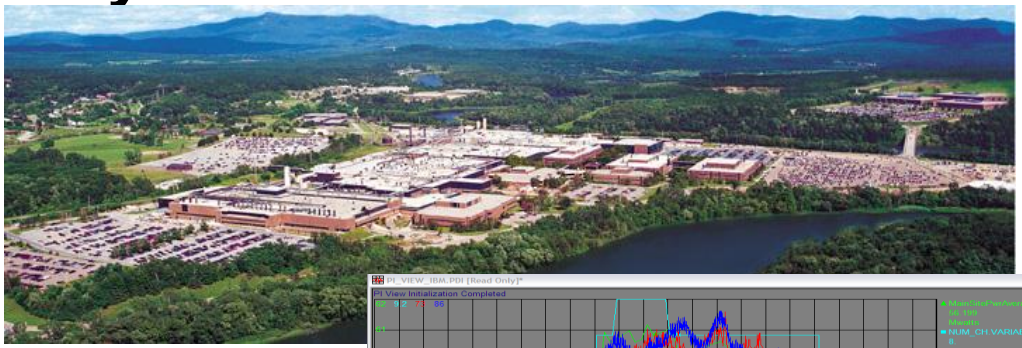
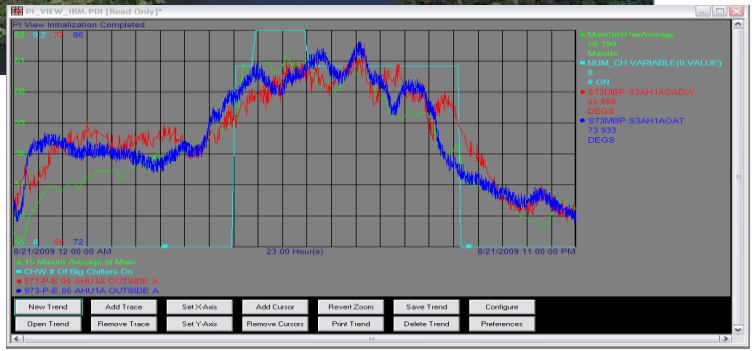
IBM – Burlington Facility



IBM Burlington is a large semiconductor manufacturing site which consumes 3.2 million gallons per day of water and 446 million kilowatt hrs. of electricity annually.



IBM's Advanced Data Management techniques have supported nearly a decade of sustained improvements in energy and water management.

Data management techniques employed by IBM allow for a continuous stream of improvement projects.

Advanced Industrial Water & Energy Management Saves $10 M Annually

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Alcoa

- Aggressive, transparent Sustainability Program
- Some key concepts
  - Life cycle assessment
  - Product design
  - Economic value of products
- Industrial Demand Response
  - Provide reliability to the grid
  - Reduce energy costs

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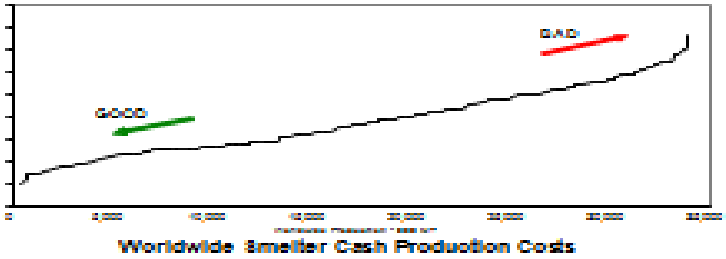
Alcoa

- Commodity business
- Co

Aluminum Smelting Economics

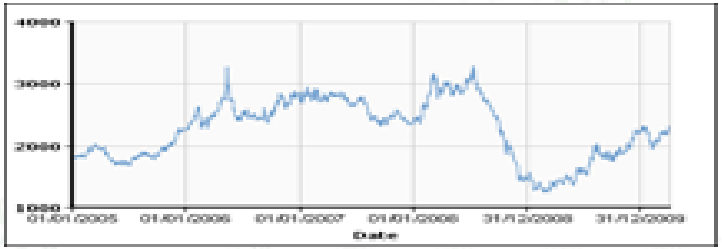
Energy is 30-40% of Aluminum Production Costs....



Worldwide Smelter Cash Production Costs

Warrick Operations is Alcoa's Largest Operating U.S. Smelter

- 330,000 MT capacity/year



Competition in a Worldwide Commodities Market....

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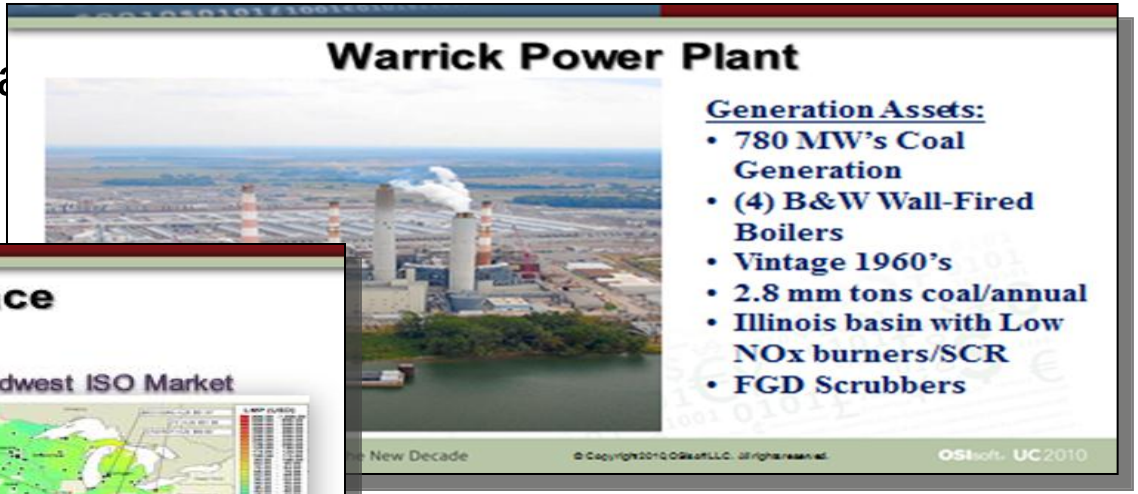
Alcoa

- 780 MW Generation
- FERC License—participa



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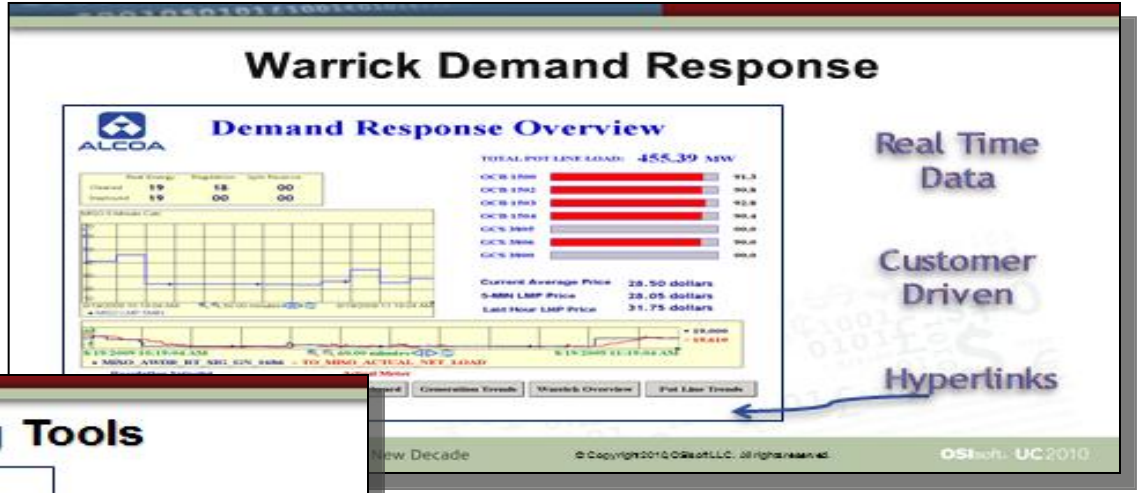
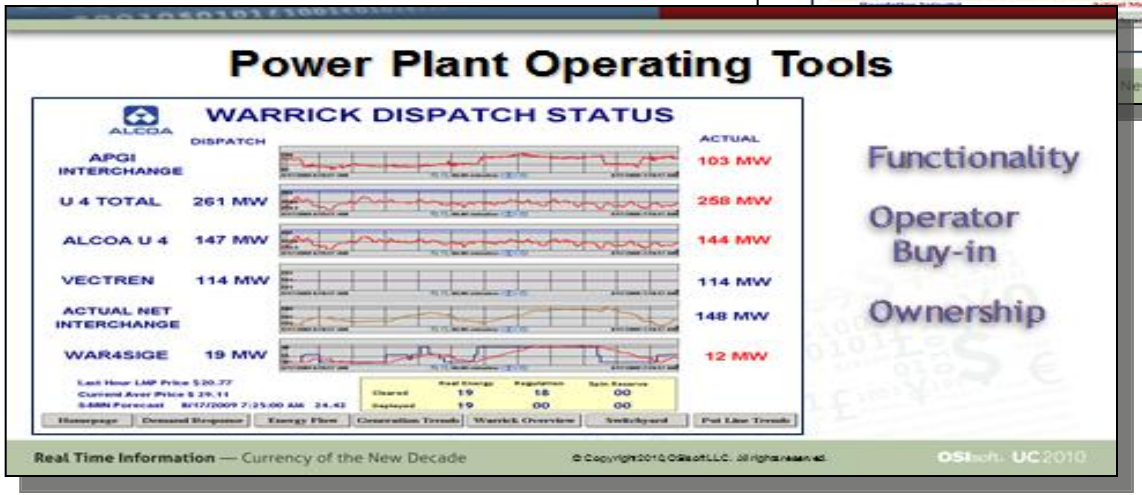
Alcoa

- MISO (Grid operator)
  - Reliability
  - Generation capacity
  - Congestion mitigation





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Thank you

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