



# Unlocking the Value From Data

Presented by

Enrique Herrera

Enterprise Strategy and Architecture Services

Microsoft Corporation

[eherrera@microsoft.com](mailto:eherrera@microsoft.com)



# Agenda

- Technology and Trends
- OSIssoft Microsoft Alliance
- Real World Examples

# Technologies and Trends

**Ubiquitous Sensors and Media**  
**Explosive Data Growth**

**System on a Chip Designs**  
**Powerful Devices**

**Computer Consumerization**  
**Many Devices World**

**The Internet of Things**  
**Computers Everywhere**

**Client + Cloud**  
**New software models**

**Natural User Interfaces**  
**Moving beyond GUIs**



# Analyze Closer to the Source AND In the Cloud

Sensor  
Data 1

Sensor  
Data 2

Sensor  
Data 3

Sensor  
Data 4

Sensor  
Data 5

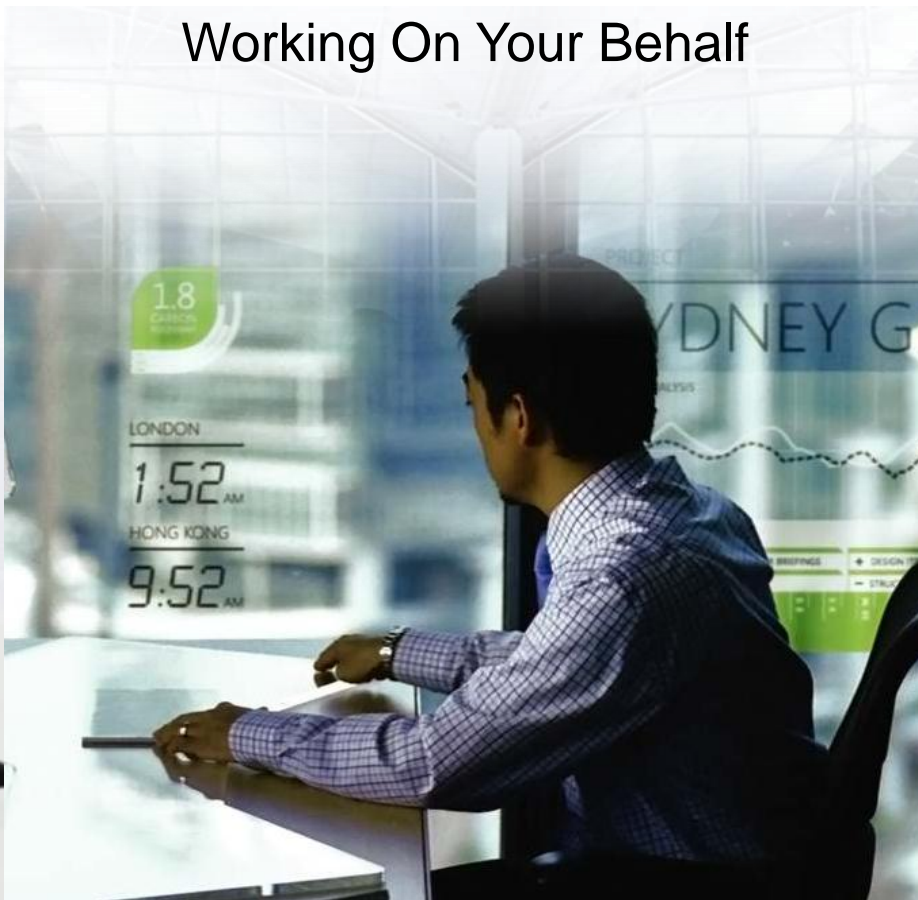


Get Value from “Big Data”

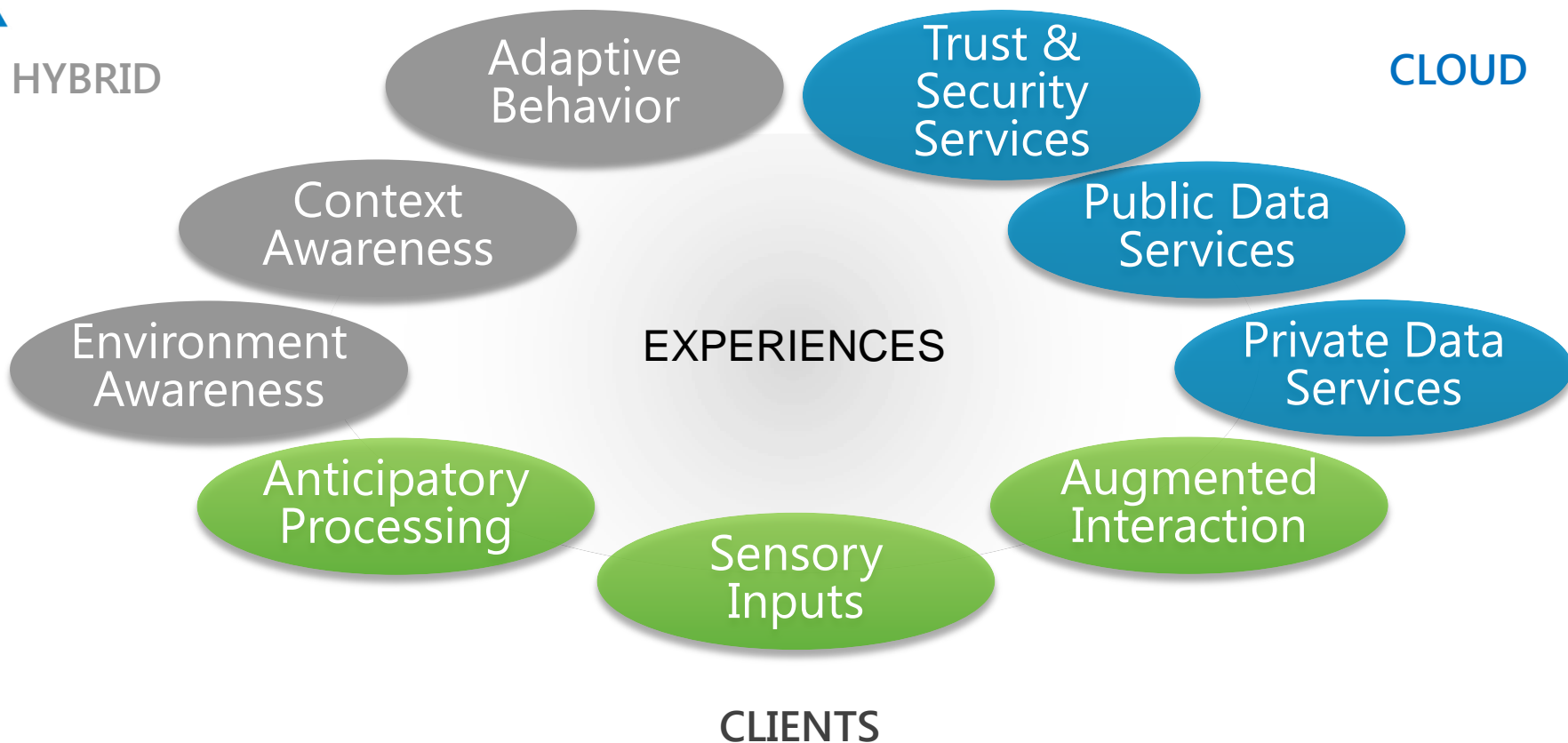
## Working At Your Command



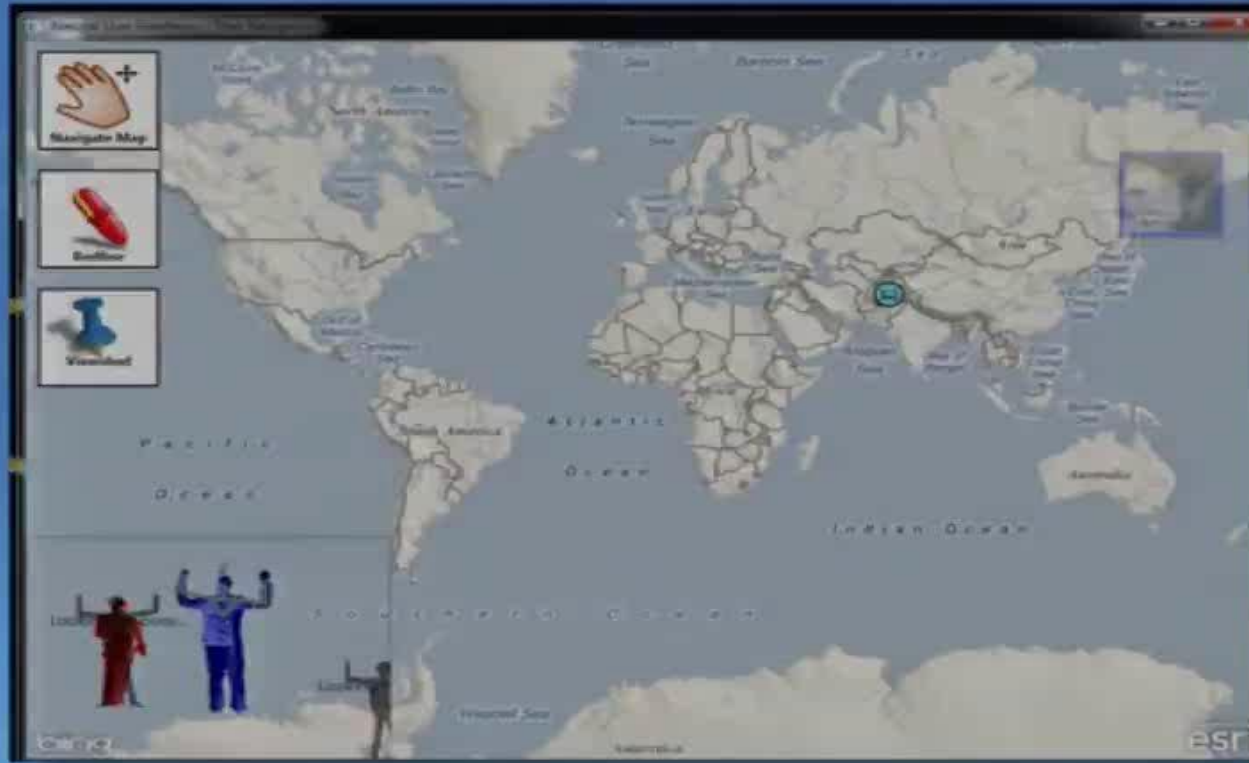
## Working On Your Behalf



# The Future of Contextually Sensitive Experiences



# A more natural user interface...



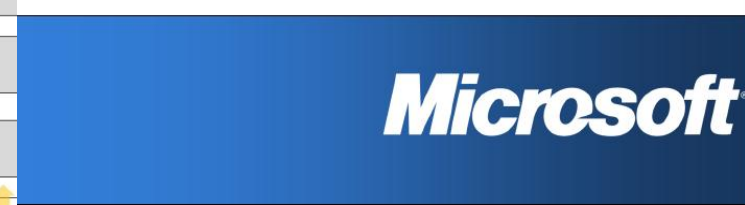
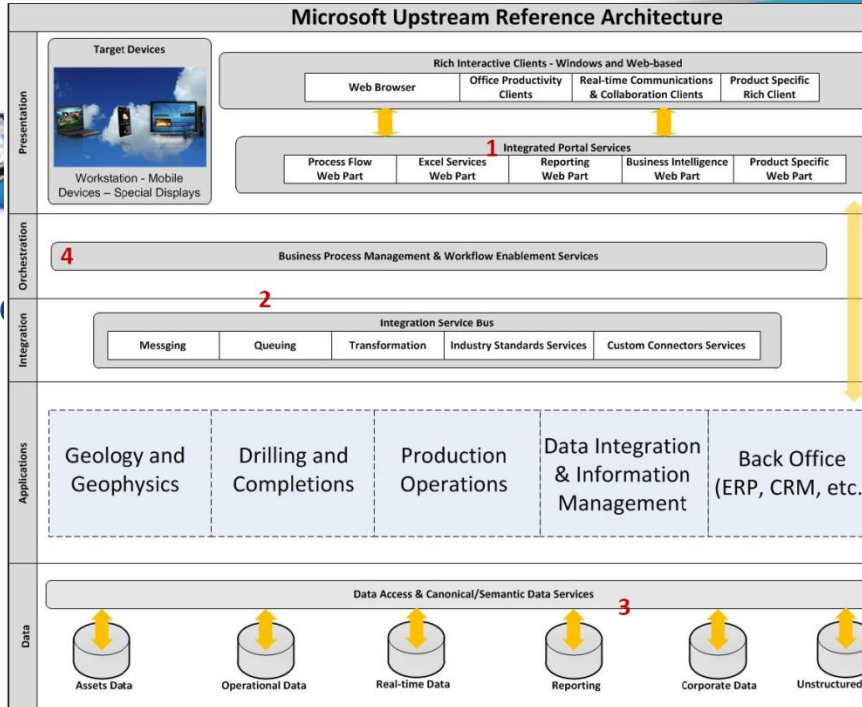


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# Investments in Manufacturing and Resources



Microsoft Power and Utilities

Smart Energy  
Reference Architecture

October 14, 2009

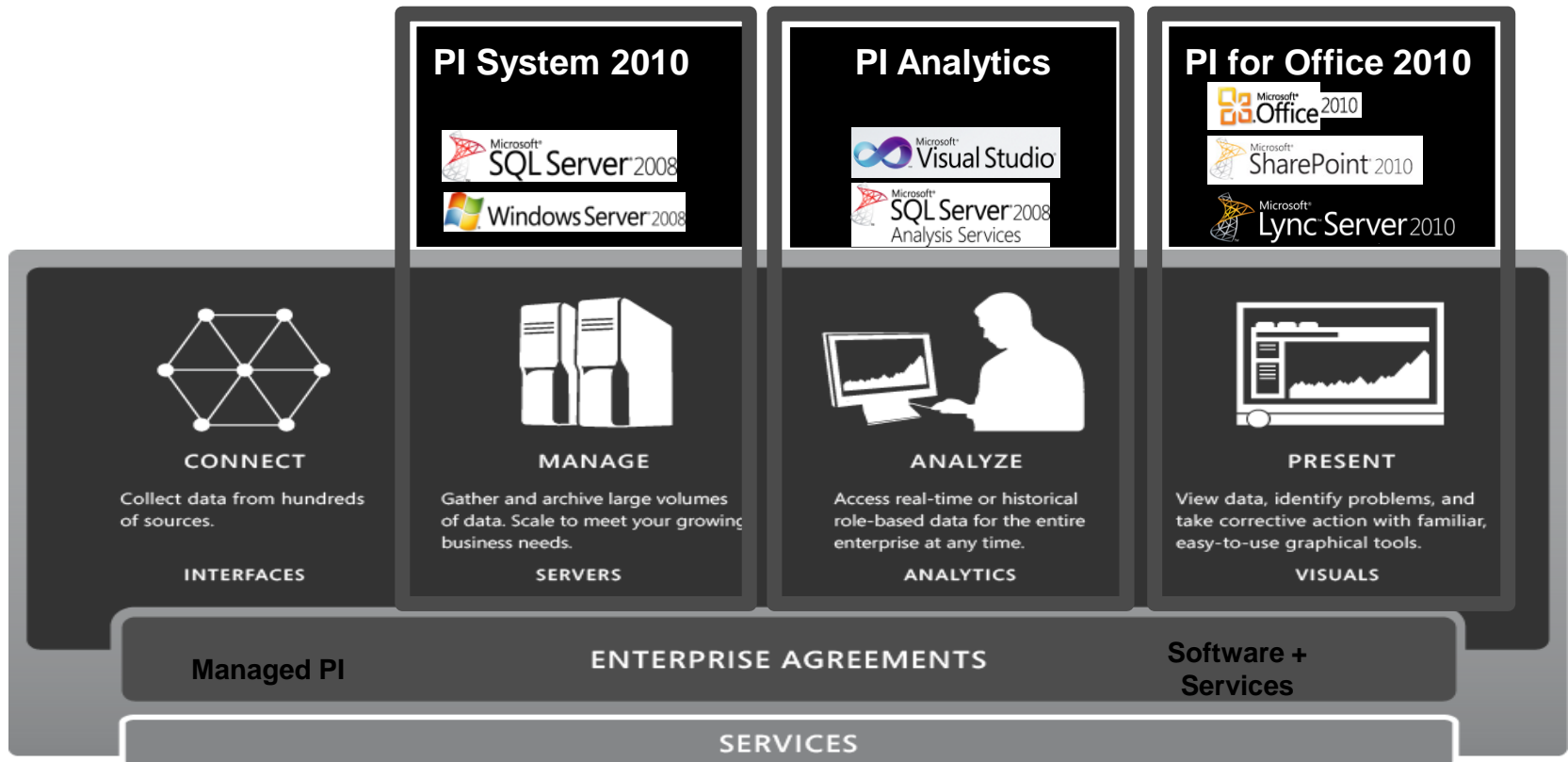
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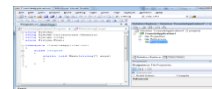
# OSIsoft PI System and Microsoft



# PI System and Microsoft StreamInsight

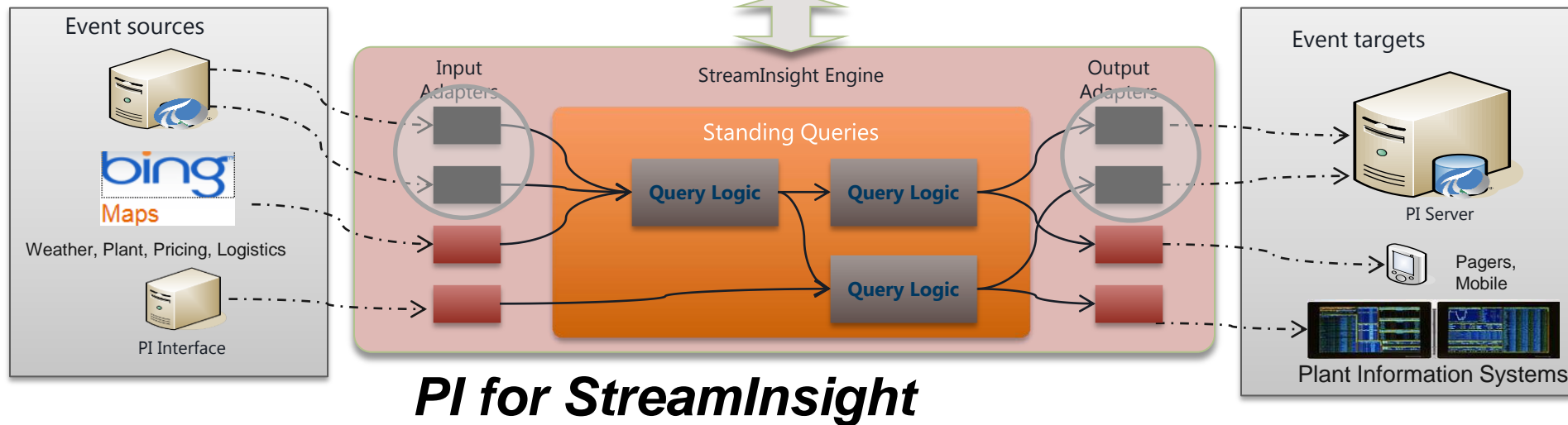
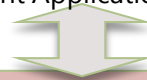


StreamInsight Application Development

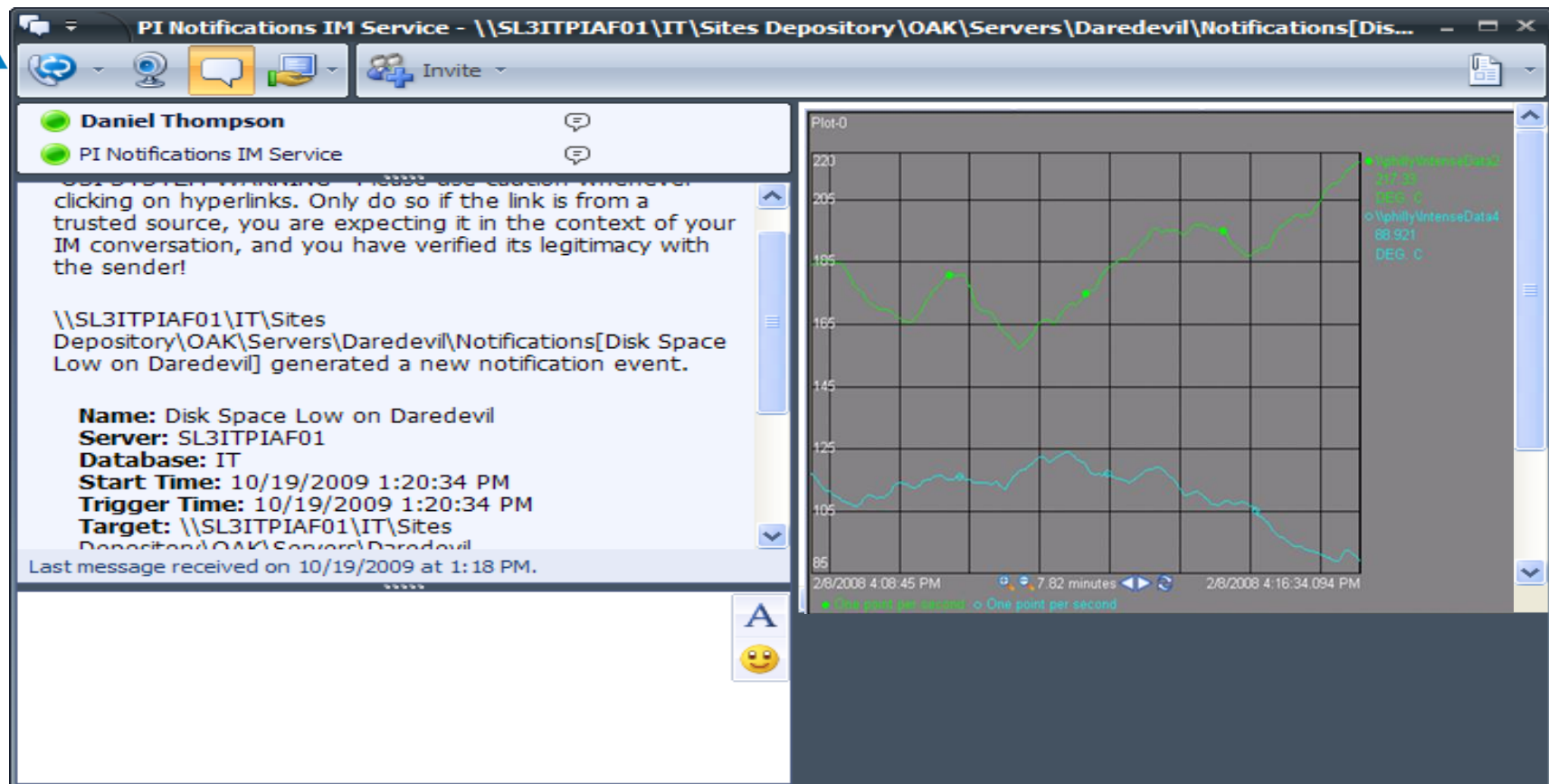


.NET  
C#  
LINQ

StreamInsight Application at Runtime



# PI Notifications and OCS R2 (Lync) Real-time Trends



# PI Coresight

- Web based user interface to analyze PI System data
- Mobile support (Silverlight)
- Intuitive UI



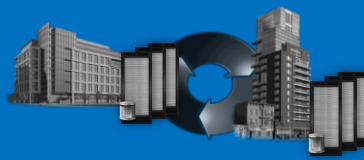
# SQL Server codename “Denali”

Delivering business agility and innovation to gain strategic value out of your information

Mission Critical  
Platform



Developer & IT  
Productivity



Pervasive Insight



# **“Denali” Reporting and Alerting**

## **Project Crescent**

**Empower users**



**Proactive Intelligence**

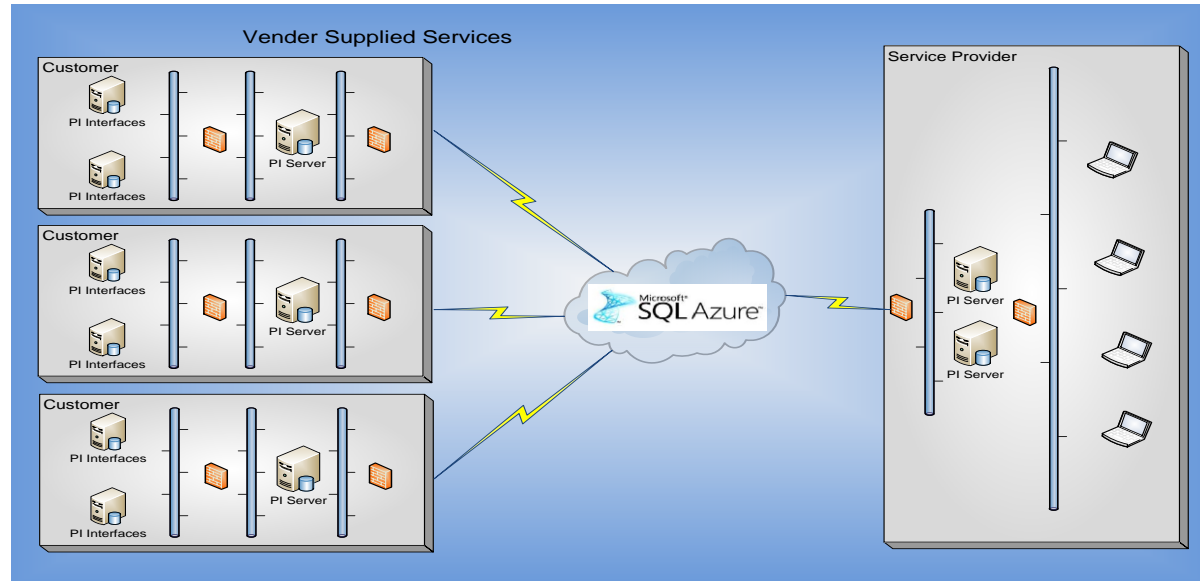


**Increase efficiency**



# Scenario: Vendor Services

- Data Driven Services
- Secure data transfer
  - Privacy







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# OSIsoft & Microsoft Customers



## Mexico's Electrical Utility Sees Saving Millions of Dollars through Collaborative BI

### Overview

**Country or Region:** Mexico  
**Industry:** Government, Utilities

### Customer Profile

Comisión Federal de Electricidad (CFE) is Mexico's national electrical power utility, serving nearly 28 million customers throughout the country. It is based in Mexico City and has 85,000 employees.

### Business Situation

To maintain its success despite increasingly challenging business conditions, CFE had to find a better, faster, more collaborative way to glean business intelligence from its under-tapped information sources.

"BI is no longer an individual activity; it has to work together in more powerful ways. OSIsoft and Microsoft are making this possible."

Fernando Barradas, Director of Information Applications

Mexico's electrical utility—Comisión Federal de Electricidad (CFE)—faced higher costs, a difficult and increasingly complex mix of sources for generating power. To factor these and other variables into its power generation infrastructure unit, CENACE (Centro Nacional de Control de Energía), that solution needed to be collaborative and real-time.



## Manufacturer Collaborates with Customers on Real-Time Equipment Monitoring Solution

"We tested some solutions and, in the end, chose two companies that are renowned in their industries. That was important to assure customers that they were getting the best technology solution possible."

Tim Hostman, Vice President of IT Innovations, Flowserve

Flowserve, a leading provider of flow control products and services for the global infrastructure market, wanted to help customers improve facility performance and reduce maintenance requirements. The company now is doing that with its real-time monitoring solution tied to a highly visual Web portal. The solution has the potential to save customers money by reducing downtime while helping Flowserve evolve from an original equipment manufacturer to a complete solution provider.

**Customer:** Flowserve

**Web Site:** [www.flowserve.com](http://www.flowserve.com)

**Customer Size:** 15,000 employees

**Country or Region:** United States

**Industry:** Manufacturing—Process—  
Oil and gas, utilities, chemicals

**Partner:** OSIsoft

**Partner Web Site:** [www.osisoft.com](http://www.osisoft.com)

### Customer Profile

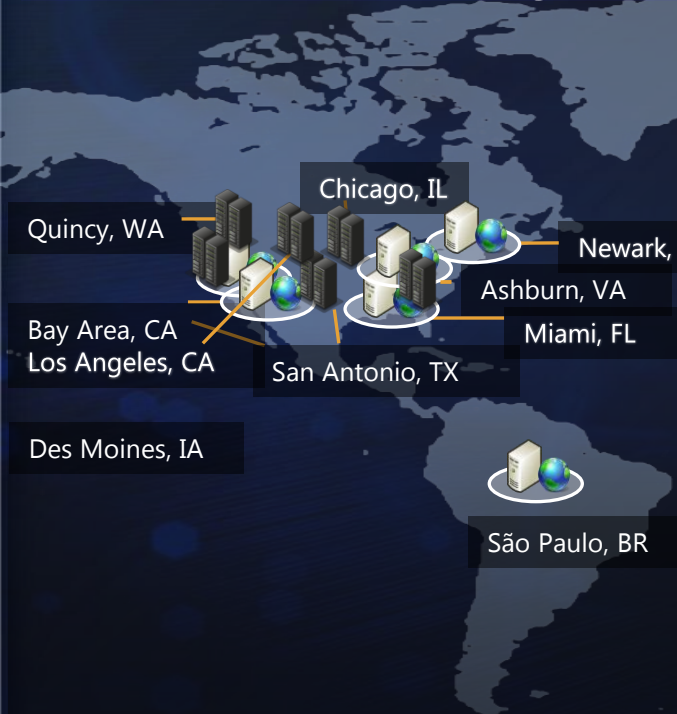
Flowserve is global provider of pumps, valves, seals, automation, and services to the power, oil, gas, chemical, and other industries. It operates in more than 55 countries.

### Software and Services

- Microsoft Office
  - Microsoft Office SharePoint Server 2007

# Microsoft's MTC Data Center Investments

## North America Region



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## Microsoft Chooses PI System® to Monitor Critical Facilities

Microsoft Technology Centers and Enterprise Engineering Center

The Microsoft Technology Centers (MTCs) and Microsoft's Enterprise Engineering Center (EEC) have chosen the OSIsoft® PI System® to monitor and analyze performance of the MTC's and EEC's critical facilities, including power, mechanical, and IT. OSIsoft ([www.osisoft.com](http://www.osisoft.com)) is provider of the PI System, the industry standard enterprise infrastructure for management of time-series data and events.

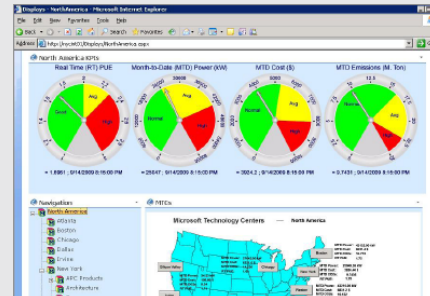
The 18 MTCs provide customers with experts and resources to envision, plan, build, deploy, operate and optimize secure customized computing solutions based on Microsoft and partner technologies.

Today, OSIsoft and Microsoft empower enterprise manufacturers and utilities to gain a competitive advantage by presenting users with dynamic operational, business, and energy data they can use to make better-informed decisions while driving excellence across the value chain. With the MTC and EEC, OSIsoft and Microsoft can further drive end customer value with their critical facilities.

"We are pleased to support Microsoft Technology Centers and its customers," said John O'Shea, OSIsoft Senior Vice President. "Adoption of OSIsoft's PI System infrastructure will help Microsoft increase efficiency and reduce costs across the MTC network to support their sustainability and environmental goals. Together, we can take these 'lessons learned' to our joint customers for their benefit. OSIsoft plans to use the Microsoft MTCs as part of our joint sales and business development engagements with Microsoft and customers."

"Microsoft and OSIsoft have a joint commitment to sustainable IT," commented Michael Valletta, Technical Director, MTC New York. "In meeting this commitment, Microsoft has expanded its use of the PI System by our Global Foundation Services (GFS) unit and the Microsoft Enterprise Engineering Center (EEC) in Redmond, WA, to include the global MTCs. This will enable our customers and visitors to see our joint technology for energy and environmental visualization at work, while we continue to reduce energy use at these facilities."

"The very large scale infrastructure and mission-critical nature of the monitoring required by the Microsoft EEC represents the kind of challenge which the PI System is designed to meet."

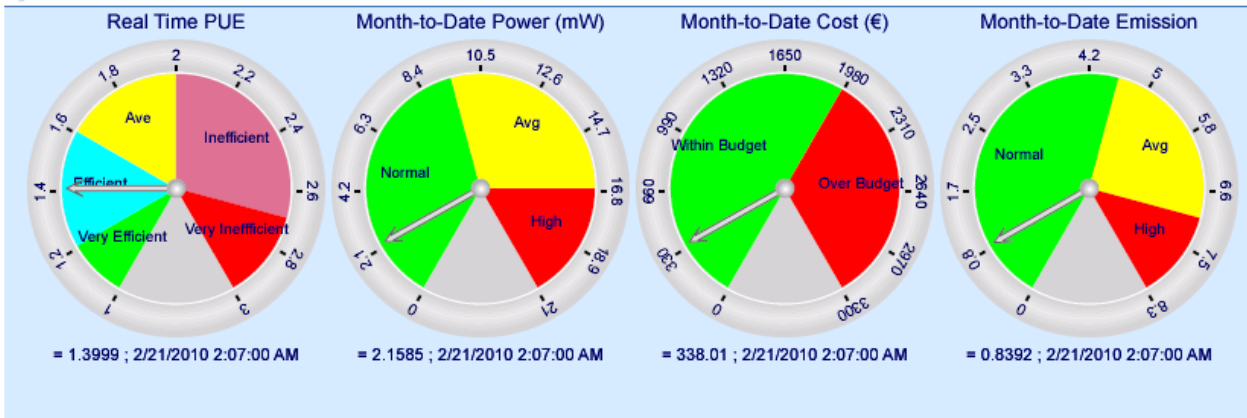


# OSIsoft at Microsoft Technology Centers



EMEA

## EMEA MTC KPIs



## Navigation

- EMEA
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    - APC Products
      - Racks
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        - Rack 1 Right
        - Rack 2 Left
        - Rack 2 Right

## EMEA MTCs





# Thank you

Enrique Herrera  
Enterprise Strategy and Architecture Services  
Microsoft Corporation  
[eherrera@microsoft.com](mailto:eherrera@microsoft.com)