



OSIsoft.

REGIONAL SEMINARS

The **Power of Data**

2012



Welcome & Agenda

DACH

Presented by

Martin Otterson Managing Director & VP of EMEA

08:30	Registration and Welcome Coffee	OSIsoft
09:30	Welcome Address- Company Overview	OSIsoft
09:45	The Power of Data	Martin Otterson OSIsoft
10:15	PI System and Product Roadmap	Andreas Schremmer OSIsoft
10:45	Break & Demos	
11:15	Energy Management (Customer Presentation)	Gerhard Then Bayer MaterialScience
11:45	PI Server 2012	Andreas Schremmer OSIsoft
12:15	PI Asset Framework	Hans Otto Weinhold OSIsoft
12:45	Lunch & Demos	
14:00	PI System to empower Smart Meter Reading (Customer Presentation)	Geneviève Fritchley Groupe E
14:30	PI Coresight, the new visualization tool	Hans Otto Weinhold OSIsoft
15:00	PIT - Process Control with Industrial IT systems (Customer Presentation)	Harald Zimmermann Verallia
15:30	Break & Demos	
16:00	Value of an Enterprise Agreement	Michael Jakob OSIsoft
16:30	What you need to know about the PI System and Cyber Security	Bryan Owen OSIsoft
17:00	Partner Solutions ShowCase (Applikationen für das PI System)	Luca Spingardi – Axel Mertins OSIsoft
17:20	Wrap-up, Demos	

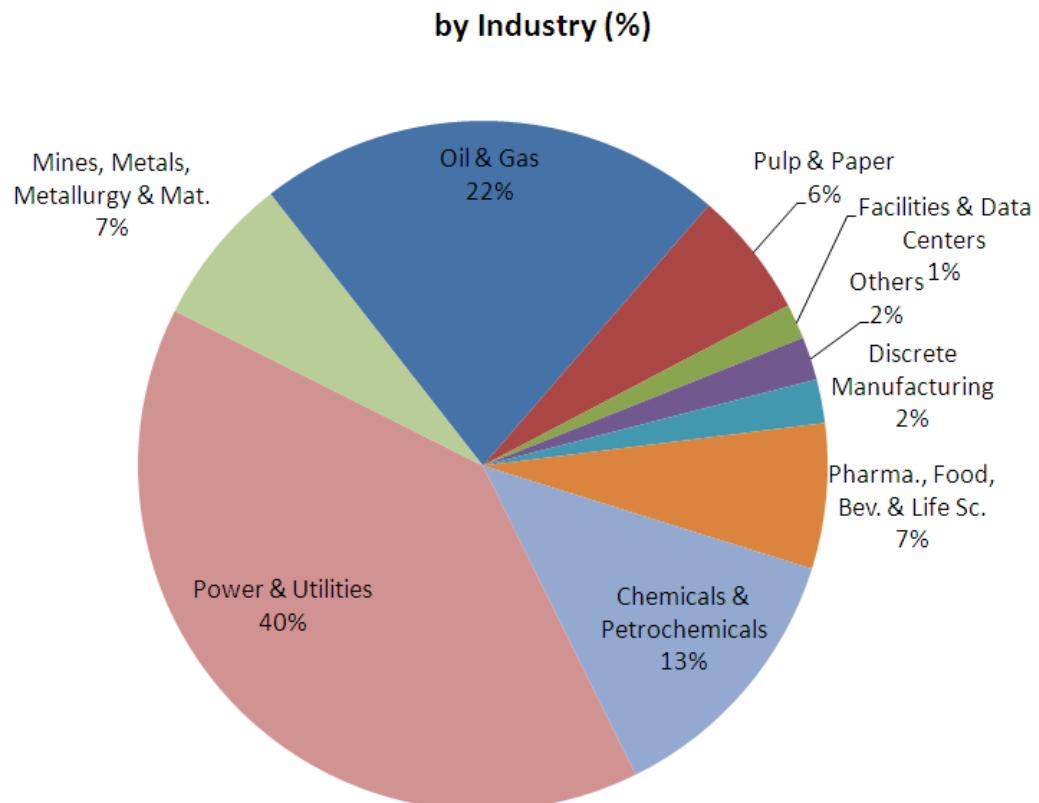


OSIsoft Company Profile

- ❑ Founded by Patrick J. Kennedy in 1980
- ❑ Headquartered in San Leandro, CA, USA
- ❑ 800+ employees in 30 offices worldwide
- ❑ 250+ employees in product development
- ❑ Over 20% of revenue invested in R&D
- ❑ 15,000+ Installed Sites, over 110 countries
- ❑ 24/7/365 “Follow the Sun” Technical Support
- ❑ Strategic partnerships with Microsoft, Cisco Systems, SAP
- ❑ Partner friendly infrastructure <http://partners.osisoft.com/>
- ❑ ~30% Growth Y-o-Y from 2010 to 2011
- ❑ Industry standard Real time Infrastructure for Streaming data and events



Industry Roles: PI Systems World Wide



Diverse & Expanding Customer Base Across Industries





b-tu

Brand
Techn
Cottbus



continental



crenox

CURRENTA

Leistung für Chemie und Industrie





GDF SUEZ



mark 8



kuraray



performance materials



nutrinova



Louisenthal



SIEMENS



Baxter



KNAUF INSULATION
ThyssenKrupp



SASOL
reaching new frontiers

Specialty MINERALS



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CYTEC



kemira



VATTENFALL



RHI

mondi

E
ENERGIE STEIERMARK
GAS & WÄRME

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Verbund

Celanese



Airex AG

Firmenich

Givaudan[©]

Lonza

voestalpine

REFUNA

Regionale Fernwärme Unteres Aaretal

SI Group

Brökelmann+Co
Oelmühle GmbH+Co



THOMSON REUTERS

MERCK

RWE
The energy to lead

GLATFELTER

Fresenius
Kabi

amcor

ALCOA

ABB

Power and productivity
for a better world™

KKL
Kernkraftwerk Leibstadt

HUNTSMAN

Celgene Europe

Kimberly-Clark

NETZHAMMER AG
engineering & consulting

OM

sa|de|ef

valorec

AKZO NOBEL

Ticona

Smurfit Kappa

sappi

Honeywell

OSIsoft: World wide growth



Recent Recognition of OSIsoft

- Presidential “E Award”
 - OSIsoft awarded the Presidential “E Award for exports” by U.S. Department of Commerce Secretary John Bryson at the White House.
 - The E Awards are the highest recognition any U.S. entity may receive for making a significant contribution to the expansion of U.S. exports.
- Microsoft “Sustainability Partner of the Year 2011-12”
 - Inaugural award from Microsoft for Sustainability
 - Recognising excellence from within Microsoft’s extensive global partner community in driving Sustainability initiatives



The Power Of Data

Presented by

Martin Otterson Managing Director & VP of EMEA



Etymology of the word “data”

Data is derived from the Latin word datum

Could be interpreted as:

“to give”

“something that is given”

a form of present or gift

Whilst Data can be a gift and has significant value.....



“...a wealth of information can create a poverty of attention and a need to allocate attention efficiently...”

Herbert Simon

Economist

Nobel Prize Winner - 1978

*Data Eruption, Data flood,
Data Tsunami, Data deluge*

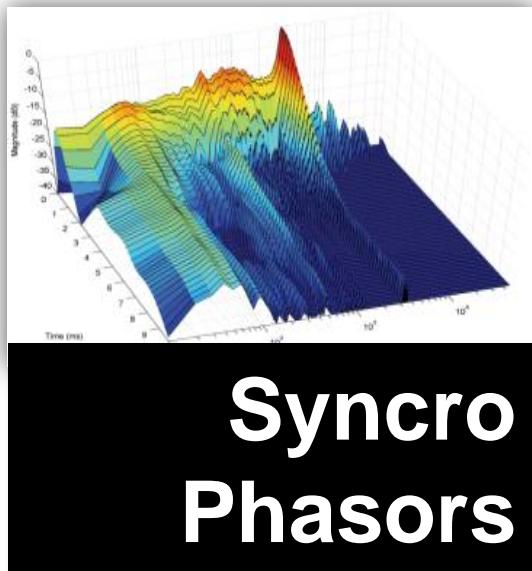
Personal Level: “Information Overload”



Real time data....BIG DATA.....Requires a new approach to leverage the Power of Data

- OSIsoft has been doing “Big Data” for 30+ years
 - Fortunately, OSIsoft customers have been data driven for many years. You have a head start in the developing practice of data analysis and data science.
- To succeed in the future and handle the phenomenon
 - People aspect
 - New roles will be required to take on the challenge
 - Specialist Data analysts, Data Scientists, Data Experts
 - Maybe even a “Chief Data Officer”
 - Technology aspect
 - Greater use of technology to capture and harness more Data
 - Continue to Increase the ability to collect, manage, process and share Data
 - Improve analytics capabilities and simplify the means of interacting with Data
 - Adopt an enterprise wide, infrastructure led approach to managing Data

Data Growth and Data Management



4.8K data streams,
120Hz

3 years online

Unique Events: 55
Trillion

Estimated Data:
436TB



Automated Metering

20M meters, 5-min
reads

7 years online

Unique Events: 177
Trillion



Fleet Monitoring

1K assets, 1M points

10 years online

Unique Events: 6,307
Trillion



Estimated Data:
50,458TB

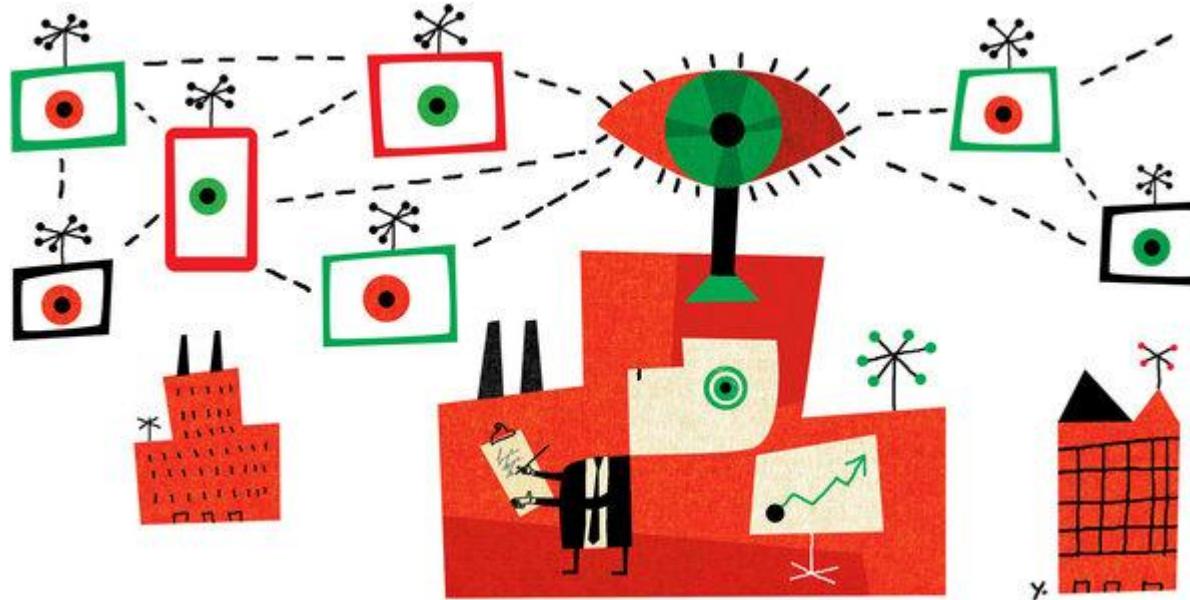
Opportunity, “Power Of Data”

- Knowledge Preservation
- Root Cause Analysis
- Proactive, condition based maintenance
- Energy & resource management
- Asset monitoring
- Sustainability initiatives
- Etc.....

At the beginning of the last decade OSIsoft predicted that Data would be “the currency of the next decade”

We firmly believe this claim is still valid today.

The Value of the Power of Data. When There's No Such Thing as Too Much Information



Recent MIT research concluded that Net gains in **Output and Productivity** were 5 to 6 % higher with Data Driven Decision Making

Reference: Brynjolfsson, et al., MIT, How does Data-Driven Decision making Affect Firm Performance, 2011.
<http://www.nytimes.com/2011/04/24/business/24unboxed.html>

How are you harnessing
the Power of data?



Infrastructure is required to unlock the Power of Data..

Real-time Infrastructure Delivers Opportunities

Electrical Power



Communications



Transportation



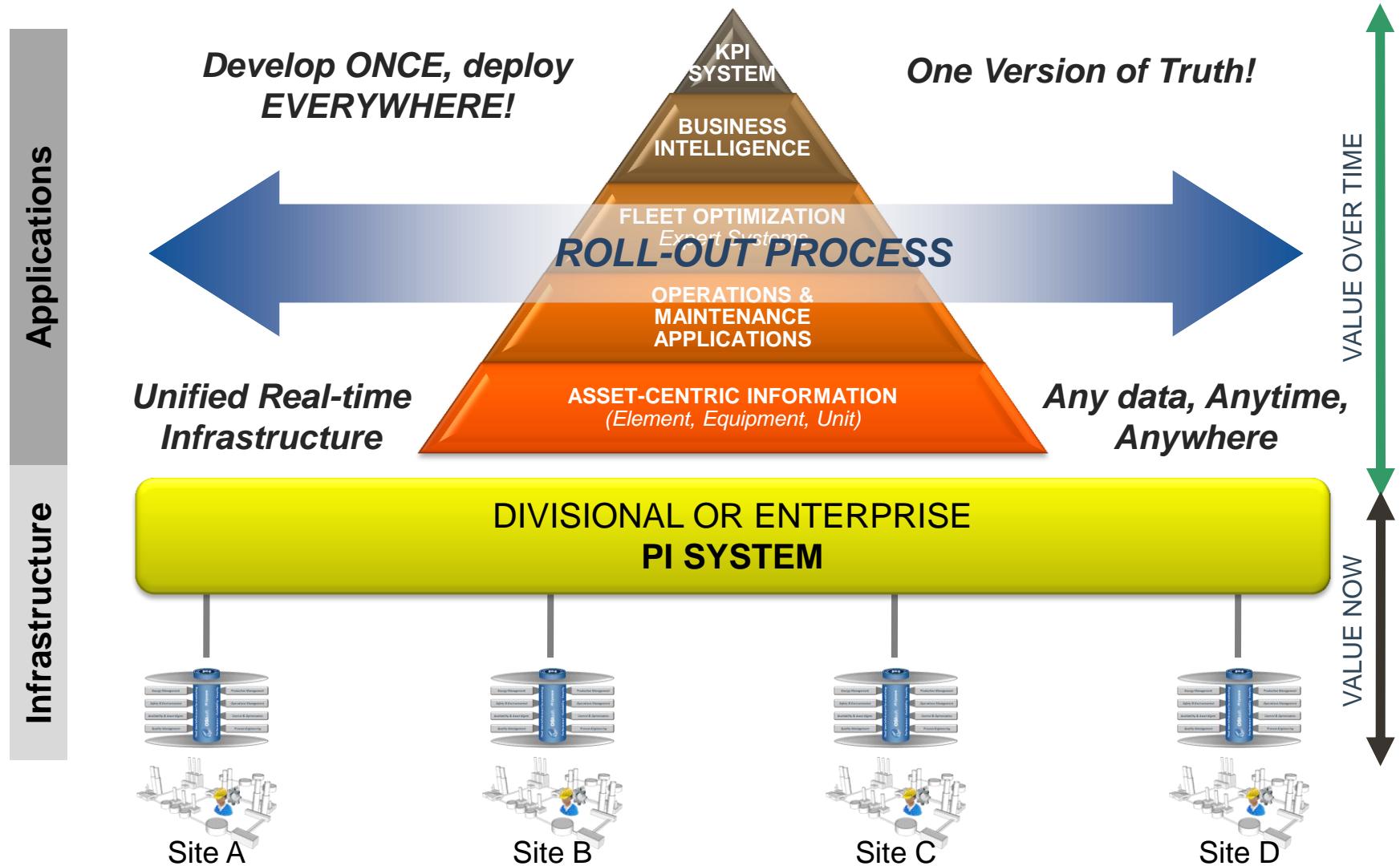
- Valuable** – delivers a recognized benefit
- Reliable and Secure** – always available, safe and trusted
- Accessible** – adaptable to innovation, easy to use
- Contextual** - organized to be effective, efficient, and extendable
- Sustainable** – must be able to last and adapt to change



Definition of the Real-time Infrastructure

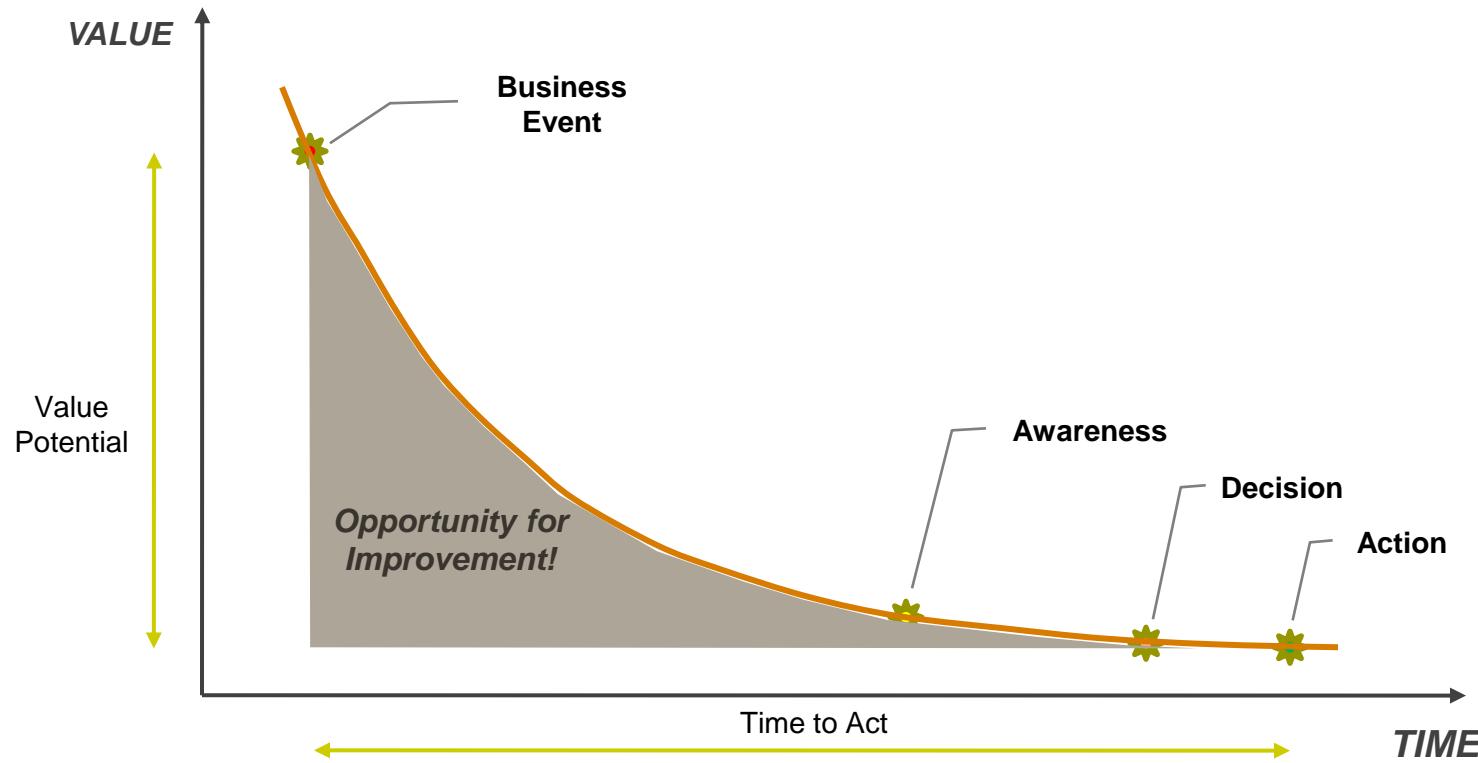
Infrastructure , to harness the Power of Data

Implementing Strategic Initiatives on Enterprise Scale



The Value of a Real-Time Infrastructure

Speeding and informing the decision making process

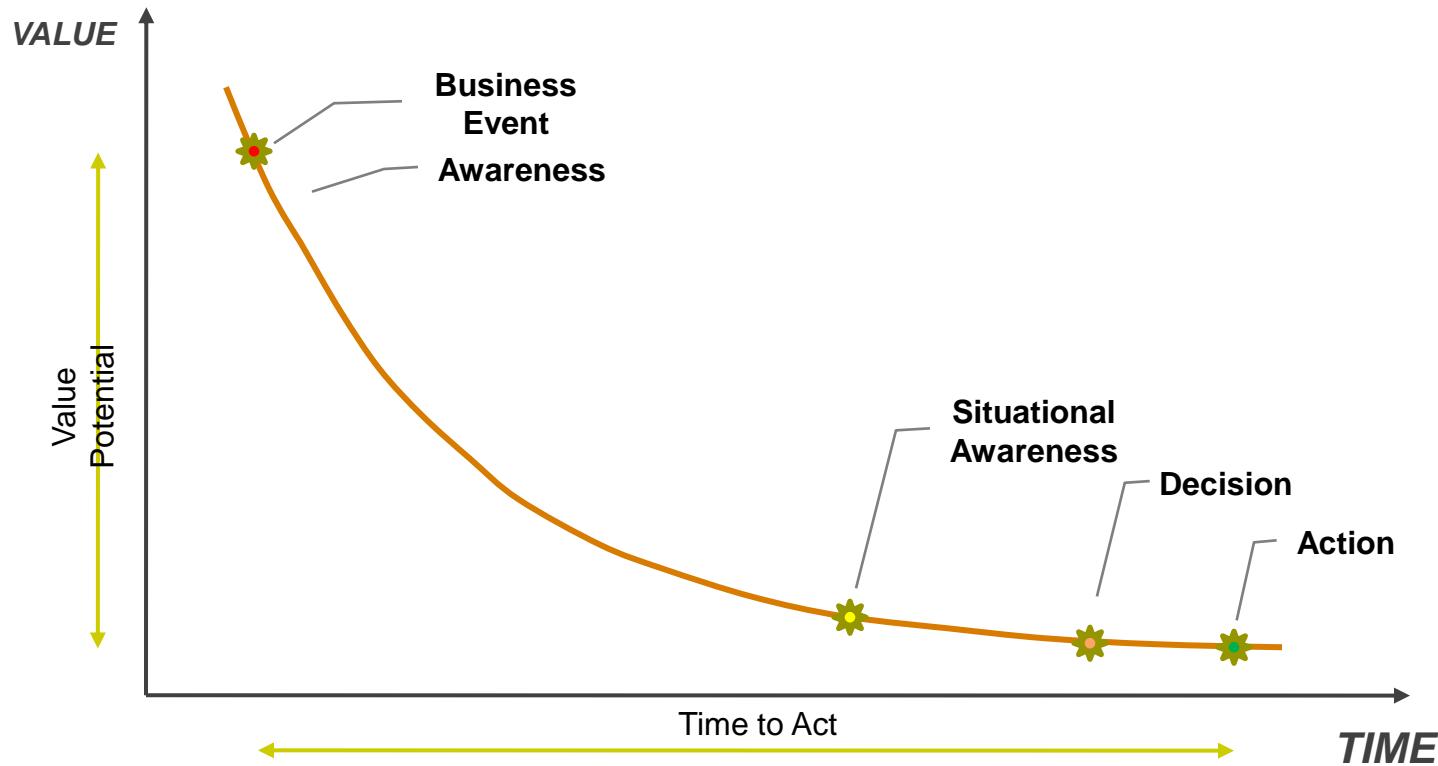


Decision making leads to action being taken:

- The time taken from a business event occurring to action being taken is often a cost or lost opportunity

The Value of a Real-Time Infrastructure

Speeding and informing the decision making process

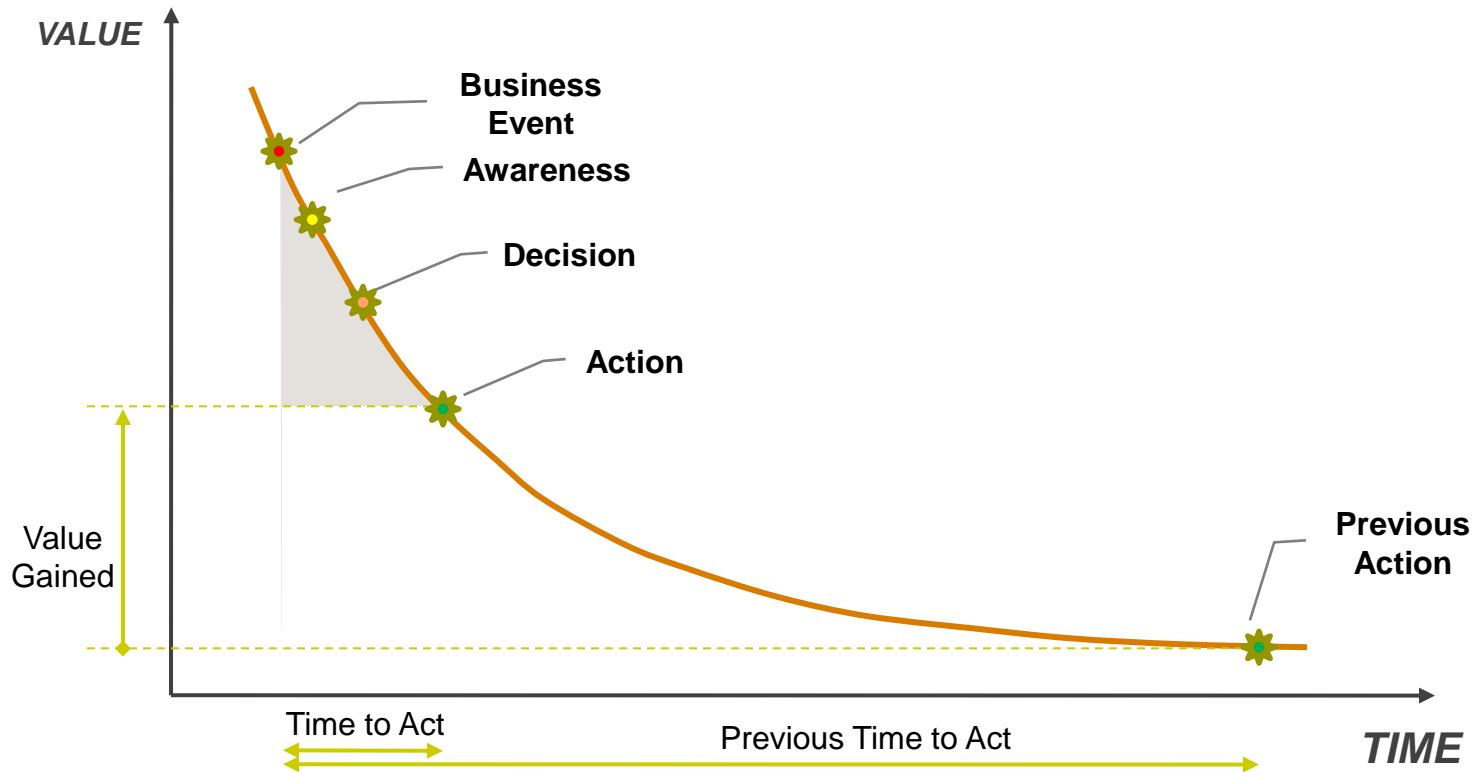


Reduce the time to awareness:

- by harnessing the power of Real-time data using the PI System

The Value of a Real-Time Infrastructure

Speeding and informing the decision making process



Speed up and inform decision making and action taking

- Supported by high quality, real-time information and analytics provided by the PI system

How does it fit into your existing Environment?

Typical Situation – Hundreds of Islands

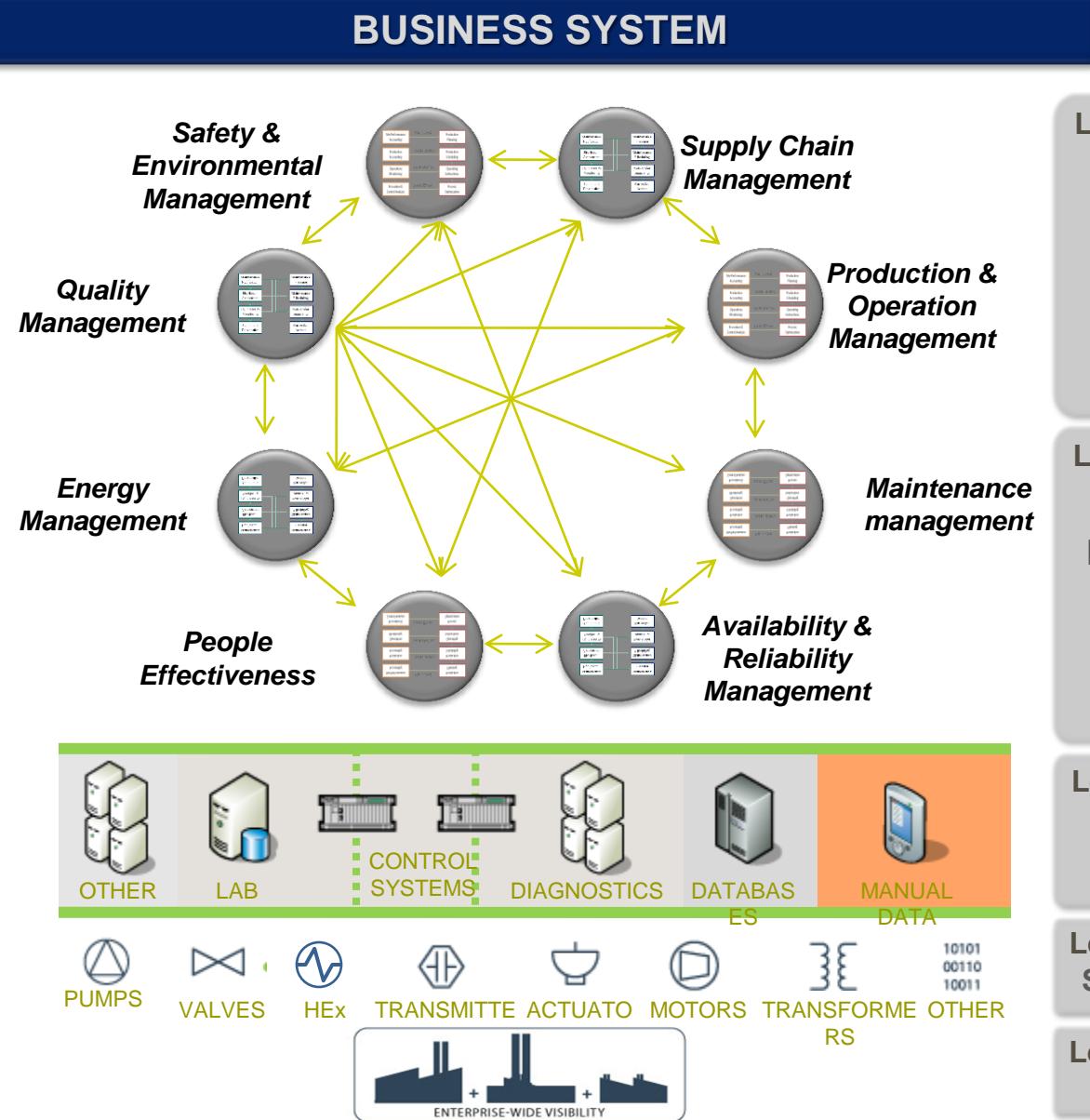
MONEY FLOW



INFORMATION FLOW



MATERIAL FLOW



How does it fit into your existing Infrastructure?

Infrastructure to all Islands

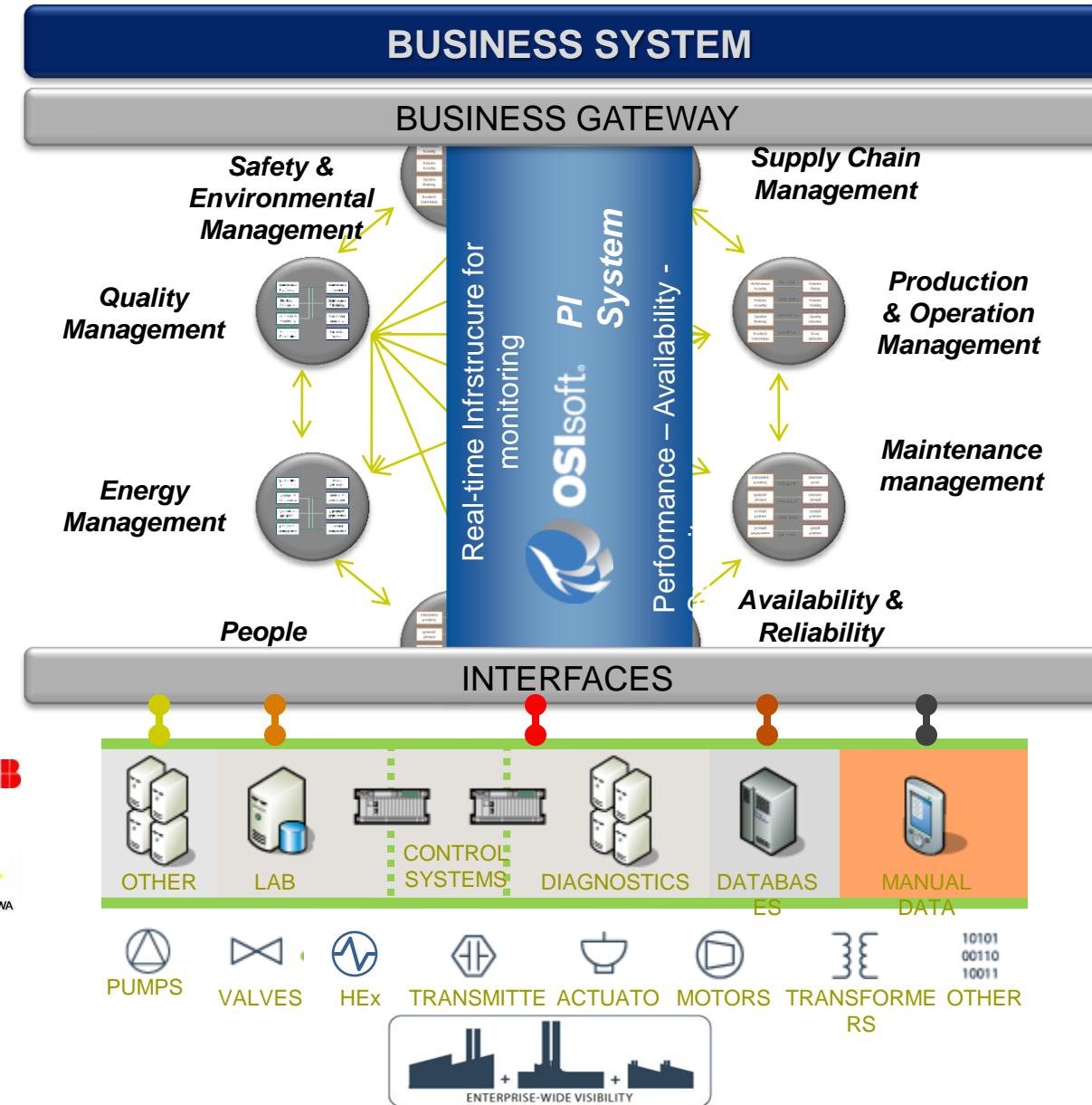
MONEY FLOW



INFORMATION FLOW

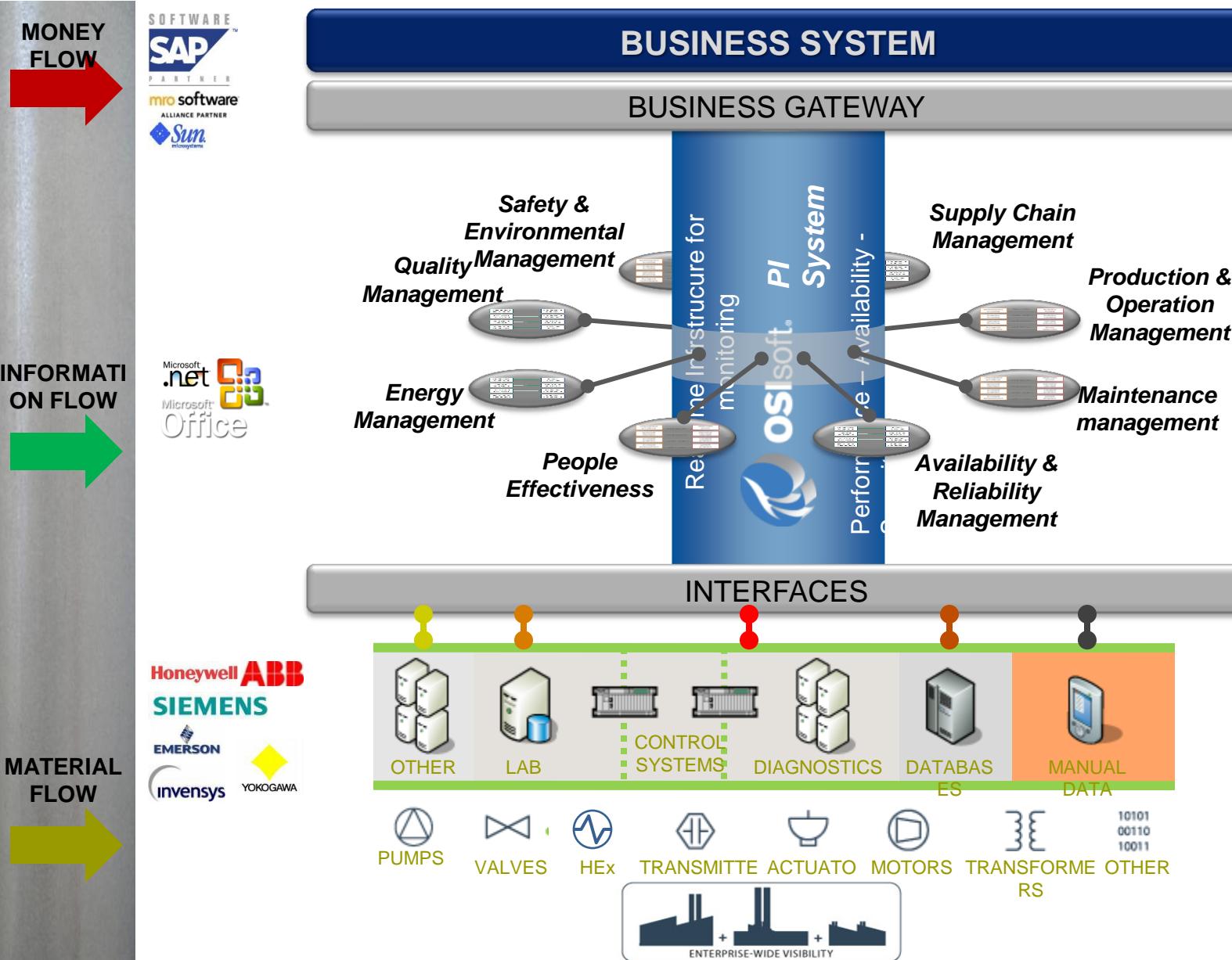


MATERIAL FLOW

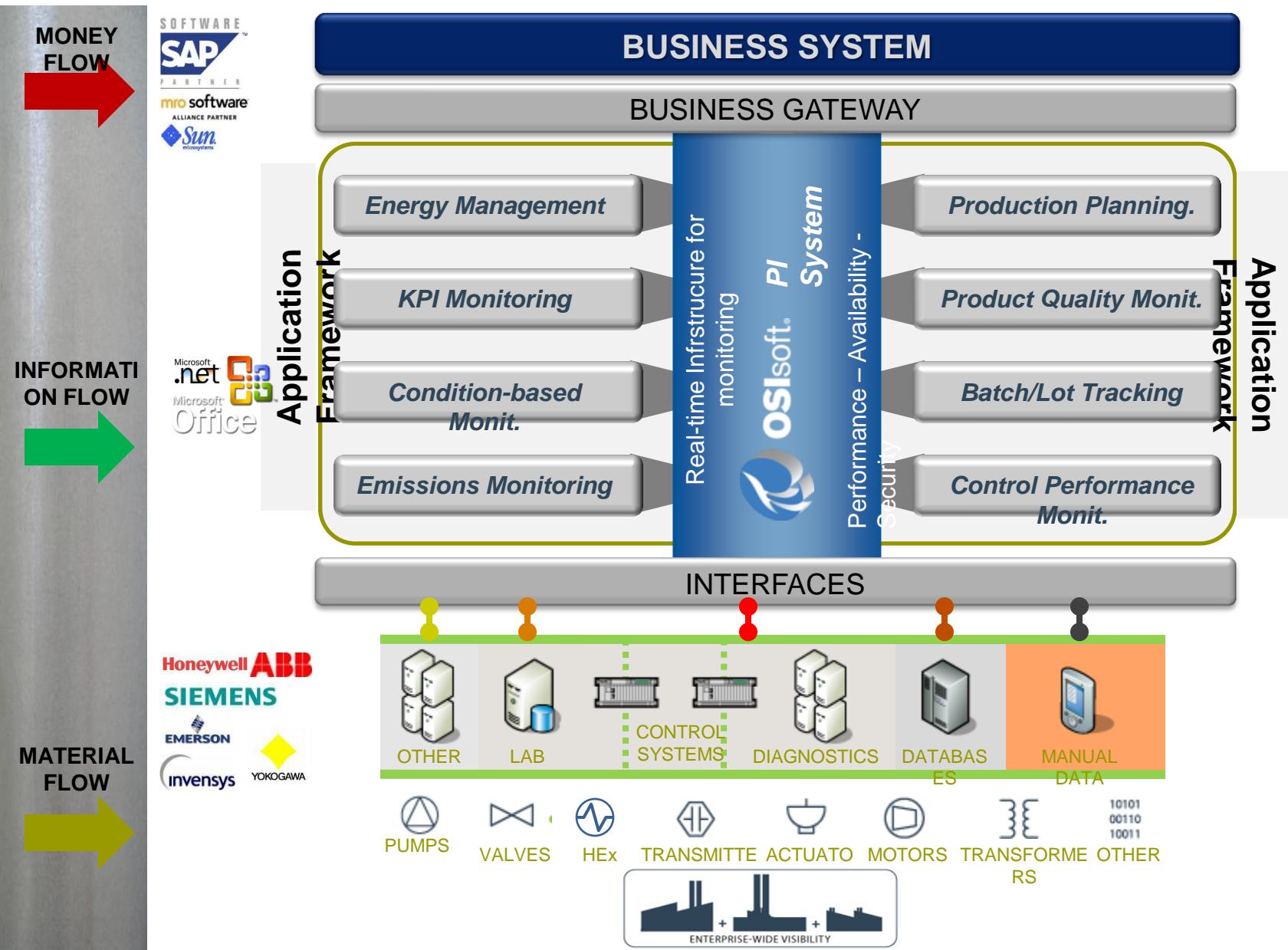


How does it fit into your existing Infrastructure?

Data foundation for all Business Processes



Incremental Value by Adding Applications



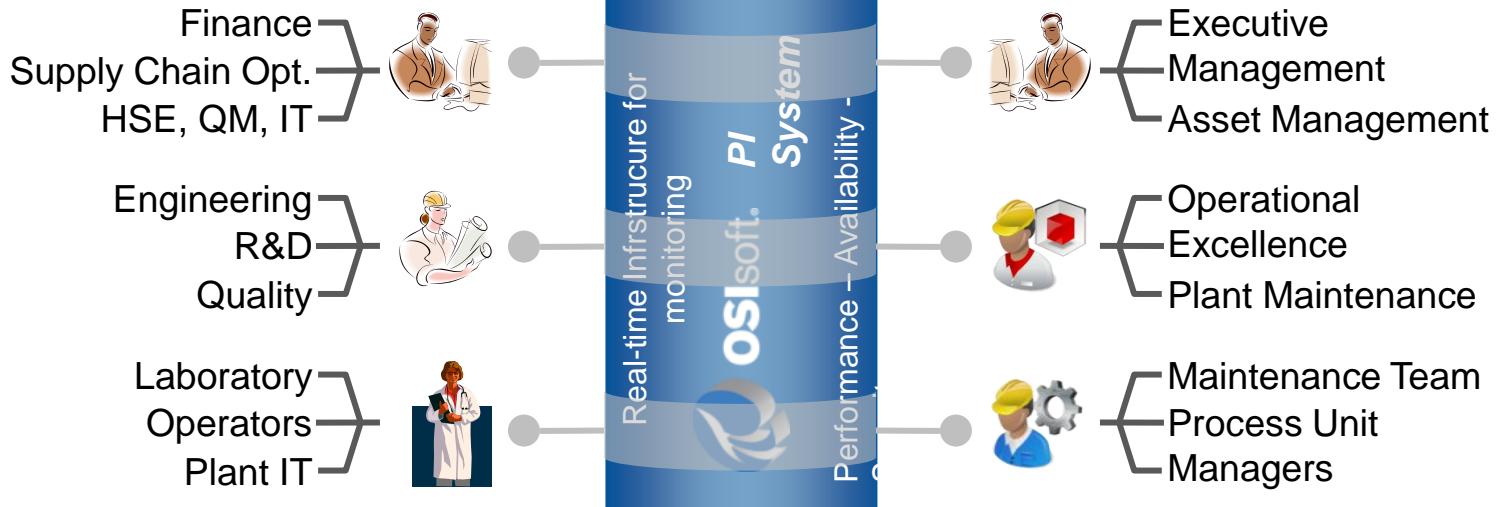
Supporting Collaboration

Everyone works with the same Information – Rules - Tools

MONEY
FLOW

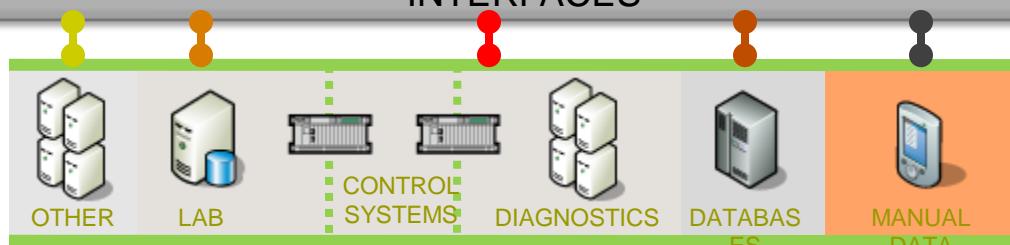
BUSINESS SYSTEM

BUSINESS GATEWAY



INFORMATI
ON FLOW

INTERFACES



MATERIAL
FLOW



Power of Data: Use Cases

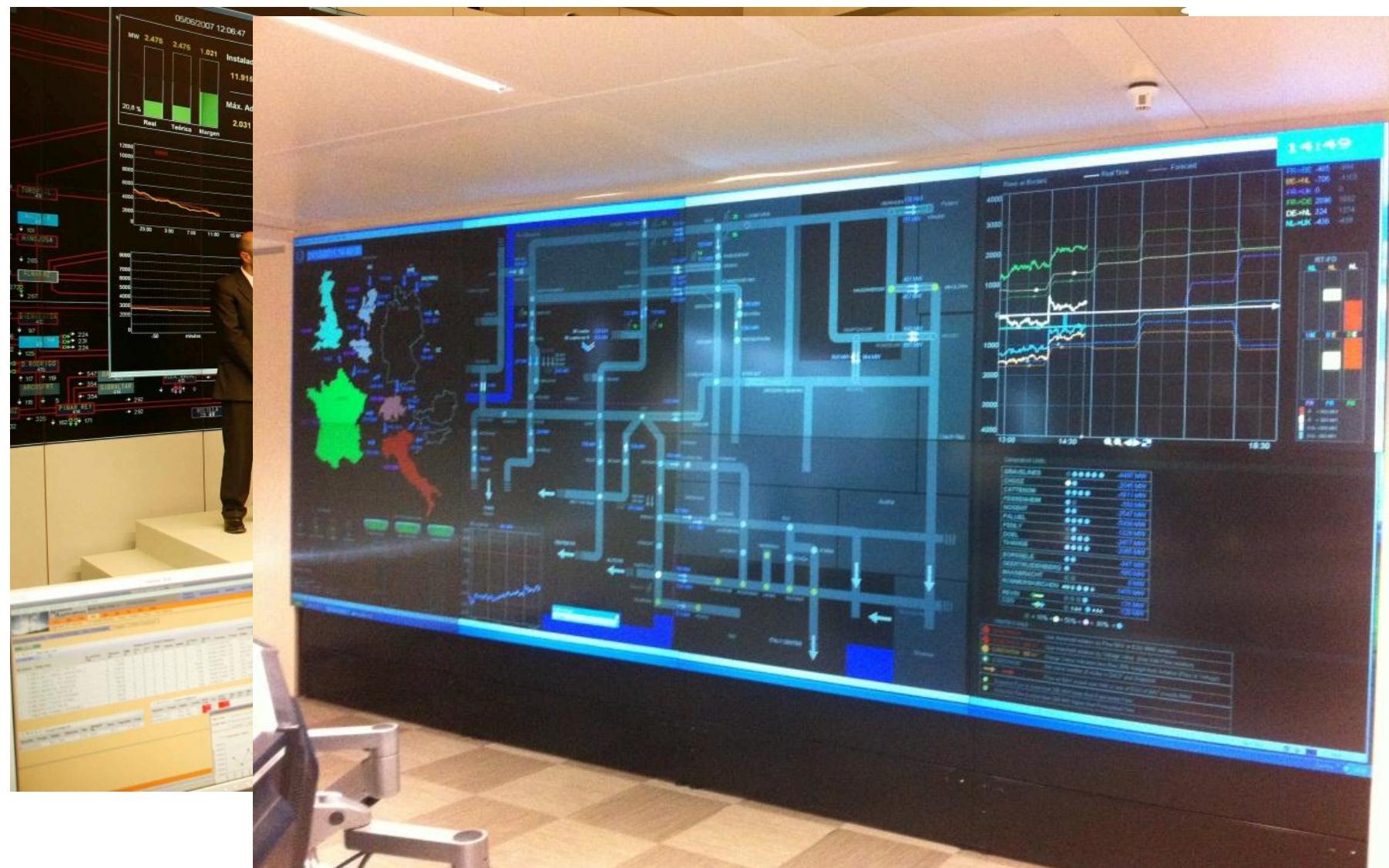
Centralized Monitoring and Diagnostic Center

A Technology Center ensures that the Production Fleet operates at peak performance with the highest possible availability in-line with the business and market requirements

- A place where **BorsodChem** knowledge, experience and skills are concentrated to optimize Operations and Maintenance
- **Functions:**
 - Operation & Maintenance monitoring and reliability tracking
 - Diagnosis of the key plant parameters (performance and condition monitoring)
 - Detection of malfunctions before they lead to trips and serious faults in the plant (avoiding catastrophic failure)
 - Archive and retrieval of O&M data
 - Generation of reports on performance and incidents
 - Carrying out of O&M recommendations



Spain-Red Electrica: “Real-time Grid Monitoring for a country”



CORESO: “Real-Time Monitoring for a group of Countries”

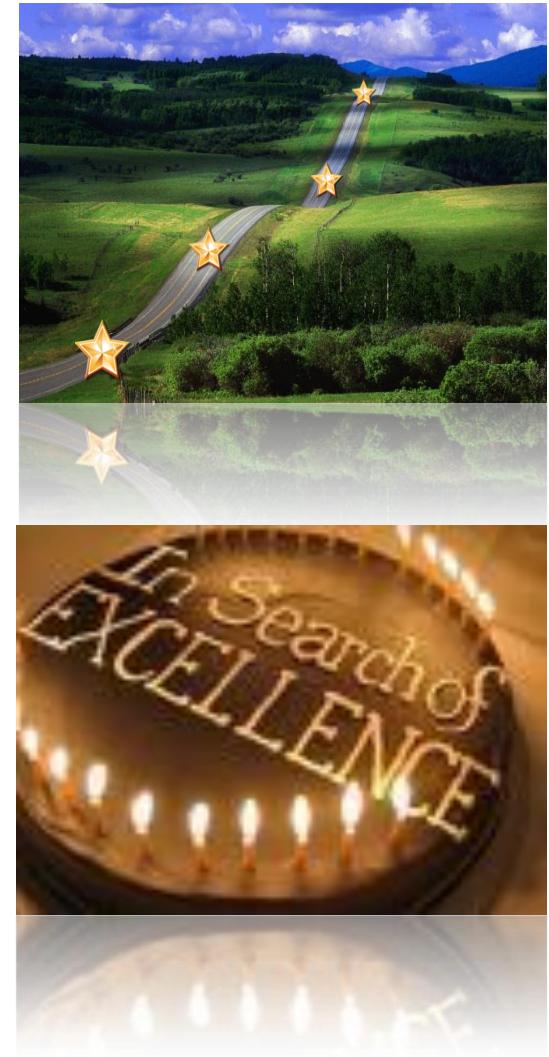
UK, France, Germany, Belgium, Netherlands and Italy

Saudi Aramco: Command & Control Room



PI System: Value for the Enterprise

- Unified Real-time Infrastructure across the entire Organisation
 - One version of Truth
 - Information is available for anyone, anytime and any place
 - Information is meaningful (asset-centric) and actionable
 - Real-time collaboration across departments & sites
- Data foundation for innovation
 - Energy Management / Energy Conservation
 - Sustainability Initiatives etc.
- Protect existing and future investments
 - Standards based, open infrastructure
 - Continuous Incremental value gained as new applications are developed





Future Events: Save the Date

2012 Industry Events

Oil & Transport/Storage
Oct. 9th , Warsaw

Transmission & Distribution
/ Smart Grid
Oct. 24th , Brussels

2012 Partner Event

Oct 15th -17th , London



Thank You!

Please Enjoy
the rest of the day