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Continuing the Journey to Operational Intelligence

Process Industries

Presented by **Perry Zalevsky**

Industry Principal, OSIsoft

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Agenda

- Welcome
- Safety
- Overview of the Day
- Operational Intelligence
- Thoughts

Conference Theme and Keywords

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Safety - Hearing

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Overview of the Day

	Life Sciences/Food & Beverages/Specialty Chemicals - Bellevue	Power Generation - Potsdam I	Transmission & Distribution - Tegel	Oil & Gas/Industrial Chemicals - Potsdam III	Process Industries - Tiergarten	Industrial IT - Charlottenburg
9:00-9:30	**OSIsoft** Enabling Decisions and Improving Quality with the PI System- Petter Moree – Petter Moree	**OSIsoft** The Power of Data in Power Generation – David Thomason, Chris Crosby	**OSIsoft** Enhance the Performance and Reliability of Transmission & Distribution Systems Using Real-Time Operational Data – Miguel Chavero	**OSIsoft** Digital Transformation within the Oil & Gas Industry – Russell Herbert	**OSIsoft** Continuing the Journey to Operational Intelligence – Perry Zalevsky	**OSIsoft** Driving Transformational Changes by Integrating Global IT Trends with the PI System – Norton Green
9:30-10:00	**Irish Distillers Pernod-Ricard** Using Data Analytics to drive Process Optimisation in Whiskey Manufacturing – Dagmara Dabrowska	**RWE Supply & Trading** Greater Flexibility for Smart Energy – Arie van Boven, Arco Stolk	**Fingrid** Developing Power System Operations: Combining Visualization and Online Analysis Using the PI System – Antti-Juhani Nikkilä	**Orpic** Releasing and Realizing the Potential of the PI System – Berttilla Rozario Anthony	**Schott AG** The Journey to Reliable and Useful Operational Data – Martin Monreal	**Qualcomm** oneM2M - Open Platform Standard for IoT – Josef Blanz
10:00-10:15	**Transfer Time**					
10:15-10:45	**Janssen** Monitoring Environmental Conditions on the Manufacturing Floor with PI Coresight – Arsenio Sanchez	**E.ON** The Internet of Wind – Gregor Biering	**PowerStream** Achieving Operational Efficiency at PowerStream – Vince Polsoni	**TransCanada** Path to Premier through Reliability 3.0	**United Utilities** Adoption of the PI System to meet United Utilities Business Challenges – Kevin Woodward	**SAP** Digitization and Innovation - Explore how OSIsoft's Infrastructure and the SAP HANA Platform help customers in their Digital Transformation Journey – Bala Ram
10:45-11:00	**BREAK - Potsdam Foyer**					

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Overview of the Day

11:00-11:30	**Abbott Nutrition** Productivity and Quality Improvements Through Continuous Contextualization of PI System Data – James Li, Shamus Cunningham	**EDF Renewable Energy** Accelerating Asset Intelligence with SAP HANA and OSIsoft IoT Connector – Devang Shah, Piyush Pansare	**DEWA** Holistic View of Operations at Dubai Electricity & Water Authority (DEWA) – Muhammad Rizwan	**Daleel Petroleum** Meeting Production Challenges with Smarter Operations – Muneer Al Balushi	**Aurubis** How the PI System Can Support an Energy Management System in a Copper Company – Thorsten Stoelcken, Philipp Kohne	**Thames Water** IT/OT Convergence - Navigating the Transformation Journey – Nick Burkinshaw, Simon Coombs
11:30-11:45	**Transfer Time**					
11:45-12:15	**Abbott Labs/AG Solution** Transitioning to a Modern PI System in a Validated Environment – Julio López, Marc Olive	**Ansaldo Energia** ADA and APEX: A Global Diagnostics Platform For Power Generation – Sandro Gollini, Giuseppe di Bartolo	**Entega** Data Acquisition from Distributed Power Plants and Integration into the Business Intelligence System – Zijad Lemes	**MOL Group** Supporting Operational Availability by connecting the PI System and SAP PM – Gábor Mucsina, Reka Erdei	**Paper Company** Evolution of Operational Data to Support Excellence in Paper Manufacturing – Laurent Watremetz, Ruth Hounslow	**OSIsoft** State of PI System Security and the EU NIS Directive – Bryan Owen
12:15-14:15	**LUNCH - Pavillon**					
14:15-14:45	**Clariant** The PI System - Enabling a Digital Factory – Michael Pelz	**Uniper/Pimsoft** Meeting New Regulatory and Financial Challenges Through Asset Framework – Mels van der Voet, Veletia Moodie	**CEPS** PI System as Part of An Existing TSO Infrastructure – Martin Tauer, Lukas Sedlacek	**Tullow Oil** Use of the PI System for a Deepwater Oil & Gas Field – Mark Whitehouse	**ArcelorMittal Ostrava Wire Rod Mill** Analysis of Rolling Speed Parameters at the ArcelorMittal Ostrava Wire Rod Mill – Radomir Domcik	**Flowserve/SparkCognition** Industrial Intelligence: Cognitive Analytics in Action – Josh Lyon, Usman Shuja, Greg Herr
14:45-15:00	**Transfer Time**					

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Overview of the Day

15:00-15:30	**F.Hoffmann-La Roche** GxP Compliant Alarm Handling with Event Frames and AF – Gerd Fromm, Christian Wirth, Philipp Sutter	**AES Jordan** The PI System Paves the Way for ISO50001 and ISO55001 Certifications – Anas Diab	**ENEL Energy Europe** Smart T&D Maintenance with the PI System – Marc Ruaix Carrera	**Shell**	**Aurelia Metals** PI System Alchemy: Turning Data into Gold – Peter Smith	**OSIsoft** The OSIsoft Redfish Connector - Supporting a New Industry Standard in the Datacenter World – John Daniels, Scott Robertson
15:30-16:30	Wrap Up	Wrap Up	Wrap Up	Wrap Up	Wrap Up	Wrap Up
18:00-1:00	Offsite Underground Dinner Party - Berlin U3					

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The OSIsoft Vision

We believe People with Data can Transform their world

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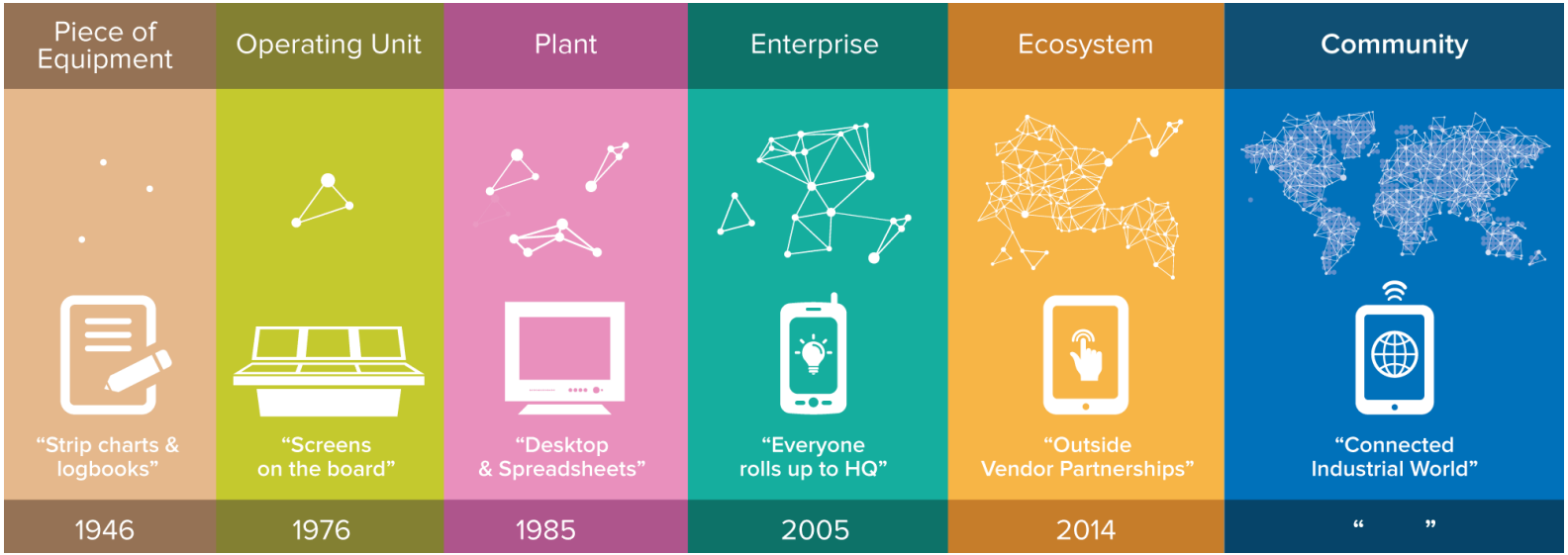
OSIsoft Evolution and Vision



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Typical Process Industry Company's Vision

Commodity Production: Low Cost Producer

Sustainability: Eliminate / Minimize Risk

Value-Add Production: Products that Differentiate

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What Challenges / Opportunities Are There?

Challenge – Market Conditions

- **Commodity or Market Prices**
- **New or Improved Operations / Known Technology Competition**
- **New, Competitive Manufacturing Technologies**

Challenge – Cost Headwinds

- **Energy Costs**
- **Raw Materials Costs**
- **Labor Costs**
- **Logistics / Transportation Costs**
- **Aging Assets / Sustaining Capital Requirements**

Other **Challenges**

- **Geology – Decreasing Yields on Known Mine Reserves**
- **Uneven Global Economic Recovery**
- **Environmental Regulations / Reporting Requirements**
- **Keeping Pace with Technology**

Opportunities

- **Commodity Market Growth in Developing Countries**
- **Market Pull for New Materials / Alloys (Strength, Weight)**
- **Sustainable Materials**

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Where Do Companies Find Value?

Process Productivity

Making the process better

Small changes are worth a lot

In areas such as material flow, pacing and supply chain

Energy and Water Management

Monitoring and managing energy and water

Fuel for mobile equipment

Asset Performance and Reliability

Keep the machines running

Improve uptime

Reduce unplanned downtime

Condition-based maintenance

Environmental, Health and Safety Compliance

Governmental regulations

Accidents and incidents

Environmental monitoring

Compliance and audit

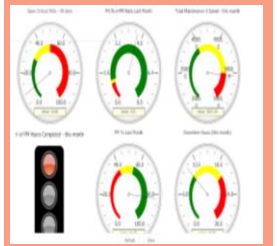
Quality Assurance

Real-time monitoring

Genealogy (history)

Certifications

Yield



KPI's and Reporting

Plant and Mine-wide to enterprise

Common definitions & calculations

Benchmarking & comparison

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Data to Value: Recognizing the Critical Contributors

People Resources	•Subject Matter Experts (SMEs) •Centers of Excellence (CoEs)	• Innovators (Enabled Workforce) •Change Agents
Tools / Applications	•Visualization Tools •Application Systems	•Analytical Tools (Big Data) •Reporting Tools
Data Infrastructure	•Data Collection / Historization	•Data Contextualization / Enterprise Normalization •Calculations / Rollup / Aggregation
Network Connectivity	•Ethernet TCPIP / Proprietary •Wired / Wifi / Cellular	
Sensors / Data Sources	•IoT / IIoT •Transactional Databases	•Calibration

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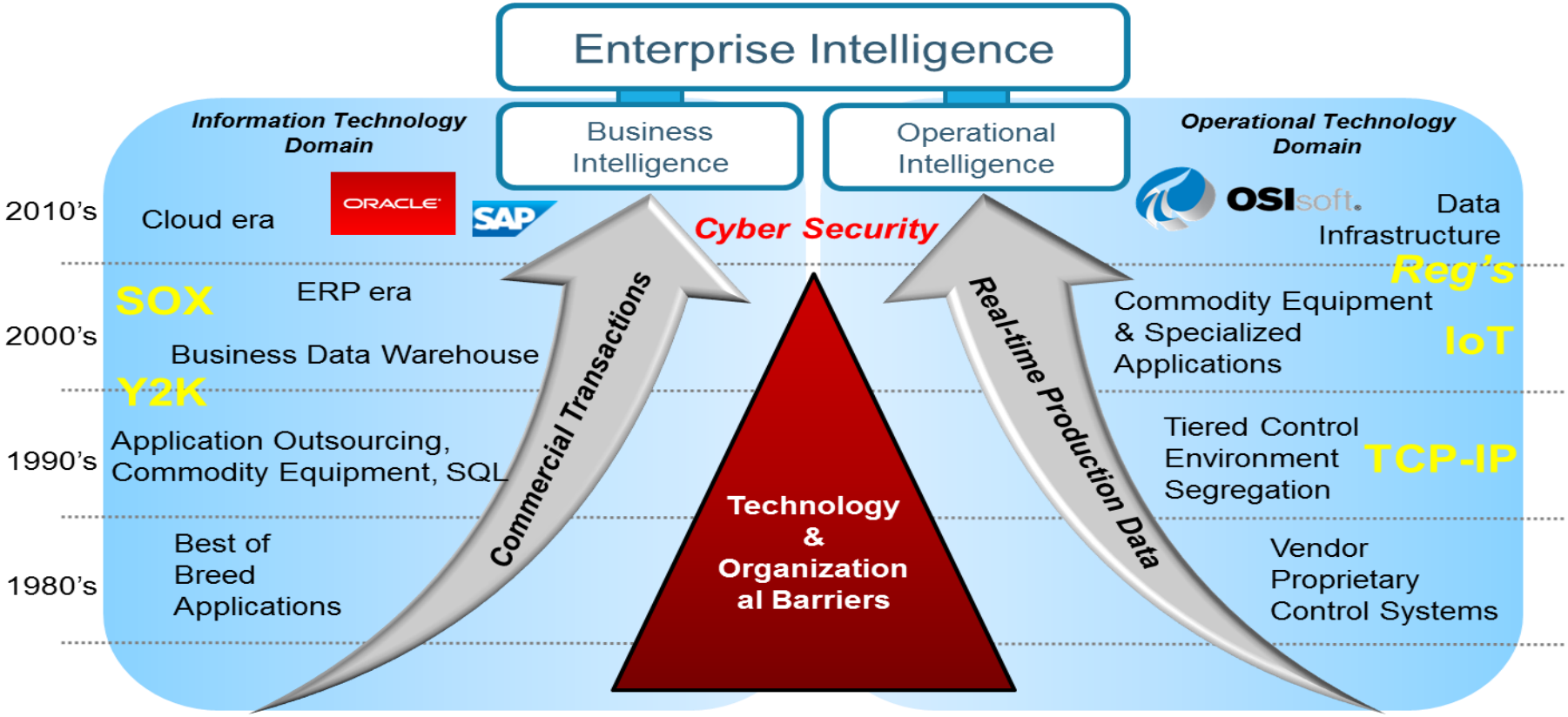
Recognizing IT/OT Convergence



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What Type of Approach is Best?

PROJECT

Pros:
- Well Defined, Limited Scope
- Single Design / Deployment
- More Manageable Initial Cost
- Common starting point

Cons:
- Site Based, One Off Solutions
- Not Easy to Leverage / Deploy ‘Best Practices’ or ‘Standards’ across Multiple Sites
- New Projects Require New Software / New Solutions / New Funding / **New Start**
- Cost / Complexity Increase Over Time

PROGRAM

Pros:
- Supports Transformation through Continuous Improvement Program
- Shorter Time to Value for Defined Value Initiatives
- Less Investment / Funding Required for Next Projects
- Leverage of ‘Common Standards’ or ‘Best Practices’
- Provides Standard Approach to Technology / Minimizes Complexity
- Engages People

Cons:
- Higher Initial Funding Investment (Offset by Lower ongoing TCO and Stronger Value Realization)

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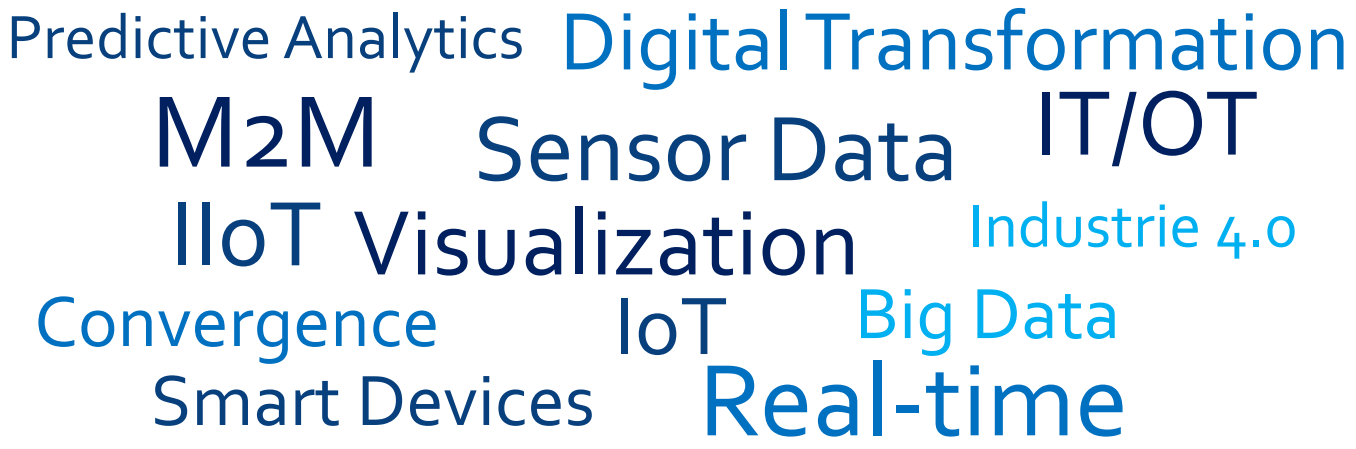
You may have heard of these…



Key Point - These all generate, use, or manipulate Operational Data

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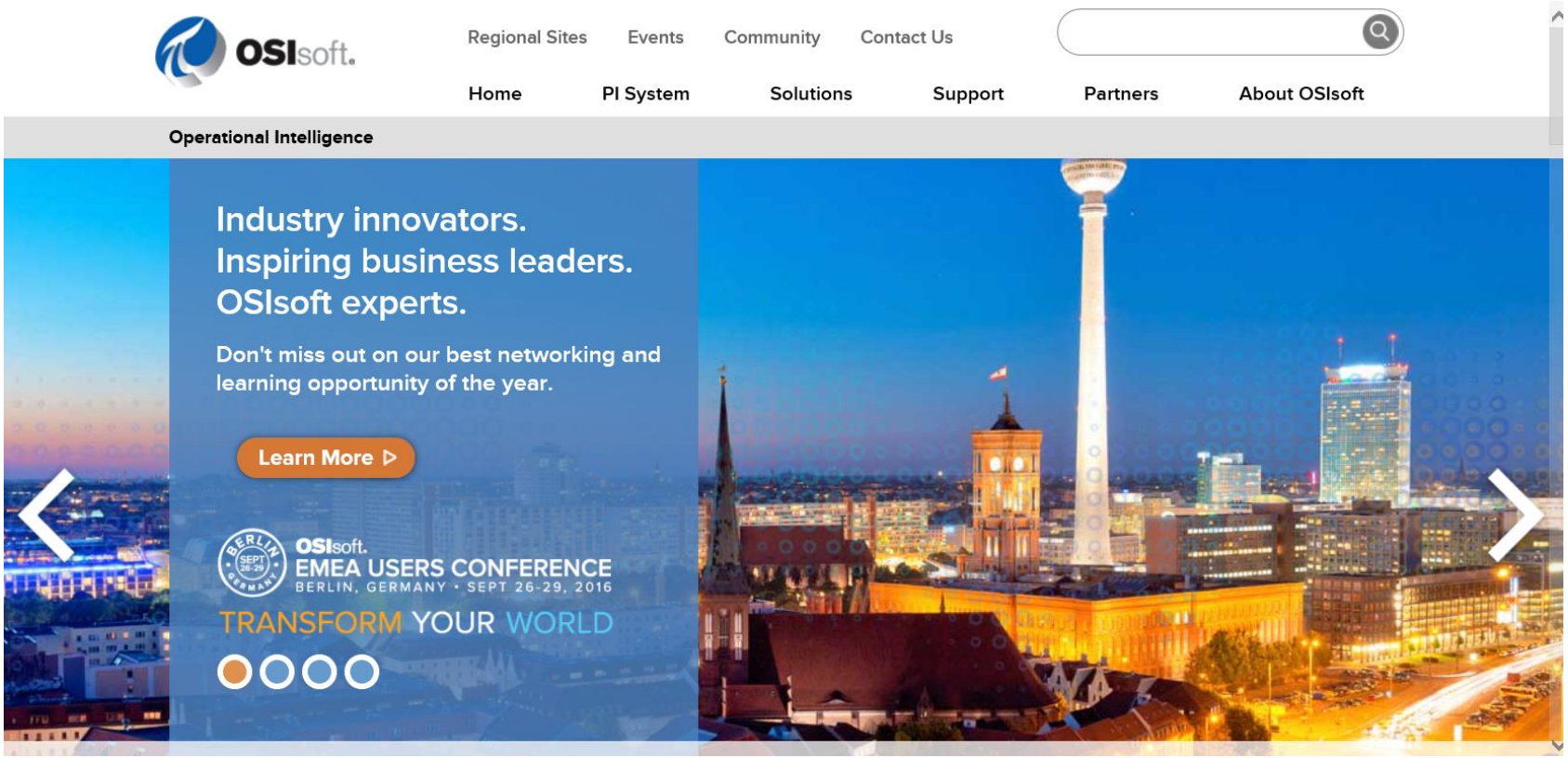
Industries on the OSIsoft website



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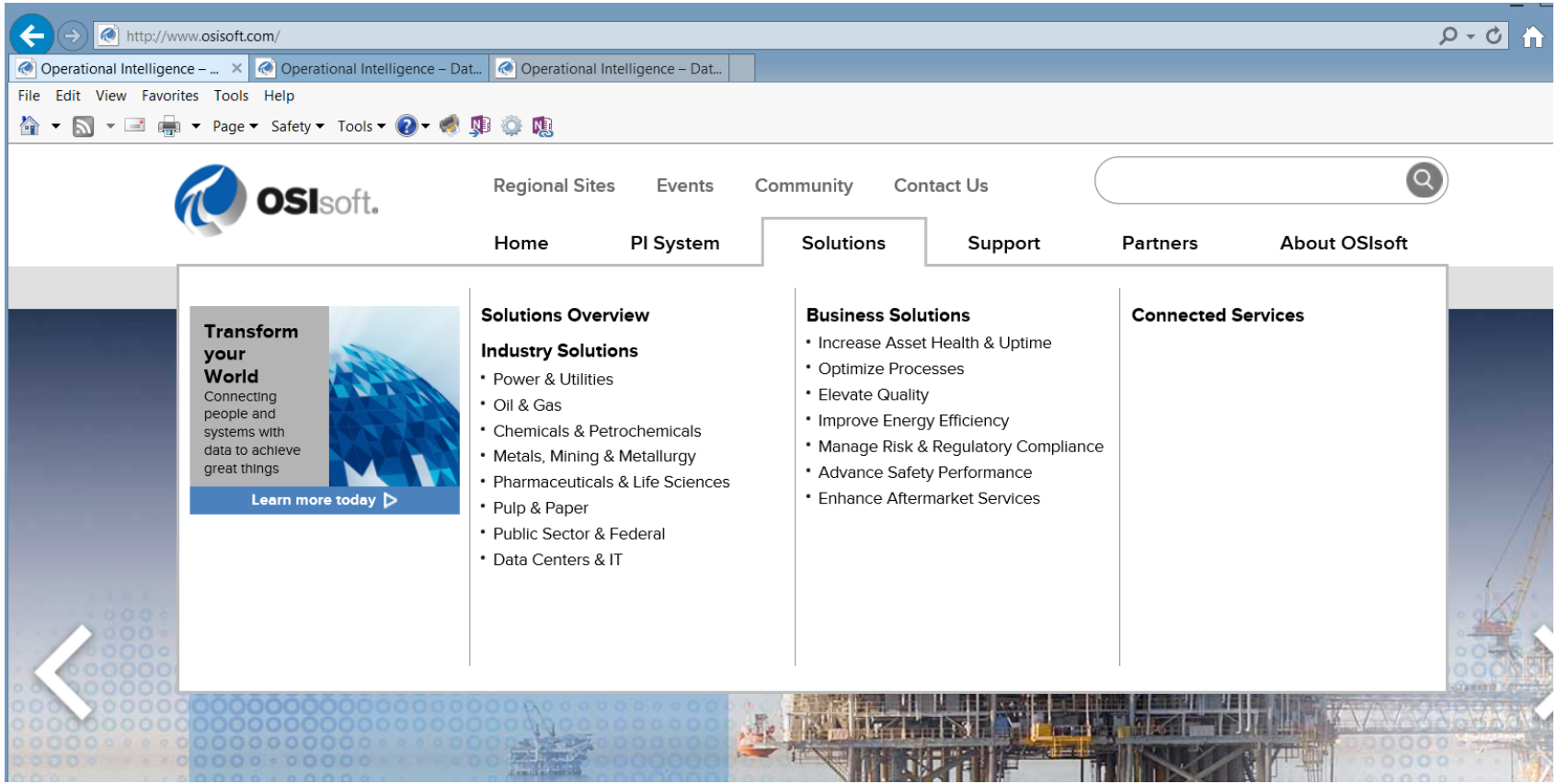

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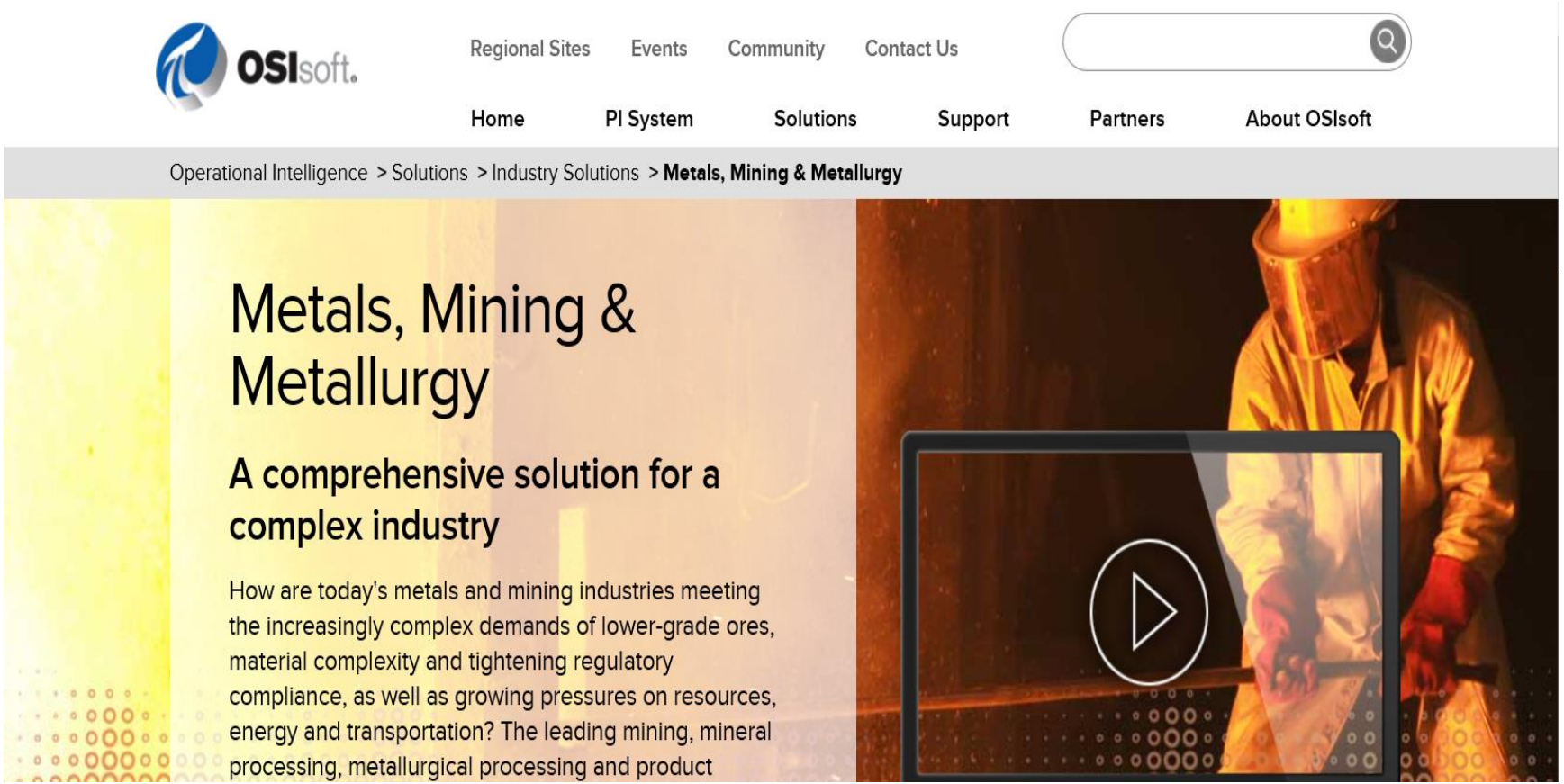

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Forest and Paper Products PI User Group

Join to discuss best practices, white papers, share news, and exchange ideas.

Objectives:
- Identify Best Practices
- Share knowledge and ideas across our industry
- Foster communication with OSIsoft regarding our industry needs

Customer run, customer led, OSIsoft assisted

This is NOT an avenue for sales presentations or marketing

Want to opt in?
https://pisquare.osisoft.com/groups/paper

Or contact jsirois@osisoft.com

Have questions?
- jsirois@osisoft.com
- msandin@osisoft.com
- Visit the PI Square Booth

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Mining, Metals, and Materials PI User Group

Join to discuss best practices, white papers, share news, and exchange ideas.

Objectives:

- Identify Best Practices
- Share knowledge and ideas across our industry
- Foster communication with OSIsoft regarding our industry needs

This is NOT an avenue for sales presentations or marketing

Want to opt in?
https://pisquare.osisoft.com/groups/mmm

Or contact jsirois@osisoft.com

Have questions?

- jsirois@osisoft.com
- pzalevsky@osisoft.com
- Visit the PI Square Booth

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Facilities and Water and Wastewater PI User Groups

Join to discuss best practices, white papers, share news, and exchange ideas.

Objectives:

- Identify Best Practices
- Share knowledge and ideas across our industry
- Foster communication with OSIsoft regarding our industry Needs

This is NOT an avenue for sales presentations or marketing

Want to opt in?
https://pisquare.osisoft.com/groups/facilities
https://pisquare.osisoft.com/groups/water

Or contact jsirois@osisoft.com

Have questions?

- jsirois@osisoft.com – any user group
- ddoll@osisoft.com – Facilities Group
- gwong@osisoft.com – Water Group
- Visit the PI Square Booth

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Key Considerations for Today's Session

- What is your vision for the use of data in your company / division?
- What role does operational data play as a key part in your vision?
- What are you doing to establish operational intelligence in your company?
- What are your key takeaways from today's presentations?

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Questions

Please wait for the **microphone** before asking your questions

State your **name & company**

Please remember to…

Complete the Online Survey for this session

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감사합니다

谢谢

Danke

Gracias

Merci

Thank You

ありがとう

Спасибо

Obrigado

Remember – It’s All About the DATA!

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