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USERS CONFERENCE 2016

April 4-8, 2016 | San Francisco

TRANSFORM
YOURWORLD



Process Industries, Transportation and Supply Chain

Presented by **Matthew Miller**
Transportation Industry Principal

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Agenda

- Digitalization of business
- Digital supply chains, ecosystems and communities
- How the PI System enables digitalization
- Industry Day session overview

Digitalization of Asset & Energy Intensive Businesses

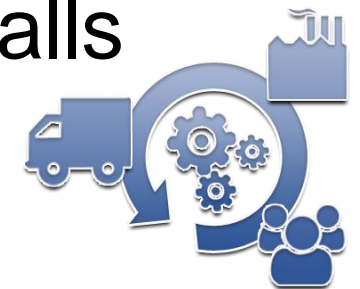
- “I DON’T KNOW” is no longer a good answer...
- Finding efficiencies inside and outside the 4 walls
- Data-driven culture is elusive at scale
- Driving predictable outcomes
 - Reduce variability
 - Understand environmental impacts
 - Embrace uncertainty



Maturity Cycle of Digitalization

digital competence → digital usage → digital transformation

- Not something you buy, its something you do!
- Top down – strategic vision driven
- Bring OT and IT worlds together
- IoT – capture digital records of ALL key physical behaviors
- Finding opportunities inside and outside the 4 walls
(supply chain and communities)



Capturing all the data....

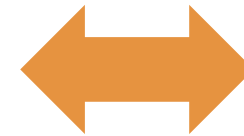
... bringing and end to “I don’t know....”

Internet of Things

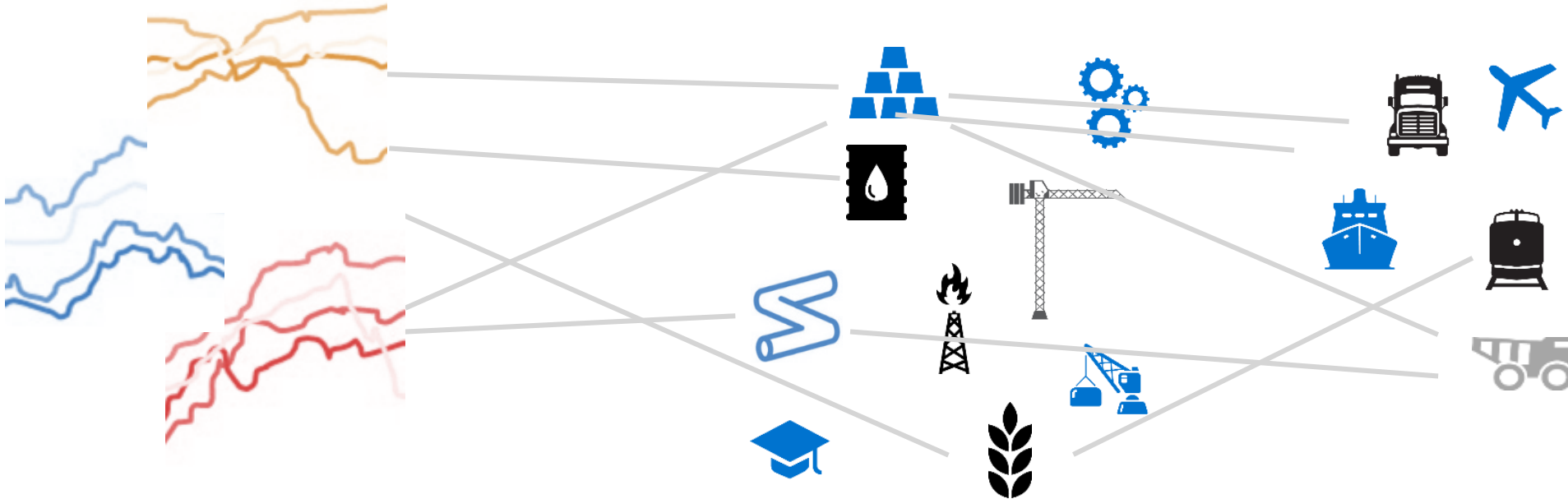
New Data
Streams



New Locations



New
Applications



Multiple Sites, Multiple Systems, Multiple Users, Multiple Businesses, Simplified Governance

Challenges around connecting sensors & equipment



SCALE



TRAVERSING
NETWORKS



SILOS



END POINT
DEVICE MGMT



CONTEXT



NETWORK
MGMT



VARIETY

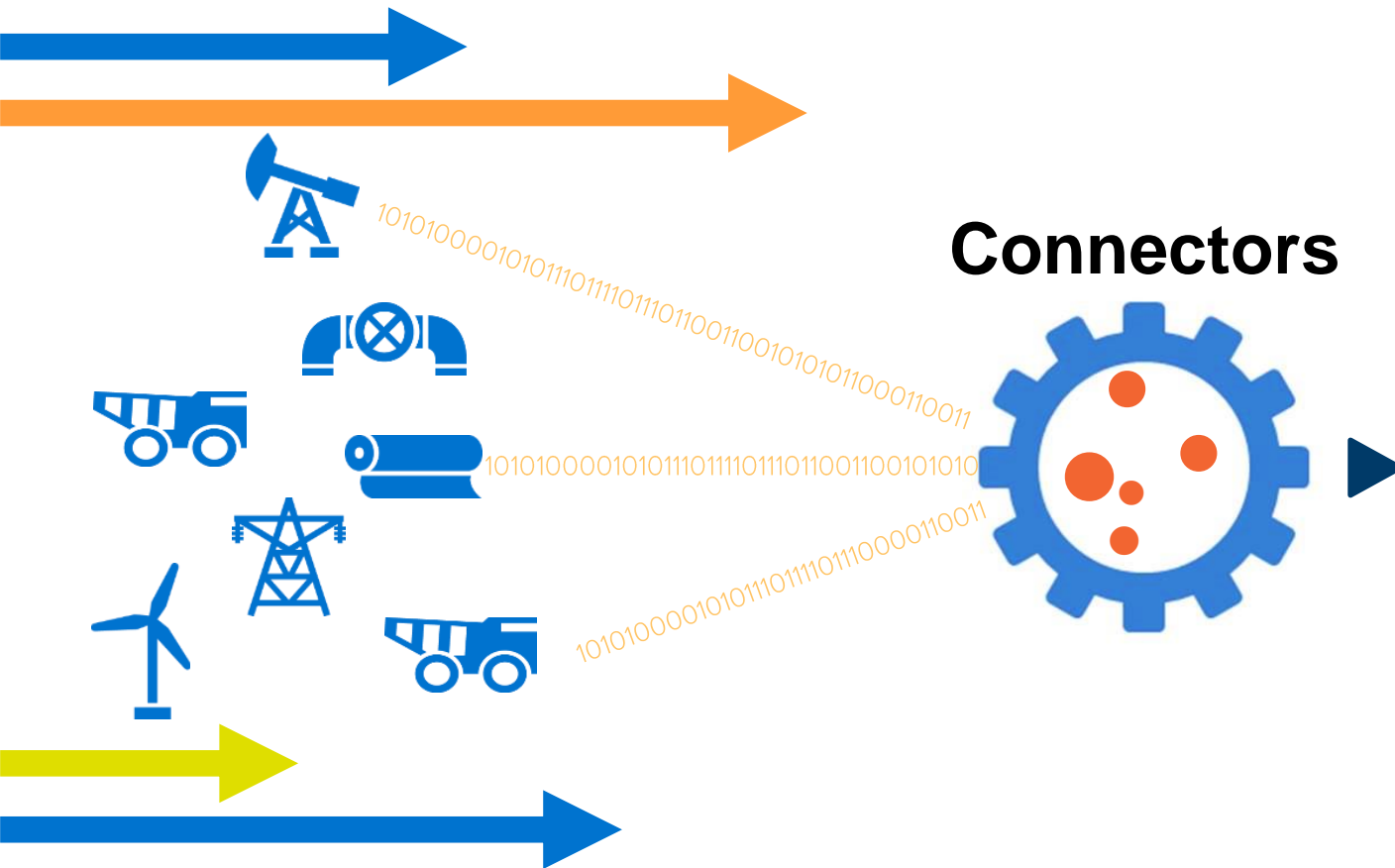


SECURITY



http://pages.osisoft.com/IIoT_Connecting_Mobile_Assets_WP_LP.html

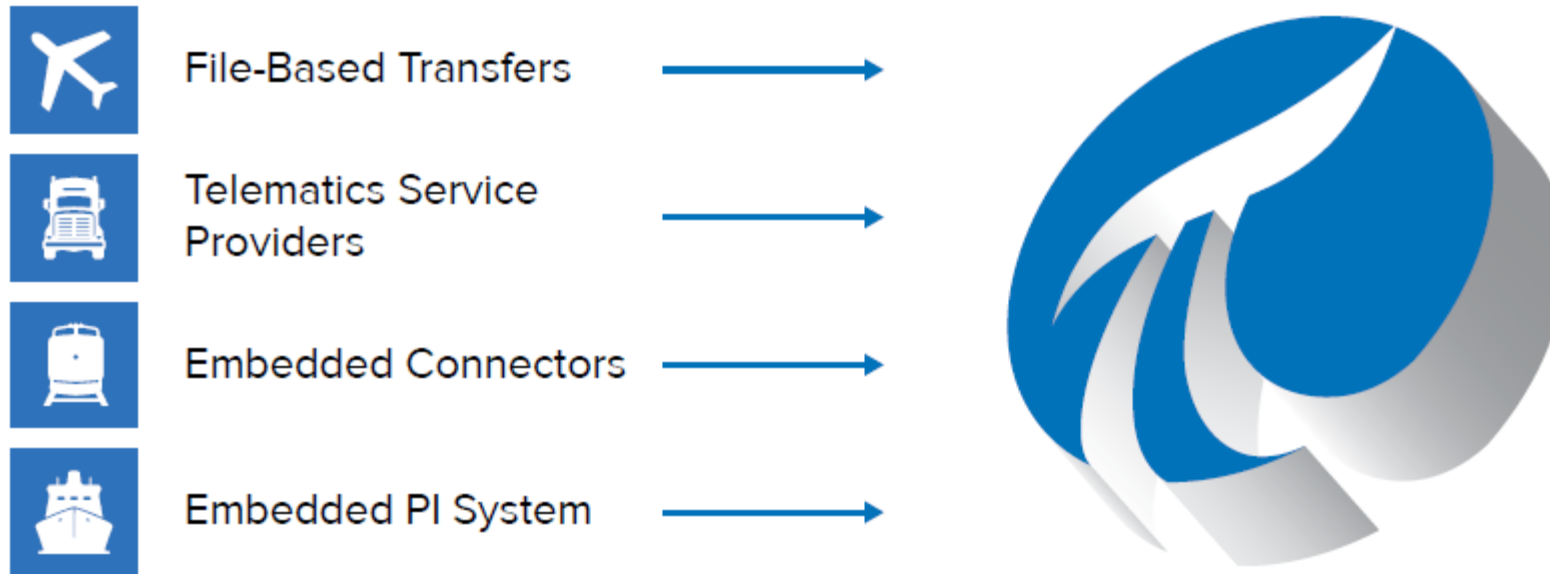
PI Connectors



- Data source is the **system of record**
- Data collected in terms of **assets** as defined by the data source
- Assets **auto-created** in AF
- Tags **auto-created** in PI Server, linked to AF Elements
- Events collected and stored in **Event Frames**
- Easy to **configure**

[TECHcon Talk - Connectivity from A to Z - Roadmap for PI Connectors and PI Interfaces 1:20 pm Continental 6](#)

Connecting mobile equipment to the PI System



[Getting Started with IIoT and the PI System](#) Continental 6 3:00 PM

[Collecting Data using the new PI Connector for UFL](#) – Integration Lab 1

Hybrid Industrial Data Ecosystem

Data Sources → Data Integration → Data Analysis



Impacts

Safety &
Security

Asset
Health

Energy
Utilization

Quality

Process
Efficiency

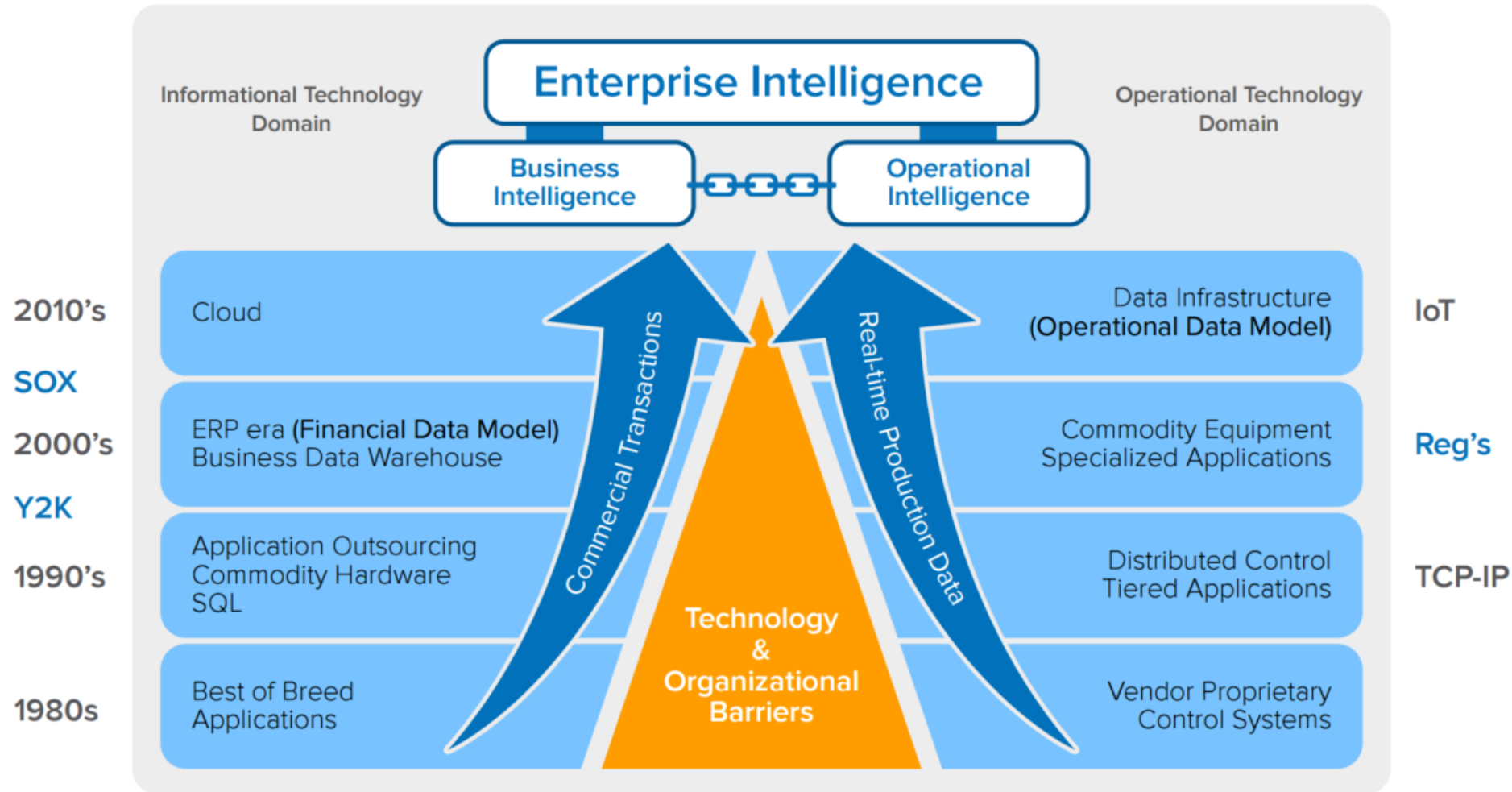
Regulatory
Compliance

Data, process and people working together...

... to improve the business

Evolution of OT and IT Integration

Streenstrup quote.



White paper wp-strategies-for-integrating-ot-and-it-lt-en20.pdf

Defrag your Infrastructure

- One version of the truth
- Secure access to all stakeholders
- Real-time
- Data Quality
- Self-Serve
- LOB Managed.
- Administered by IT
- Minimize Gaps

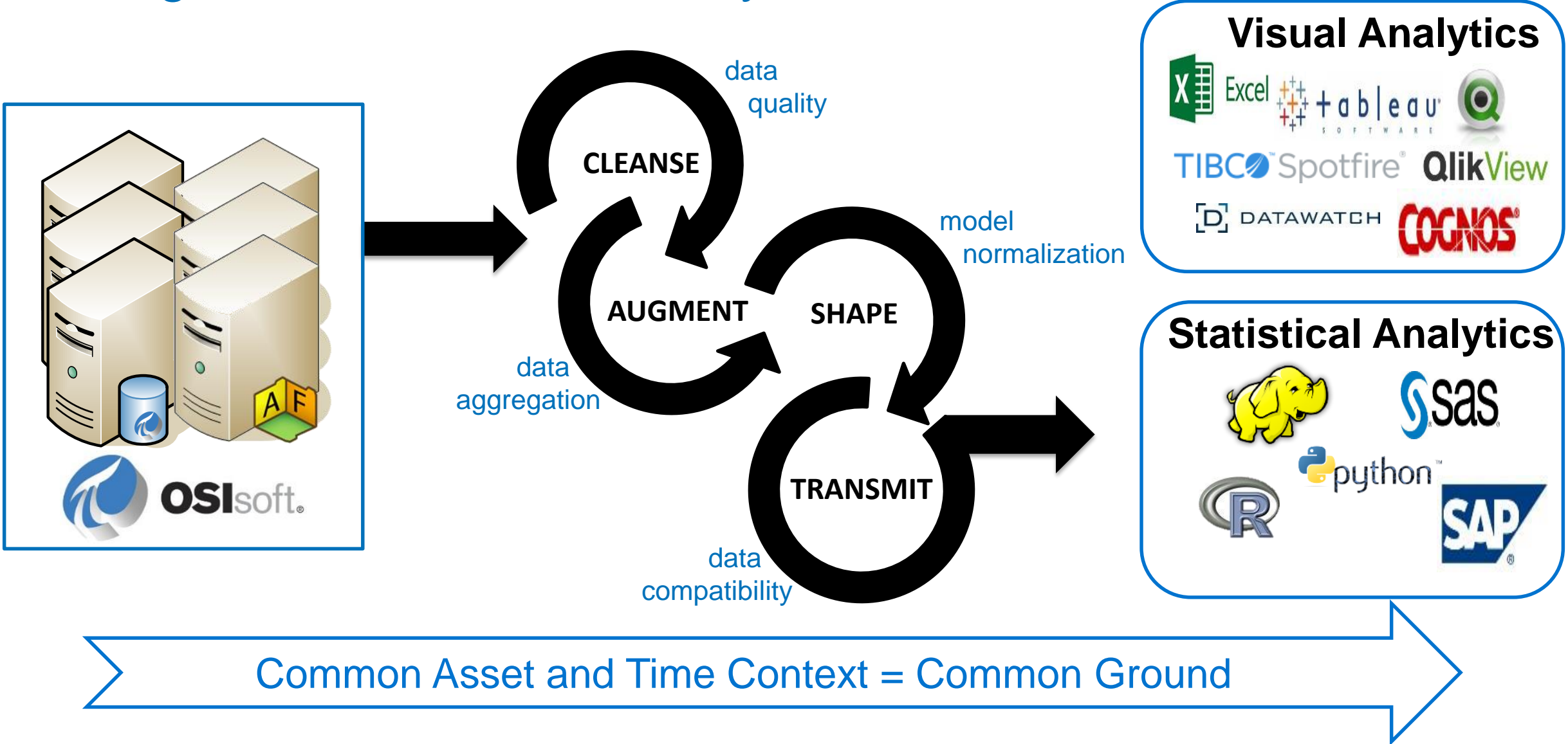


How OSIsoft has evolved to enable digital transformation

- Operationalize Context – AF & EF
- Support the mobile workforce – PI Coresight
- Build COTS OT/IT Bridge – PI Integrators
- Enable ecosystems and communities – PI Cloud Services
- New License Models – EA, CSSA
- Partnerships and Alliances
- Developed white papers and solution briefs

Matt Z. talk.. OT/IT integration PDWH

PI Integrator for Business Analytics



Sharing beyond traditional four walls....

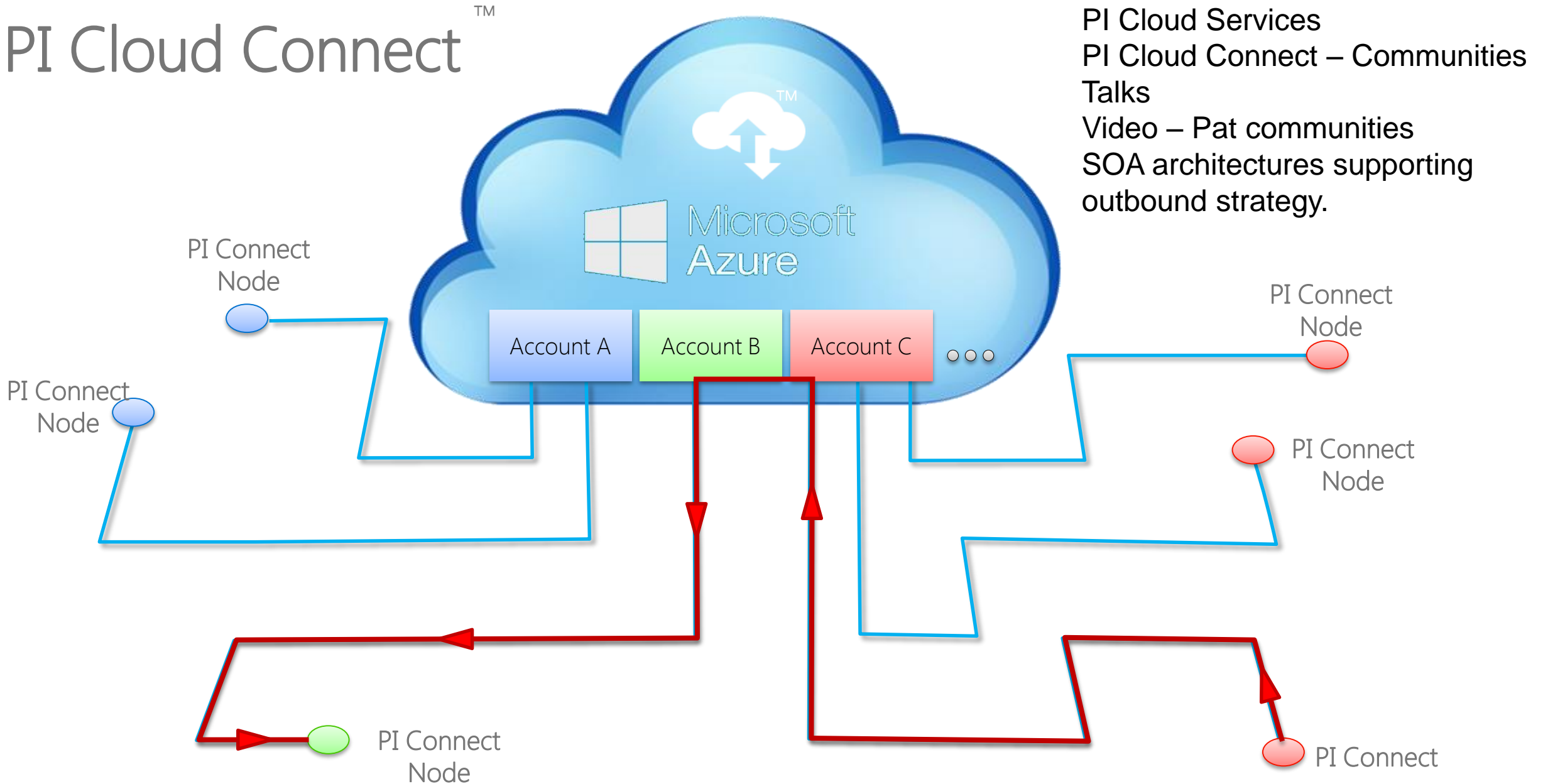
... and beyond the organization

Connected Industry of the Future enables Community

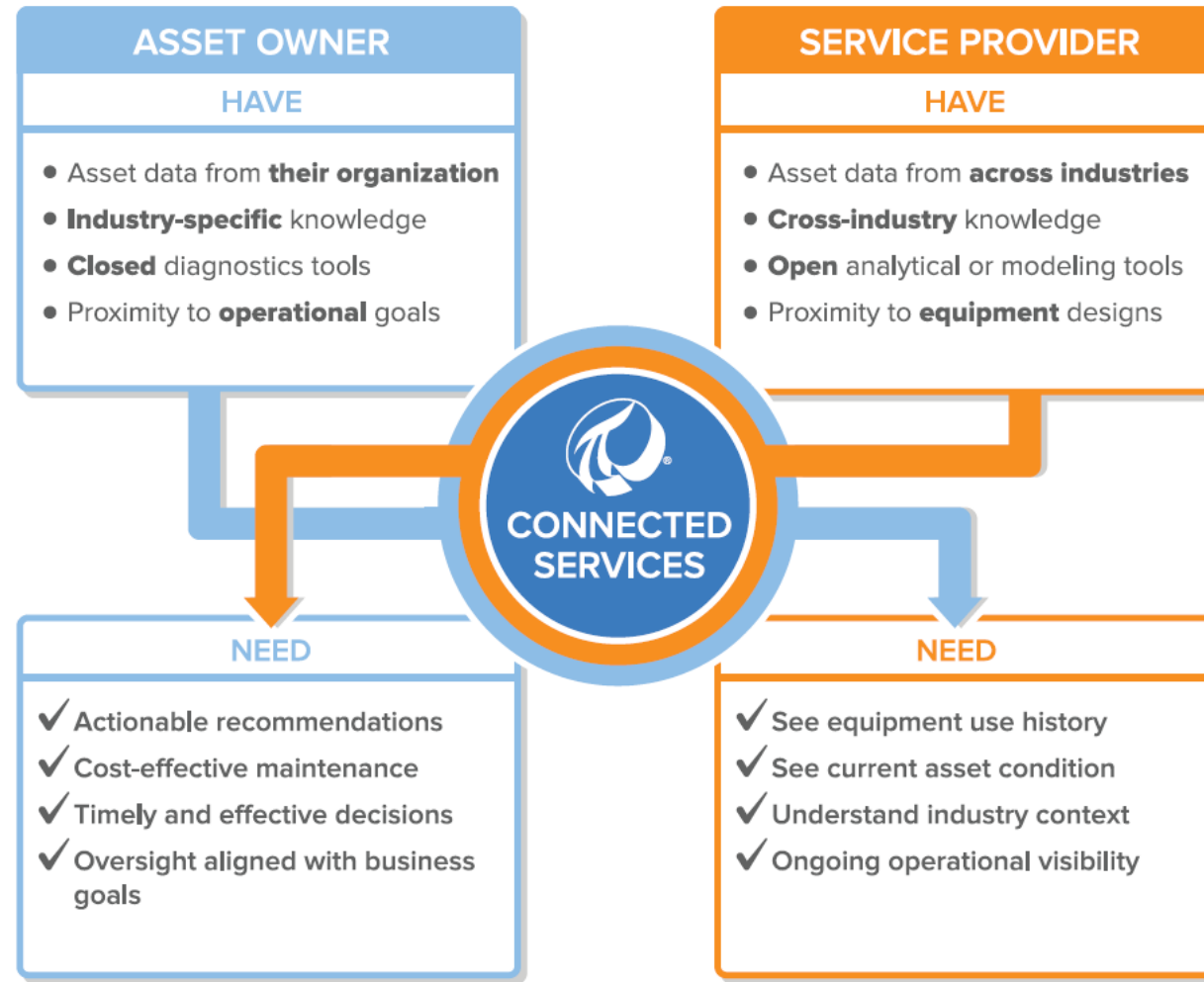


SOURCE: OSIsoft IoT Whitepaper on Marketing.Home

PI Cloud Connect™

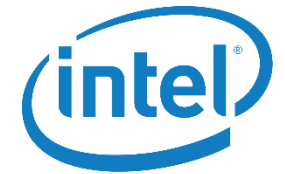
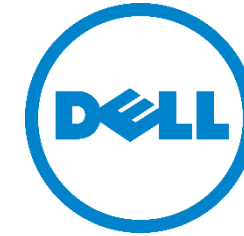


Connected Services – Building a Service Ecosystems

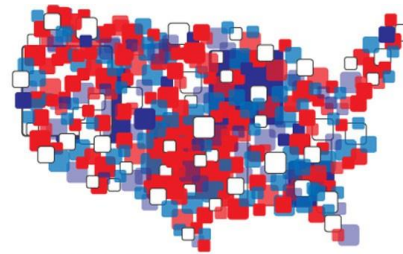


New partnerships, research and applications

BAE SYSTEMS



UNIVERSITY
OF
CALIFORNIA



ENVISION: AMERICA™



Carnegie Mellon



Transportation & Supply Chain 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/transportation>

Or contact jsirois@osisoft.com



Have questions?

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



Today's Industry Track Presentations

Presentation	Time	Presenter
Smart Manufacturing - Next Generation IT for Next Generation Manufacturing	9:45-10:15	Jim Davis, PhD – UCLA/SMLC
Daily Performance Management through Visual Analytics	10:30-11:00	Bruce Lucas - Michelin North America
Heavy Haul Equipment Logistical Challenges in Iron Ore Mining - Strategies to Turn Real-time Information into Operational Efficiency with the PI System	11:15-12:00	Michel Plourde - ArcelorMittal Mines Canada
Lunch (J1939 roundtable)	12:00- 2:00	PI Connector Development and PM Team
Loram Knows How to Keep Things Moving	2:00-2:30	Eric E. Manninen - Loram
Bluestar's Business Transformation with the PI System	2:45-3:15	Martin Ma - Nantong Xingchen Synthetic Material Co Ltd.
Lenzing Journey to Operational Excellence with OSIsoft PI	3:30-4:15	Wolfgang Purrer - Lenzing AG
Common perspectives surrounding digital enterprises, assets, process and supply chains	4:15-4:45	Kristin Kelly – Content Strategist Matthew Miller – Industry Principal

Contact Information

Matthew R. Miller
Transportation Industry Principal
mmiller@osisoft.com



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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Session Wrap-up

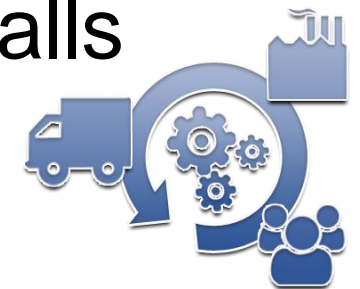
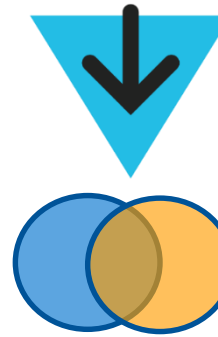
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- Not something you buy, it's a strategy!
- Driven from the top
- Bring OT and IT worlds together
- IoT – capture digital records of ALL key physical behaviors
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(supply chain and communities)



Is “digitalization” a top priority for your executives?

1. Yes!
2. For parts of the enterprise
3. It's a few years down the road
4. No or I don't know

The biggest challenge to adopting digital strategies is:

1. Restructuring IT systems
2. Making a clear business case
3. Lack of executive support
4. Understanding where or how to start
5. Other

The MOST important strategic goal of digitalization is to:

1. Drive innovation
2. Align operations and business strategy
3. Optimize workforce
4. Improve supply chain management
5. Other

The most important business OUTCOME of digitalization will be to:

1. Mitigate risk
2. Streamline operational costs
3. Enable new business models
4. Uncovering latent ROI through collaboration
5. Improving ability to produce predictable outcomes

To enable digitalization, the MOST important capability of the PI System is:

1. Data integration & democratization
2. Easy connections to business tools
3. High fidelity, trusted data
4. Information available on mobile devices
5. It will not be important

Survey Result Summary

- Executive digitalization vision
- Challenges to digitalization adoption
- Important strategic goals of digitalization
- Desired business outcomes of digitalization
- Most important PI System Capabilities

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감사합니다

谢谢

Danke

Merci

Gracias

Thank You

ありがとう

Спасибо

Obrigado

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