GLOBAL WEBINAR

Leverage the Right Technology to Avoid a Data Swamp

Presenter:
John de Koning, Customer Success Advisor, OSIsoft

November 8, 2017

OSIsoft®

Our Speaker

John de Koning

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John de Koning is a Customer Success Advisor who helps OSIsoft customers be more successful in generating value on their Digital Transformation Journey. John is able to leverage 40 years experience in the Oil & Gas industry in various business roles ranging from operations, process control, process technology, and IT. The last 10 years of his career he was leading Digital Transformation at the enterprise level for Shell.

Find Your Way in the Forest of Technologies

- Businesses of all kinds are beginning to see their data as an important asset.
- Data can help make operations more effective and profitable.
- The ability to gather time-series and non time-series data is growing.
- More technologies are becoming available to help us make sense of it.

How do we choose the right technology and approach for our business problems?

Polling Question

Which technology is your company currently using?

A. Application specific databases

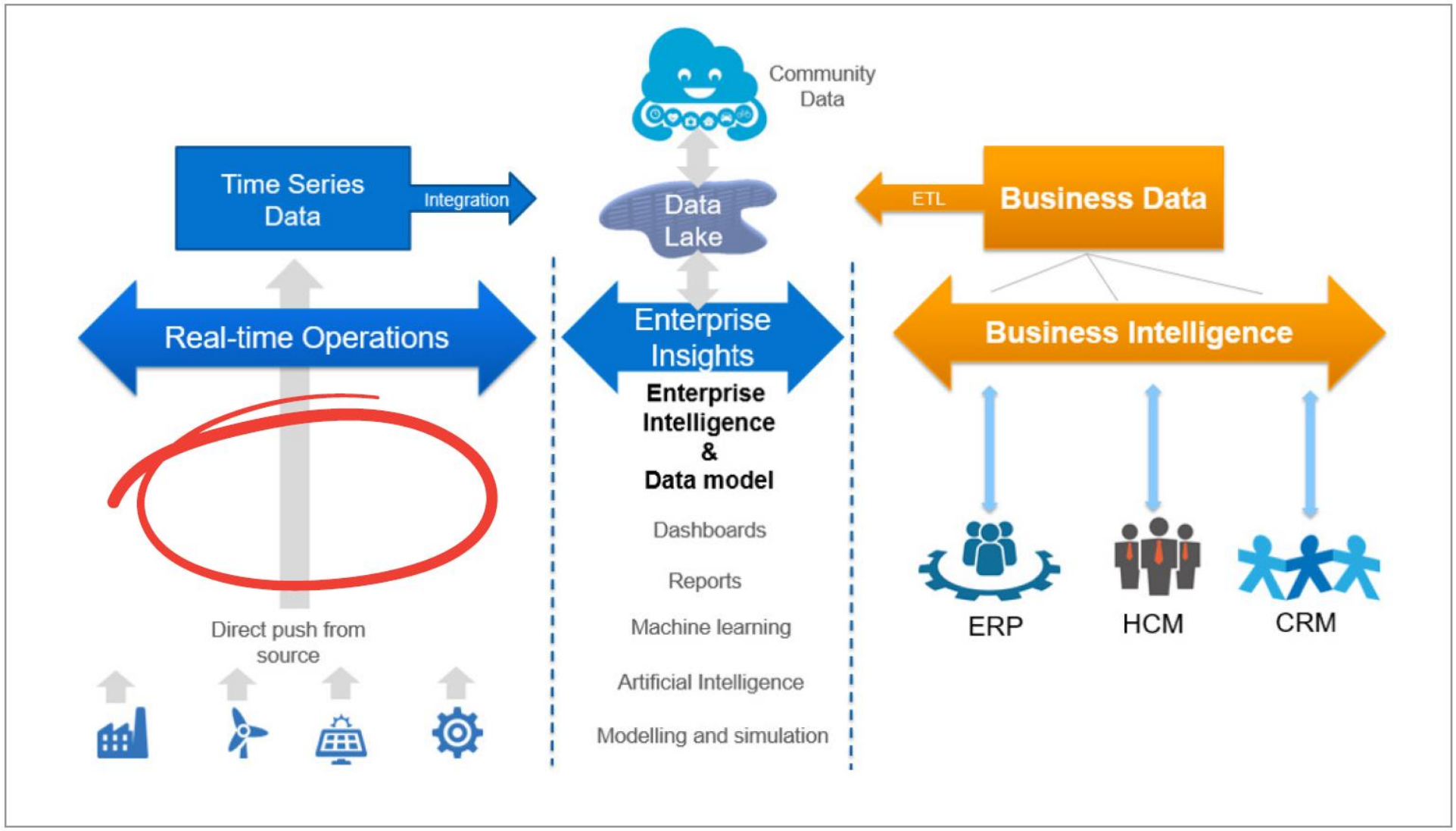
B. Centralized warehouse

C. Data Lake technology (SAP-HANA, Azure, Hadoop, etc.)

Data Warehouse versus Data Lake

Data Warehouse		Data Lake
Structures, processed	**Data**	structured / semi-structured / unstructured, raw
schema-on-write	**Processing**	schema-on-read
expensive for large data volumes	**Storage**	designed for low-cost storage
less agile, fixed configuration	**Agility**	highly agile, configure and reconfigure as needed
mature	**Security**	maturing
business professionals	**Users**	data scientists et. al.

Perfect World



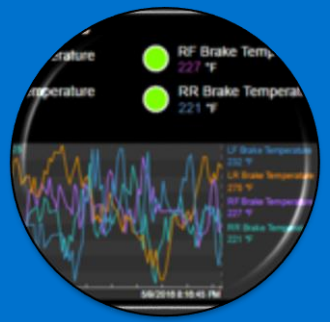
Polling Question

Is your company using cloud based data storage?
A. All our data is in the cloud
B. New development will be based on cloud storage
C. Only to share some data with others
D. Only non-critical data is in the cloud
E. No, not at all

Fundamentals for Time-Series Solution Architecture

Connectivity

Ensure the corporate solution is able to connect to the variety of (legacy) data sources and potential new sources



Time-Series Capacity

The system should be able to deal with timeseries data (high fidelity, time indexing, and time synchronization)

Context

Easy-to-understand asset/equipment-based relations between the individual data streams, to enable business users to easily compare, view and analyze data on an equipment

Accessibility

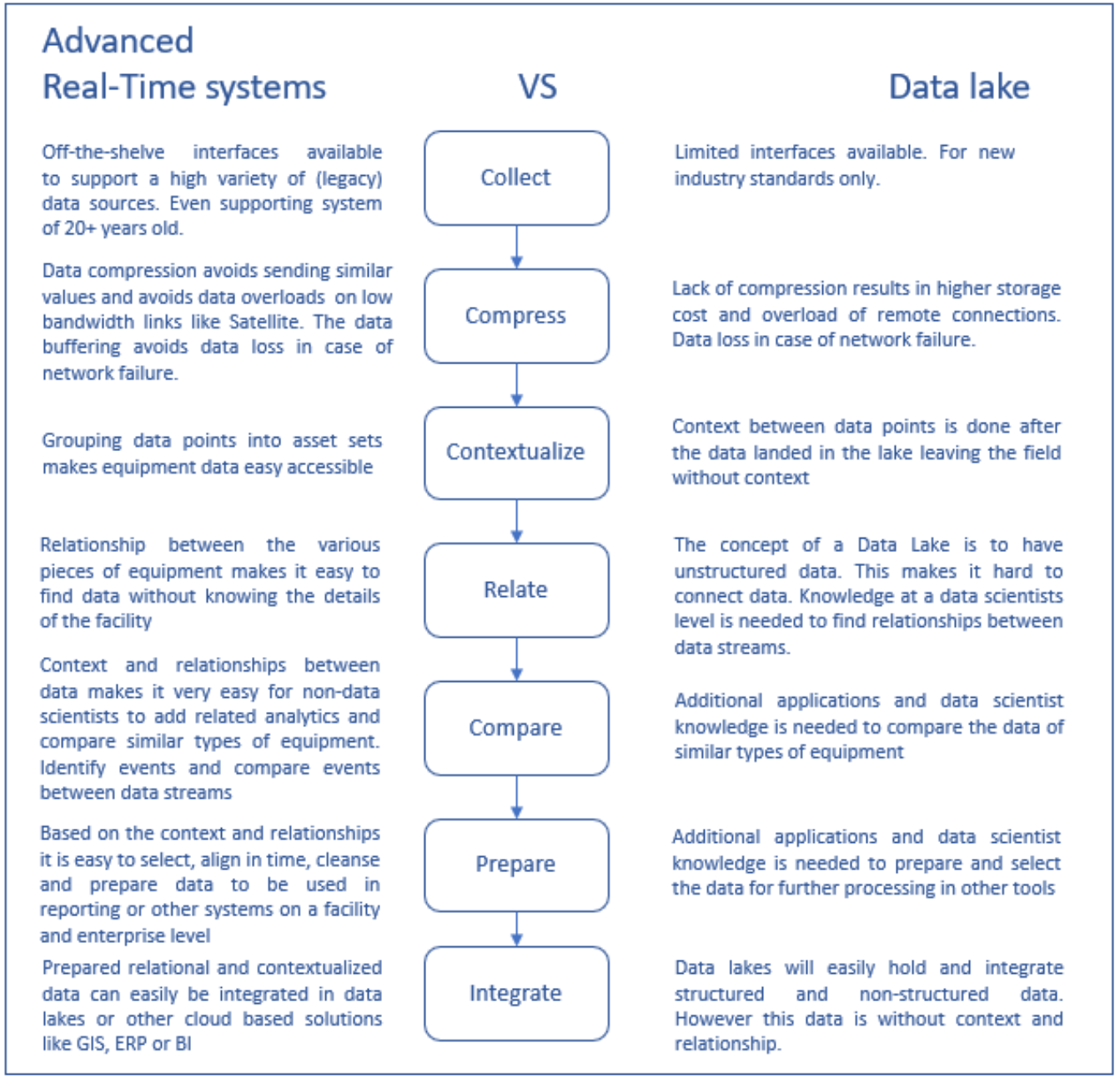
Users should be able to analyze and visualize the data with the tools of their preference to help optimize the facilities they operate

Security

Keep your production facility safe and secure! Don't allow unintended back-door access to your automation system

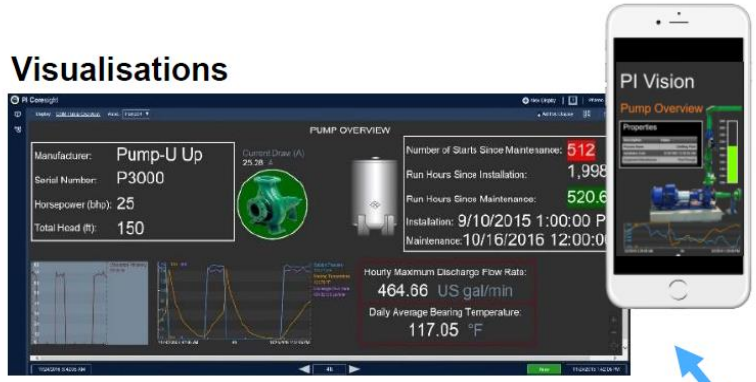
Foundation for success

Value of Real-Time Infrastructure



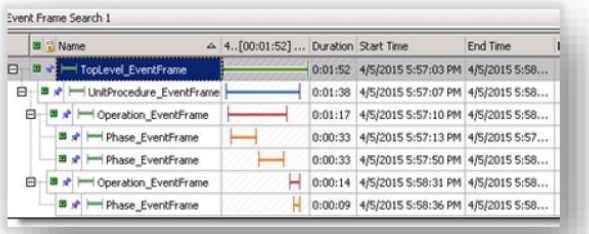
The Power of Context

Visualisations



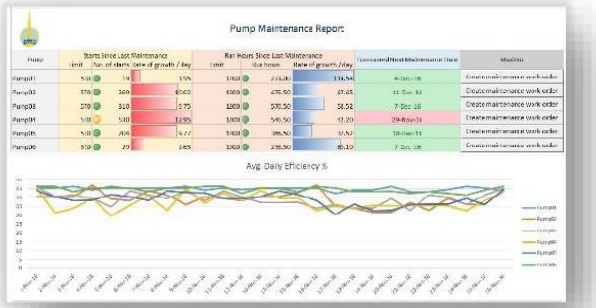
Historical Performance & Future Predictions

Events

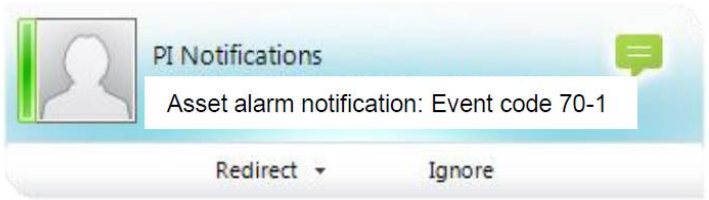


Pump

Reports



Alerts & Notifications



Automated Workflows

IBM maximo®

SAP PM®

Polling Question

Is your company using a standardized corporate model for equipment definitions?

A. Yes, all of our use cases are based on this

B. Yes, but it is currently in development and only used in a few cases

C. No, some standards are available but only at a site level

D. No, not at all

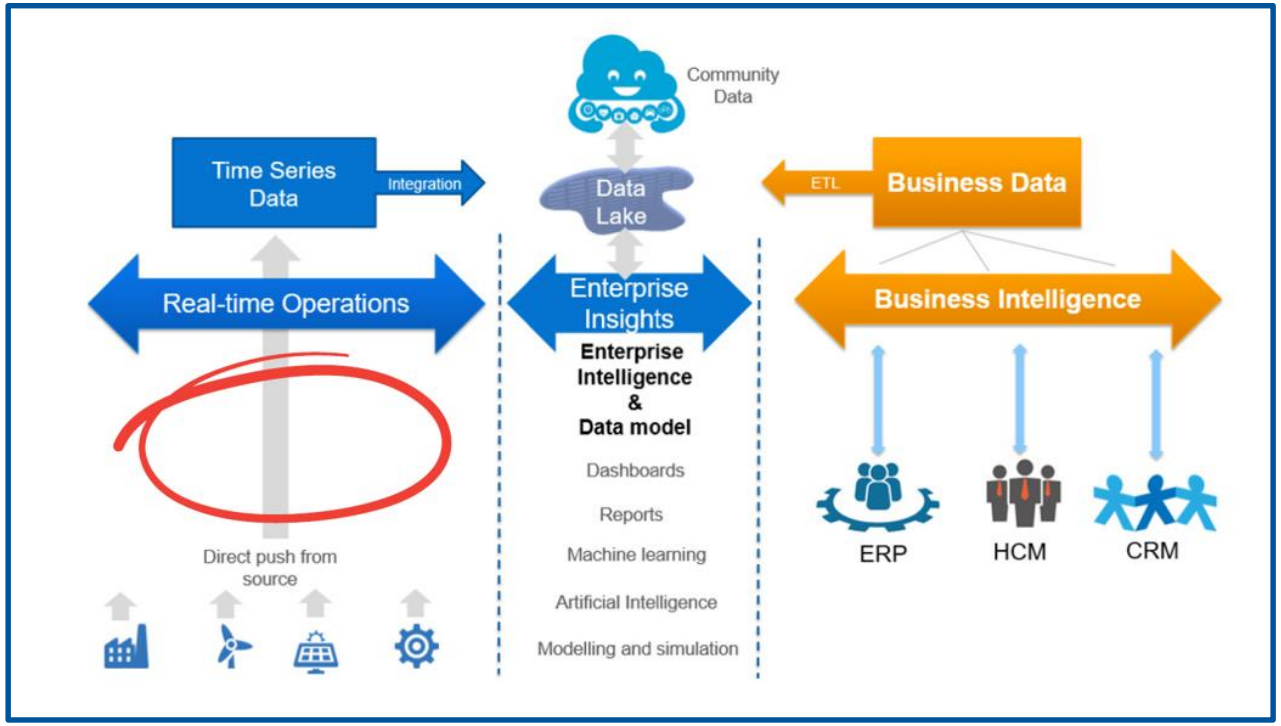
Time Series Data Infrastructure with Data Lake Integration

- Automation vendor-based like Honeywell PHD or Yokogawa Exaquatum
- Open source-based like InfluxDB, Graphite, and Prometheus
- Rotating Equipment vendor-based like Siemens XHQ
- Vendor independent systems like the OSIsoft PI System

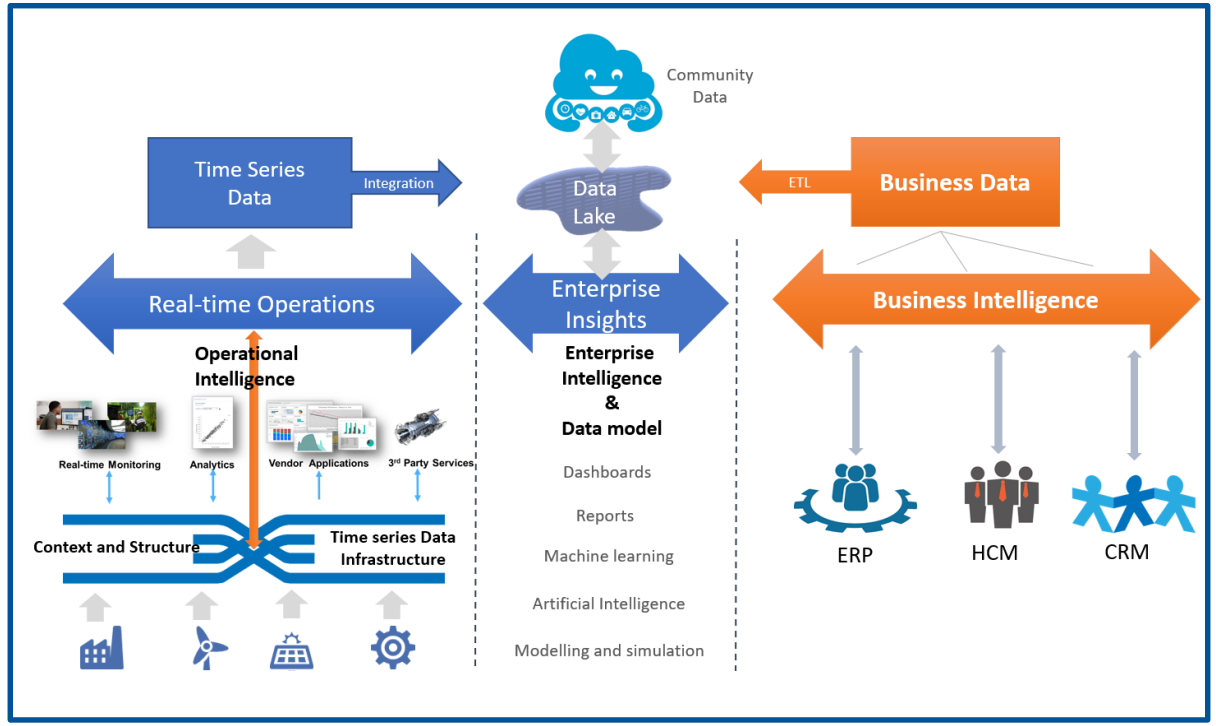
See White Paper for detailed comparison

https://www.osisoft.com/White-Papers/Data-Lake-or-Data-Swamp/

Hybrid Solution for RT Data in a Data Lake Environment

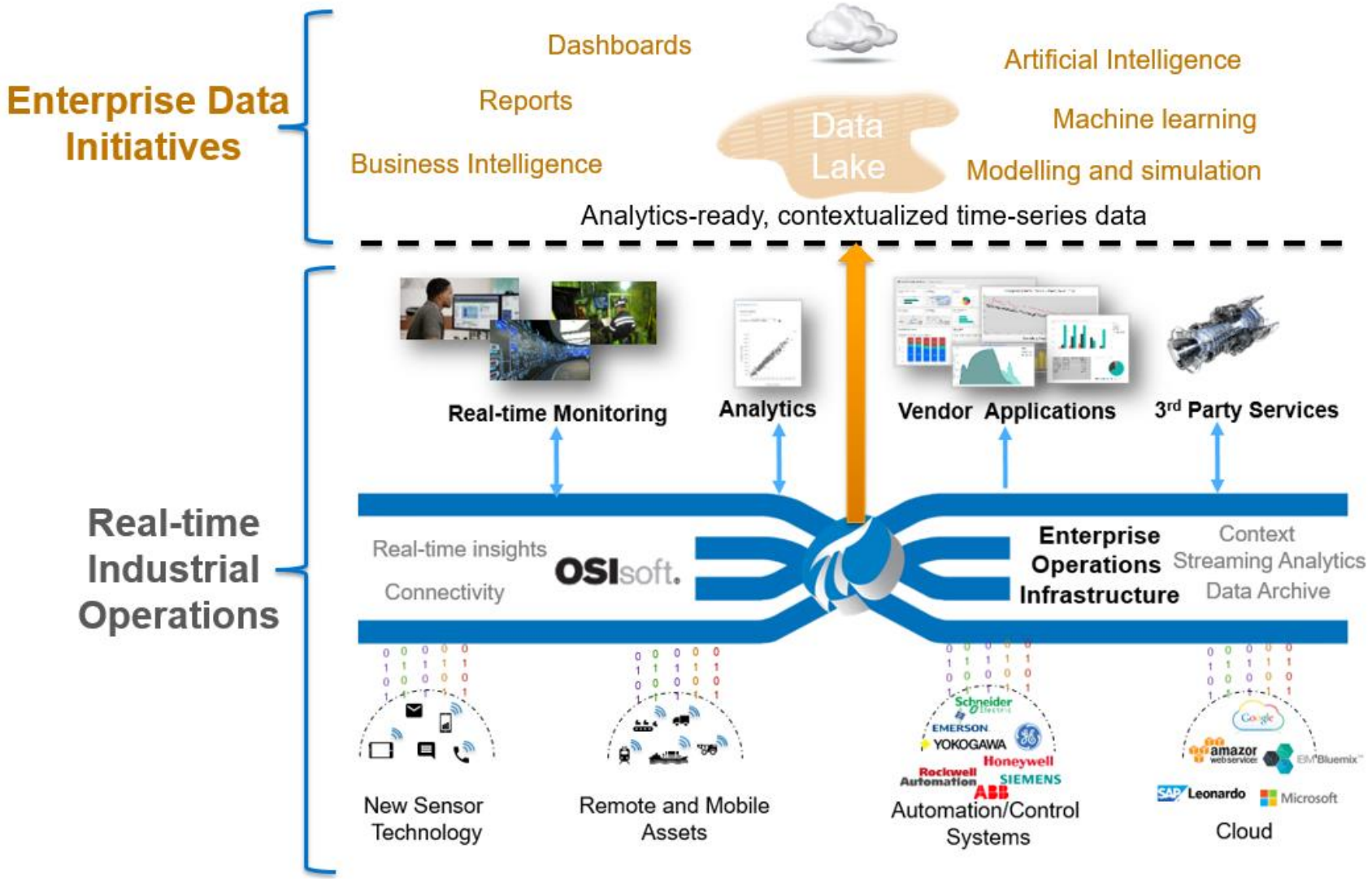


Perfect world



Hybrid reality

How OSIsoft PI System Blends in Perfectly



Polling Question

Will this webinar help you be successful with your Data Lake and Real-time Data?

A. Yes, this gives me clear direction

B. Only some parts are useful

C. This is not the right direction for our Data Lake integration.

D. No, not at all

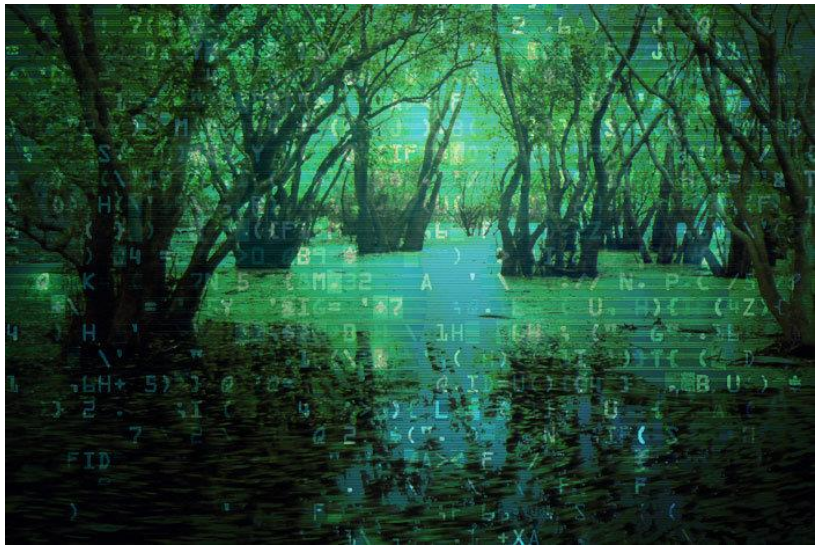
Digital Transformation

Data Lake or Data Swamp

GOAL

Maximize the value of Data Lake technologies for integration of corporate data

KSG SOLUTIONS
BRINGING SPEED TO YOUR VALUE GENERATION



CHALLENGE

How to avoid a Data Lake becomes a data swamp

- Many (legacy) data sources
- Context of data is not available
- Time synchronization and Data Latency
- Data aggregation and integration

SOLUTION

Leverage technologies designed to bring structure to unstructured real-time data

- Get uniform access to data
- Create standardized Digital Twins
- Unlock the data in a structured way
- Transform in a usable format

RESULTS

Aggregation and Integration of structured and contextualized data at a corporate level

- Company wide standardization
- Enable Powerful Data Analytics
- Accelerate value generation with fit for purpose data
- Successful basis for Digital Transformation

White Paper: Data Lake or Data Swamp

https://www.osisoft.com/White-Papers/Data-Lake-or-Data-Swamp/

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Questions and Answers

Polling Questions

How was the presentation?

A. Too technical

B. Just right

C. Needs more depth

We appreciate any feedback from you.

Would you like to speak to your Account Manager?

A. Yes

B. No

Next

- White paper: Data Lake or Data Swamp
- Stayed tuned for follow-up email
  - Link to OSIsoft On-Demand webinars
  - Visit PI Square
- Have conversation with John

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감사합니다

谢谢

Danke

Gracias

Merci

Thank You

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Спасибо

Obrigado

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SPEAKER:
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LIVE | Wednesday, November 8, 2017 | 8-9AM PDT

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