

19'th Oct 2021

---

# AVEVA PI World

## Cloud Strategy Highlights & Vision

Andreas Hartl, SVP Cloud

Gregg Le Blanc, SVP Information Management



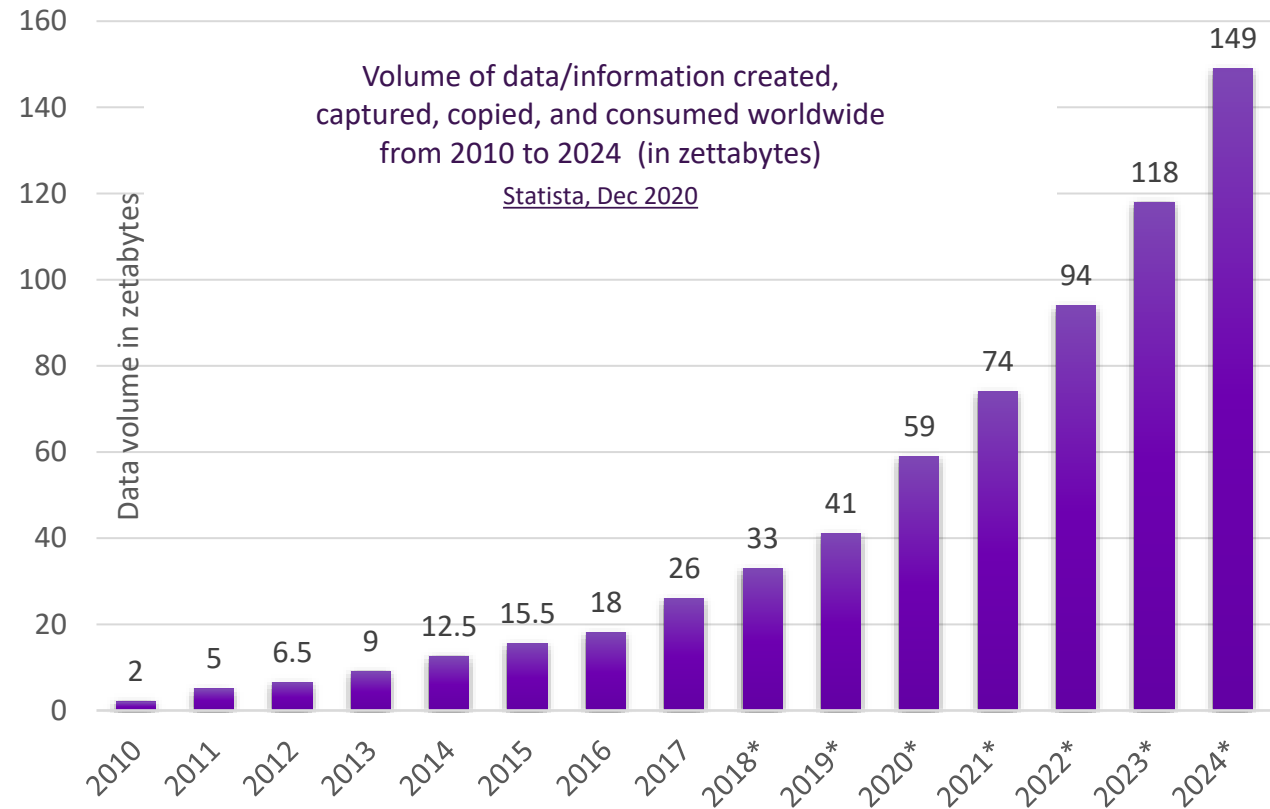
AVEVA

# The importance of data sharing

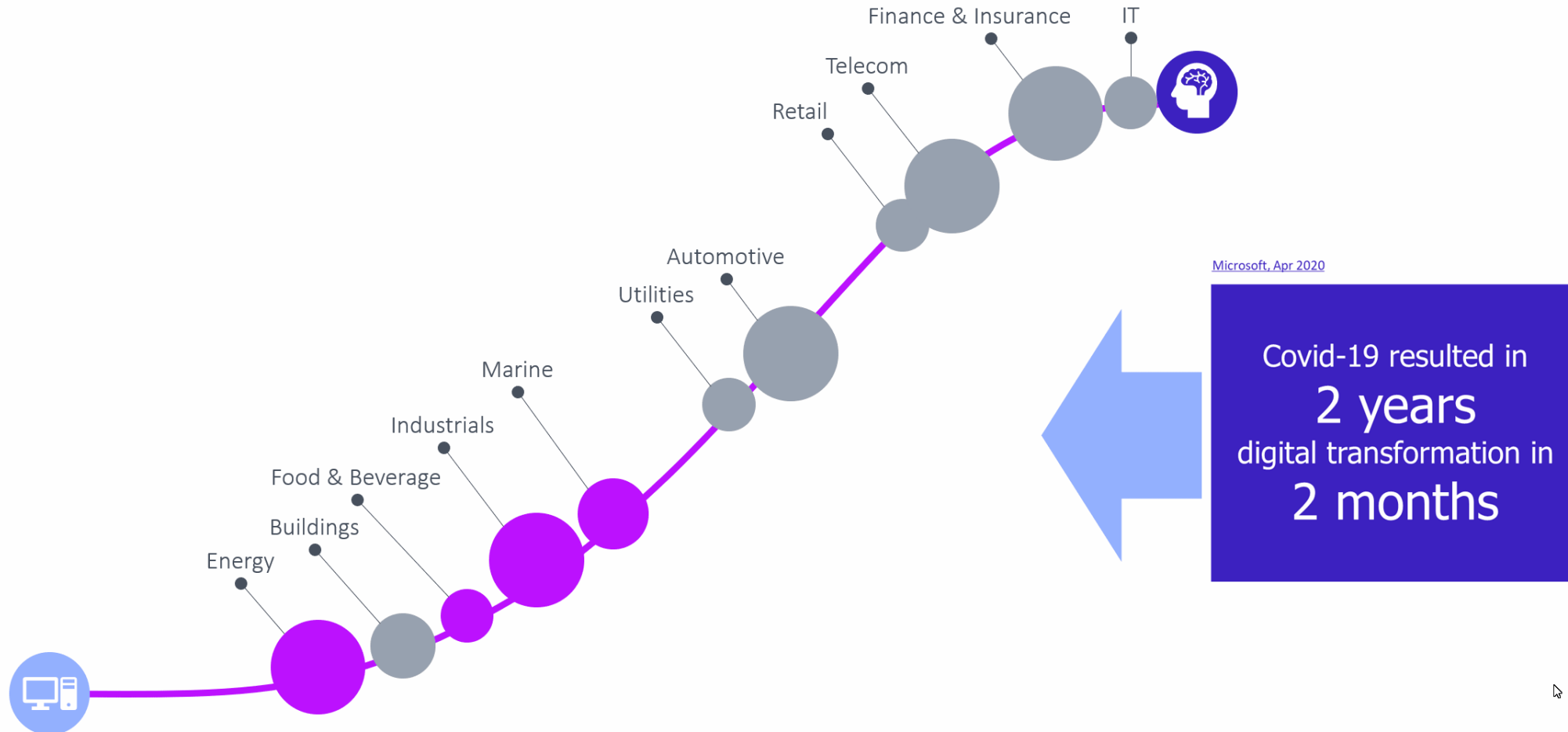
Gartner, 2021

By 2023, 85% of data sharing strategies that include external data sources will drive revenue-generating digital business outcomes rather than data management.

By 2024, most organizations will attempt trust-based data sharing programs but only 15% will succeed and outperform their peers on most business metrics.

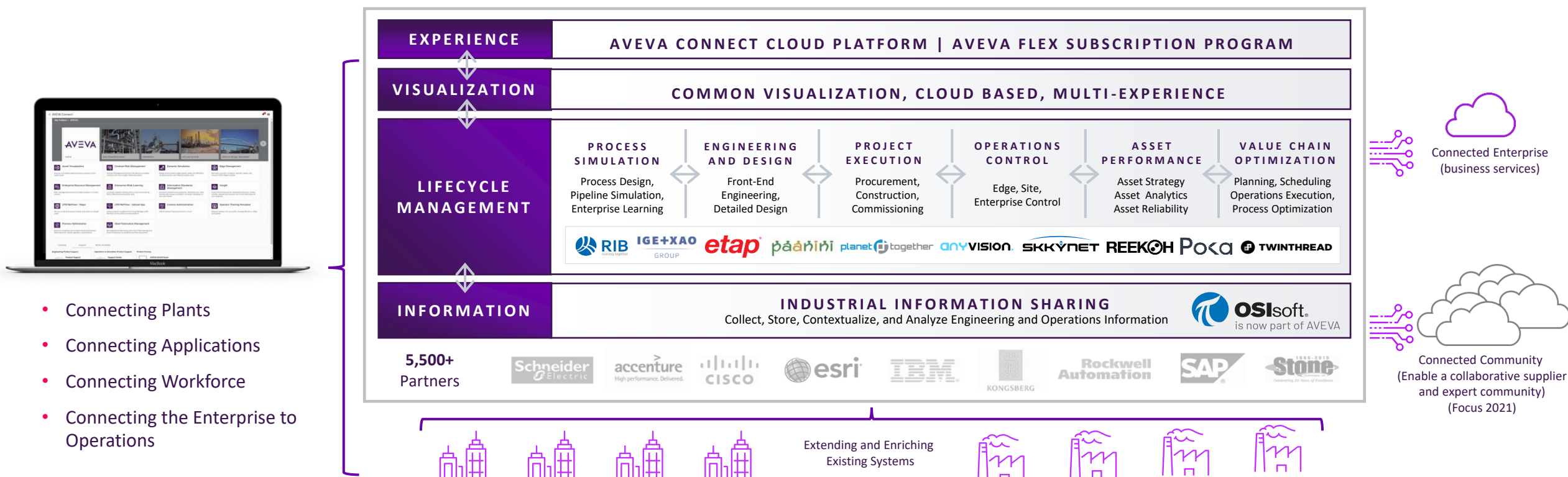


# The digital transformation timeline has been compressed



# Industrial Digital Transformation with a Cloud ready portfolio

Provide a rich industrial cloud enabling the opportunity for digital transformation with **industrial information sharing**



# AVEVA Connect



# With proven results

<https://www.aveva.com/en/perspectives/success-stories/>

## Earlier Decisions

Digital escalation for faster decision making  
**44% less downtime**  
**40% increase in on-time delivery**  
**21% energy savings**



"The result now is quicker insight to **enable faster decision making**. We can stop the line through digital escalation if there is a quality issue."

## Increased Agility

**Increased efficiency** and collaboration  
**Improved visibility** of engineering data  
20% improvement in IT agility



"By **using data more proactively**, we are able to boost operational performance and achieve our strategic objectives."

## Digital Twin

**Common digital thread** across the business  
Contextualize data to **drive asset reliability, enhance efficiency and reduce downtime**



"The Digital Twin is not just a data representation of an asset, it provides **insight and knowledge** that helps companies better understand the behavior of the process."

## New Ways of Work

**Flexibility** to start small and upscale  
Moved from manual processes to **fully digital**  
"We were seeing data within hours"



"We have a very mobile workforce and with the **data in the cloud that data is available** no matter where the person is that needs to see it."

## Rapid Returns

**Reduced** unplanned downtime  
Improved **equipment effectiveness**  
Improved **productivity**



"**The speed at which we can implement has drastically been minimized**, going from weeks to only hours."

## Supply Chain Visibility

**Margin increase** of 1-3 cents/bbl  
**Train new users 50% faster**  
Cloud enables **data integrity and traceability**



"AVEVA provides more than just software. **Its unique approach enables better business processes** through a unified easy-to-use decision-making tool"

McKinsey - It's the innovation.

You might think that cloud merely optimizes IT. But 75 percent of cloud's predicted value comes from boosting innovation.



## Enterprise-wide Data Sharing

**Gained visibility** into manufacturing lines  
**Self-service visualization** to identify issues  
Enabled **shared data access** for plant and corporate stakeholders

"We at Kilbourn had the capability of getting **quickly up to speed with cloud** technology and we were able to gain **increased visibility of our data**"



# AVEVA PI World

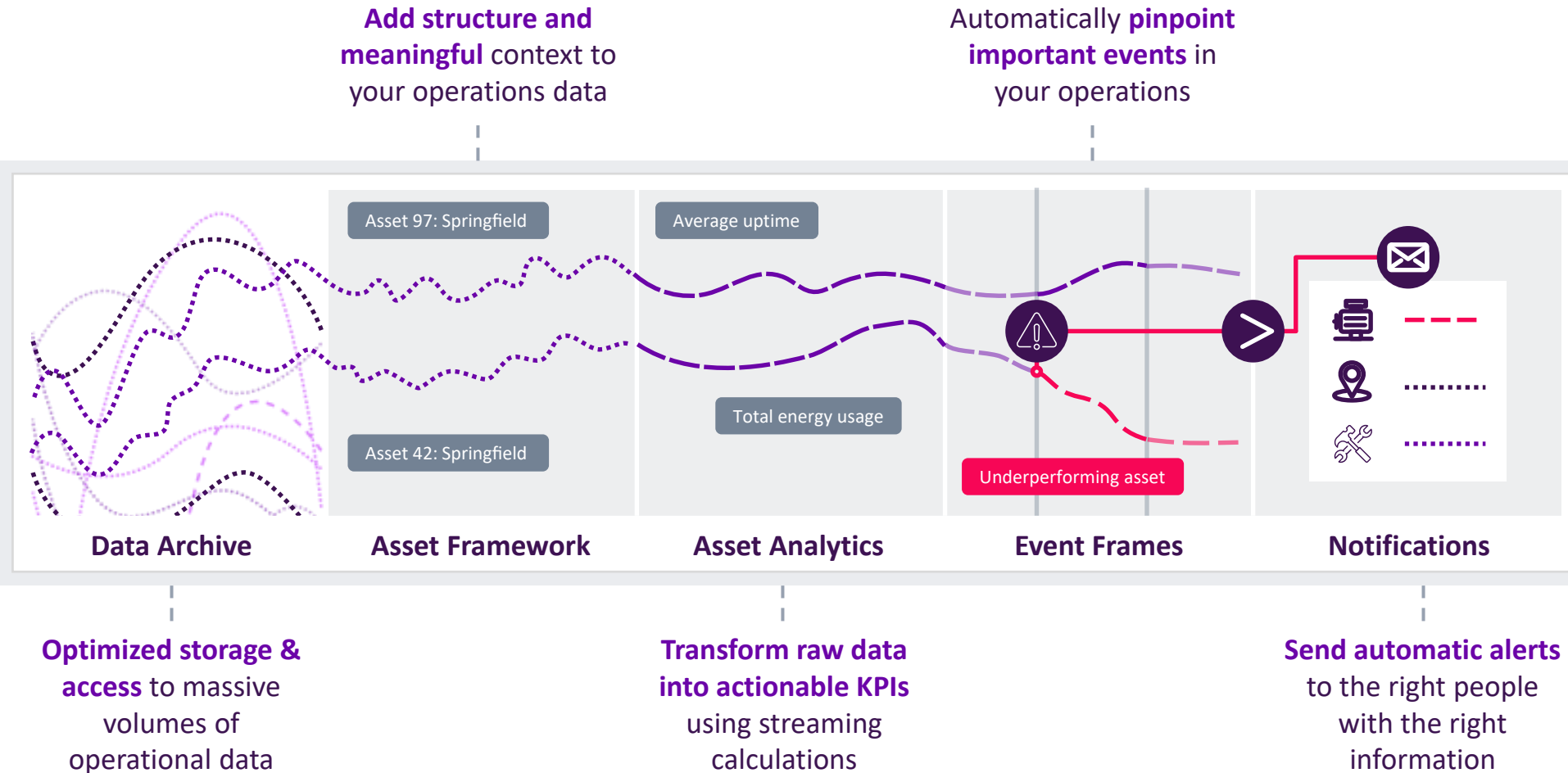
## Cloud Strategy Highlights & Vision

Gregg Le Blanc

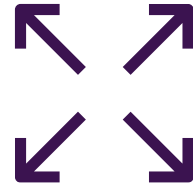
SVP, Information Management

AVEVA

# PI Server turns data into decision-ready information



# AVEVA Cloud Strategy



Scope  
& scale



Data sharing &  
ownership



New  
consumers

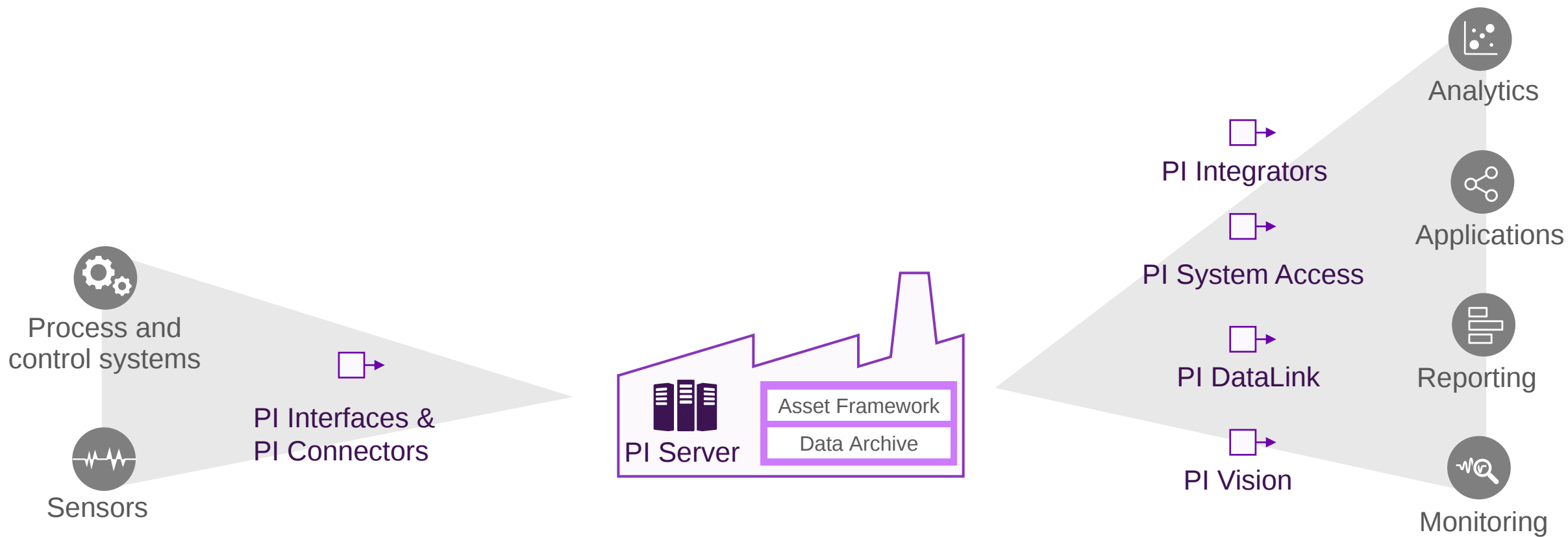


Security  
& privacy



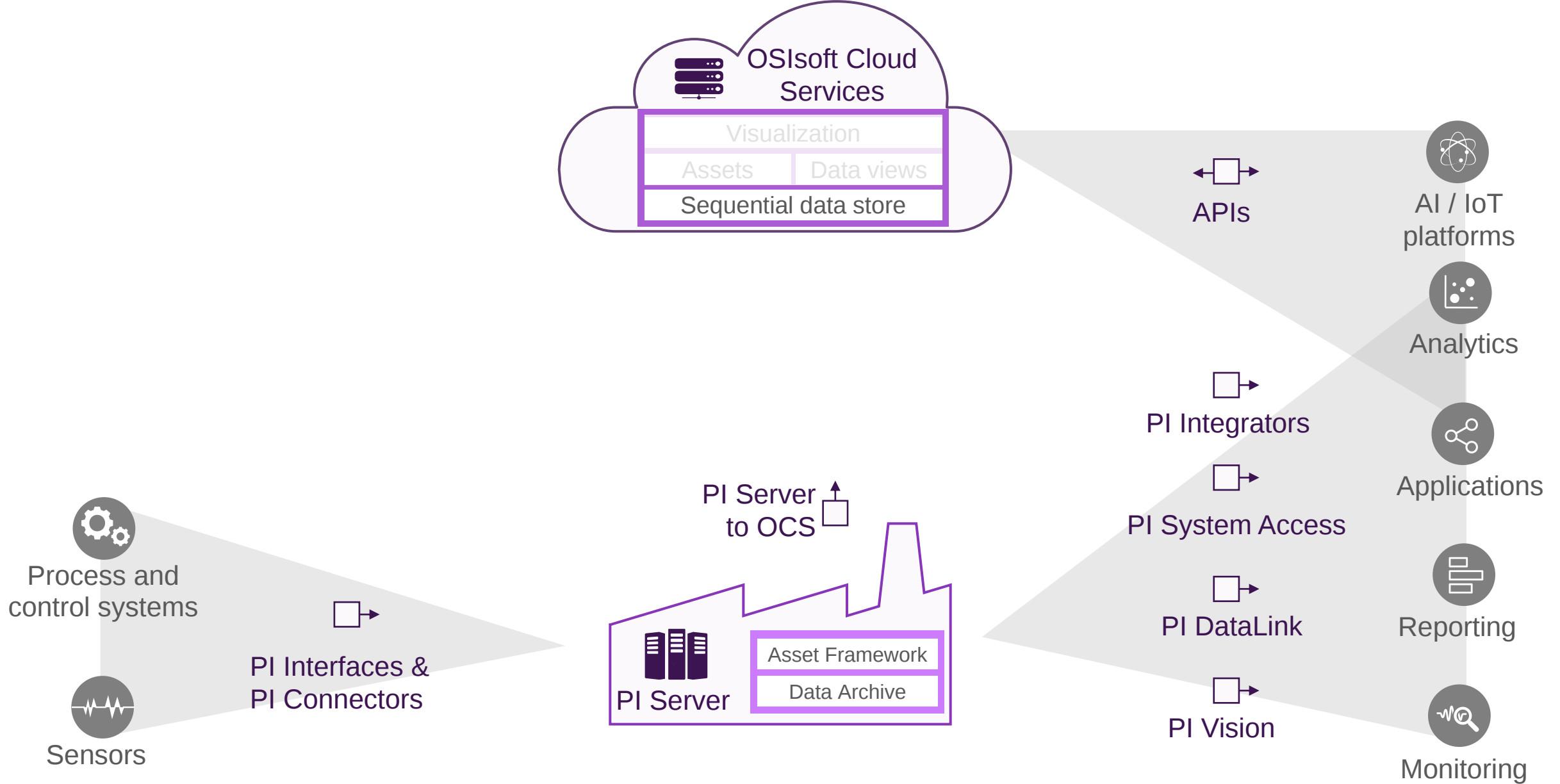
Workplace  
changes

AVEVA



## 2018: PI Server

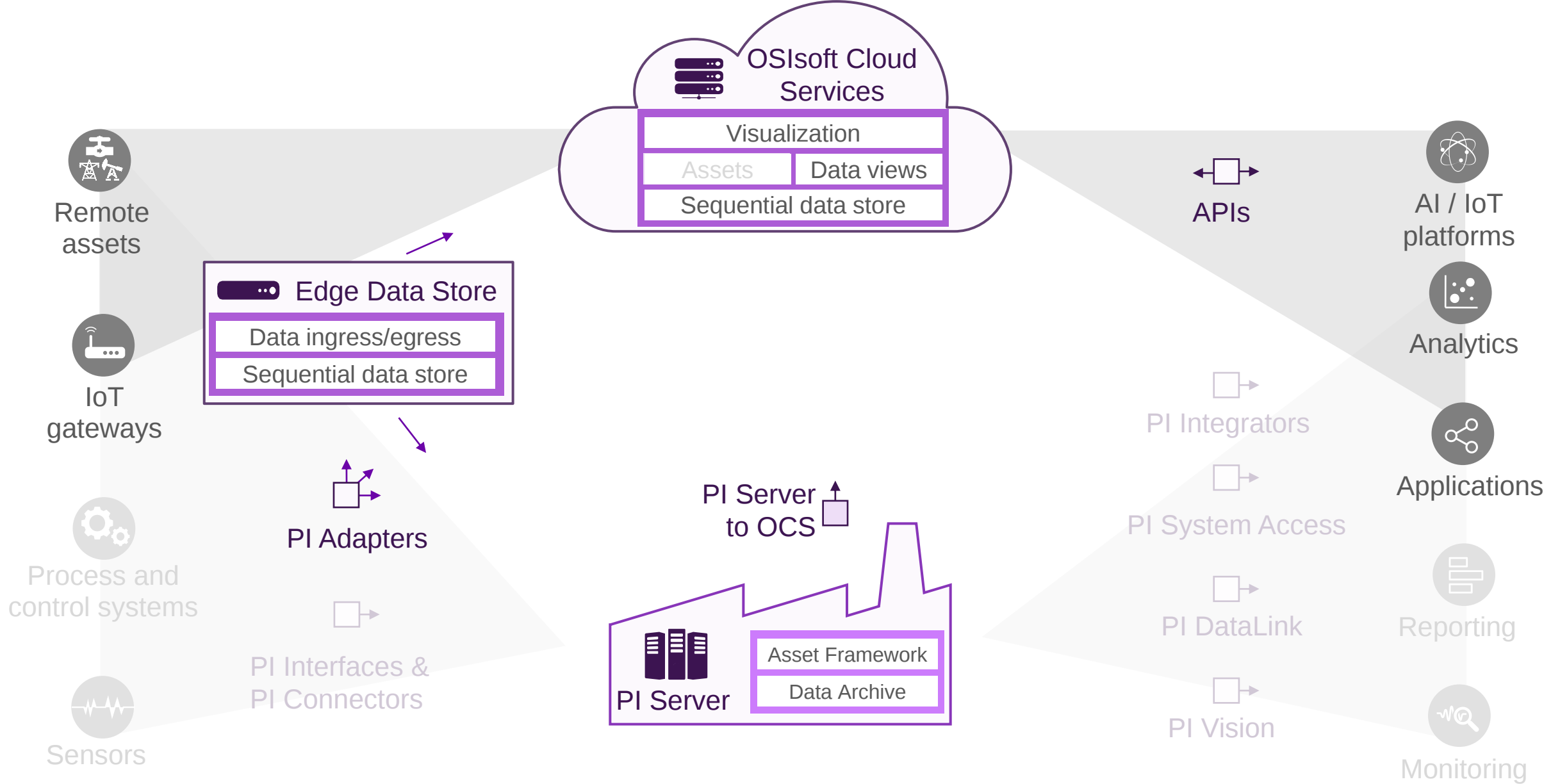
Focused on the asset and plant.  
Hardening the core for **critical operations**.



## 2019: OSIsoft Cloud Services

Expanding beyond the plant.

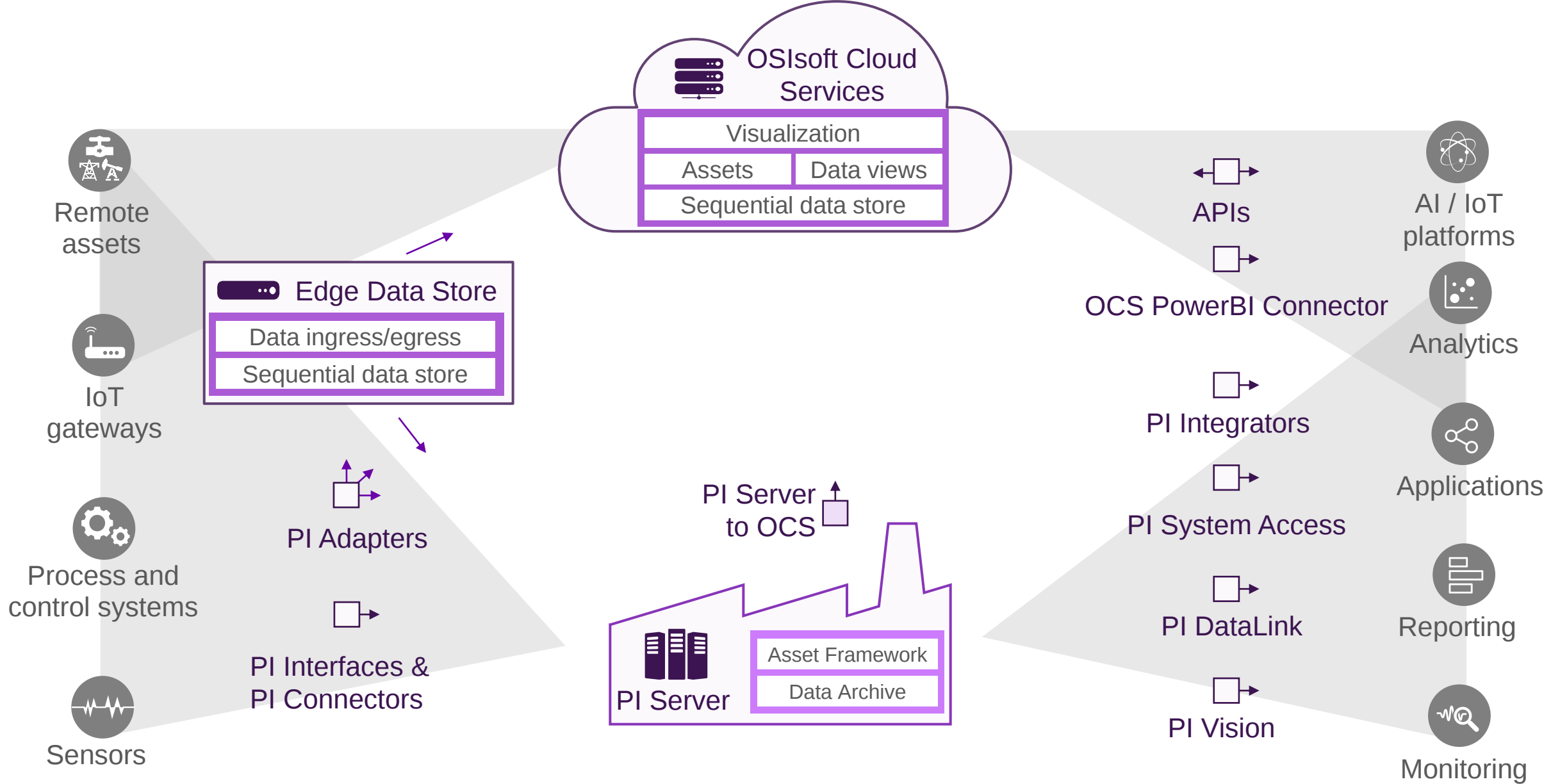
Investing in a **new platform** that supports new cloud-scale use cases.



2020: Edge Data Store, PI Adapters, and OCS features

We're bringing that new platform **to the edge**.

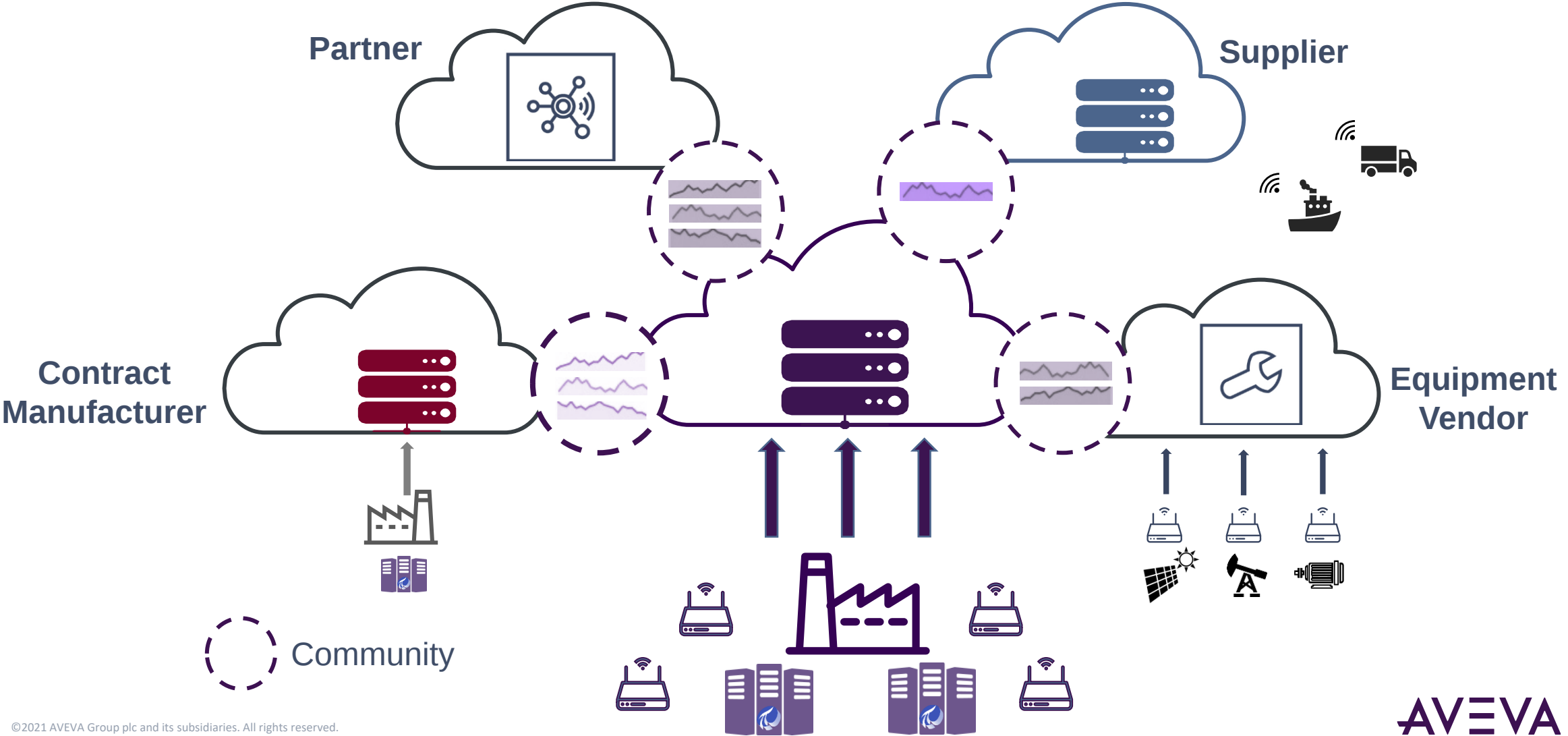
We're expanding customer capabilities from edge to cloud.



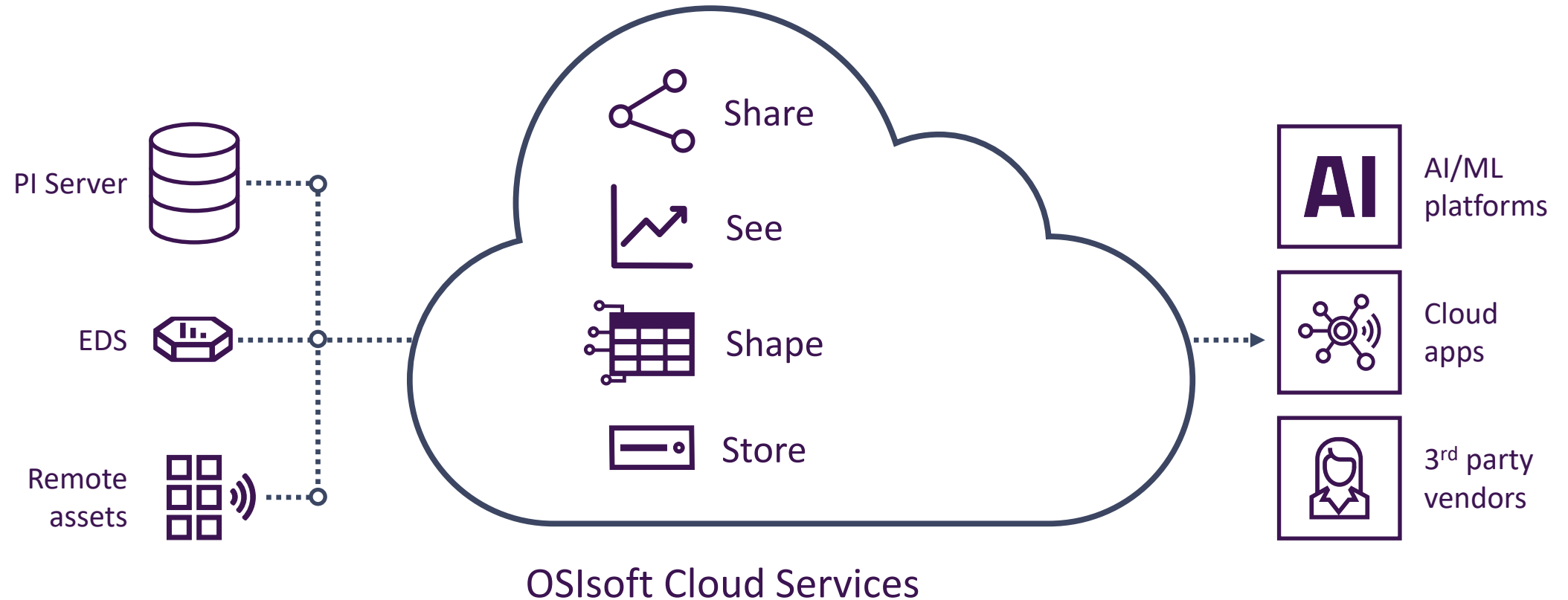
**TODAY – Customers can build their seamless infrastructure**

Leverage OCS Assets, Asset Framework and Communities (preview) to keep data in **context** and **secure** so you can enable **new users** and **new use cases**.

# Connected Community – Industrial Operators



# Your shared version of the truth

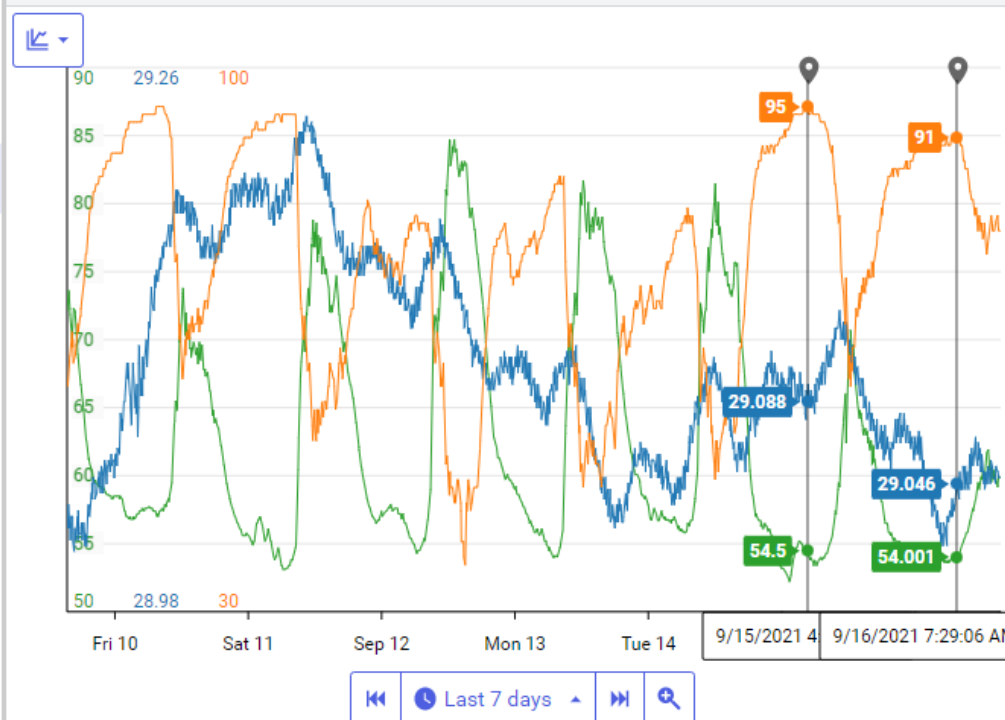


# OSIsoft Cloud Services

OSIsoft Cloud Services ▶ Trend

Drilling ▾ 🔔 ? 👤

- Home
- Data Management ▶
- Data Collection ▶
- Visualization ▶
- Analytics ▶
- Security ▶
- Developer Tools ▶
- Support ▶



| Timestamp             | ■ Oakland Weather Station   Temperature                        | ■ Oa                               |
|-----------------------|----------------------------------------------------------------|------------------------------------|
| 9/15/2021 04:40:09 AM | 54.500                                                         |                                    |
| 1d<br>2:48:57         | Min: 53.400<br>Max: 70.700<br>Average: 57.160<br>Delta: -0.499 | Min:<br>Max:<br>Average:<br>Delta: |
| 9/16/2021 07:29:06 AM | 54.001                                                         |                                    |

## Add Traces

Assets

Streams

Q oakland X ?

Oakland Montclair Weather Station in 94...

Oakland Weather Station | MaxDailyGust  
Oakland Montclair Weather Station in 94... +

Oakland Weather Station | Temperature  
Oakland Montclair Weather Station in 94... +

Oakland Weather Station | HourlyRain  
Oakland Montclair Weather Station in 94... +

Oakland Weather Station | DailyRain  
Oakland Montclair Weather Station in 94... +

Oakland Weather Station | EventRain  
Oakland Montclair Weather Station in 94... +

Oakland Weather Station | WeeklyRain  
Oakland Montclair Weather Station in 94... +

Oakland Weather Station | MonthlyRain  
Oakland Montclair Weather Station in 94... +

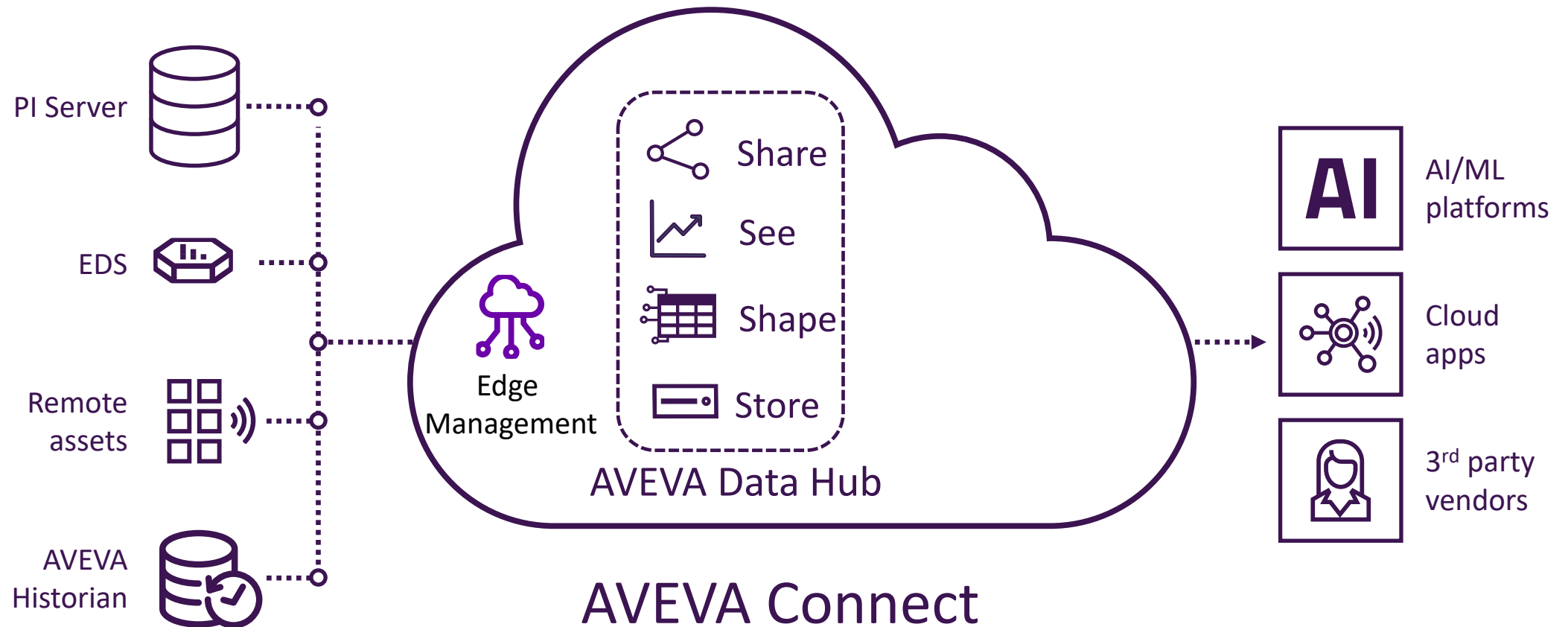
Oakland Weather Station | TotalRain  
Oakland Montclair Weather Station in 94... +

Oakland Weather Station | BarometricPr...  
Oakland Montclair Weather Station in 94... +

Oakland Weather Station | BarometricPr...  
Oakland Montclair Weather Station in 94... +

COLLAPSE

# Introducing AVEVA Data Hub



# AVEVA Data Hub

Coming soon!

See talks later in AVEVA PI World

## AVEVA™ Connect

### My Folders > AU Mining Operations



AU Mining Operations



EU Mining Operations



### Data Hub

A cloud-native platform for aggregating, persisting, contextualizing, and analyzing real-time operations data from historians, edge devices, and more.

## AVEVA™ Data Hub > PI to Data Hub Agents

NA Mining Operations

Home

Data Management

Data Collection

Visualization

Analytics

Security

Developer Tools

Support

Filter Agents...

Manage Permissions

Remove Agent

Logs

Download Agent

Help

Description

Status

Version

Data Archive

Region

NA Mining Operations

Registered

1.6.0.0

khounlavong7270

WestUS

Details

Agent Overview

Agent Description

NA Mining Operations

Agent Namespace

e6ed9e4a-66a9-4ce6-8c16-8e72c17f2...

Agent Status

Registered

## AVEVA™ Data Hub > Asset Explorer

NA Mining Operations

Home

Data Management

Data Collection

Visualization

Analytics

Security

Developer Tools

Support

Assets

Search for Assets

+ Add Asset

Filter facets

Status

Good

Warning

Bad

Unknown

Asset Type

Haul Truck

Body Weight

95000

99129

100101

Potential Target Payload

210

181

200

Model

T-2016B

T-2015

T-2016

HT - 101

Haul Truck 101

HT - 102

Haul Truck 102

HT - 103

Haul Truck 103

HT - 104

Haul Truck 104

HT - 105

Haul Truck - 105

HT - 105

Haul Truck - 105

Asset Type: Haul Truck

Metadata

Properties

Status

Property

Last Value

UOM

Timestamp

Engine Oil Temperature | IsQuestio...

false

9/21/2021 1:02:08 PM

Engine Oil Temperature | IsSubstit...

false

9/21/2021 1:02:08 PM

Engine Oil Temperature | IsAnnota...

false

9/21/2021 1:02:08 PM

Engine Oil Temperature | SystemSt...

9/21/2021 1:02:08 PM

Engine Oil Temperature | DigitalSta...

9/21/2021 1:02:08 PM

Engine Speed | Value

2,592.097

9/21/2021 1:02:02 PM

Engine Speed | IsQuestionable

false

9/21/2021 1:02:02 PM

Ground Speed | Value

Operation State | Value

Engine Speed | Value

4,000

65

3,000

2,000

1,000

0

-500

9/21/2021 12:05

9/21/2021 12:13:11 PM

9/21/2021 12:28:13 PM

9/21/2021 12:35

12:40

12:45

12:50

12:55

01 PM

Now

LOADING

UNLOADING

998.611

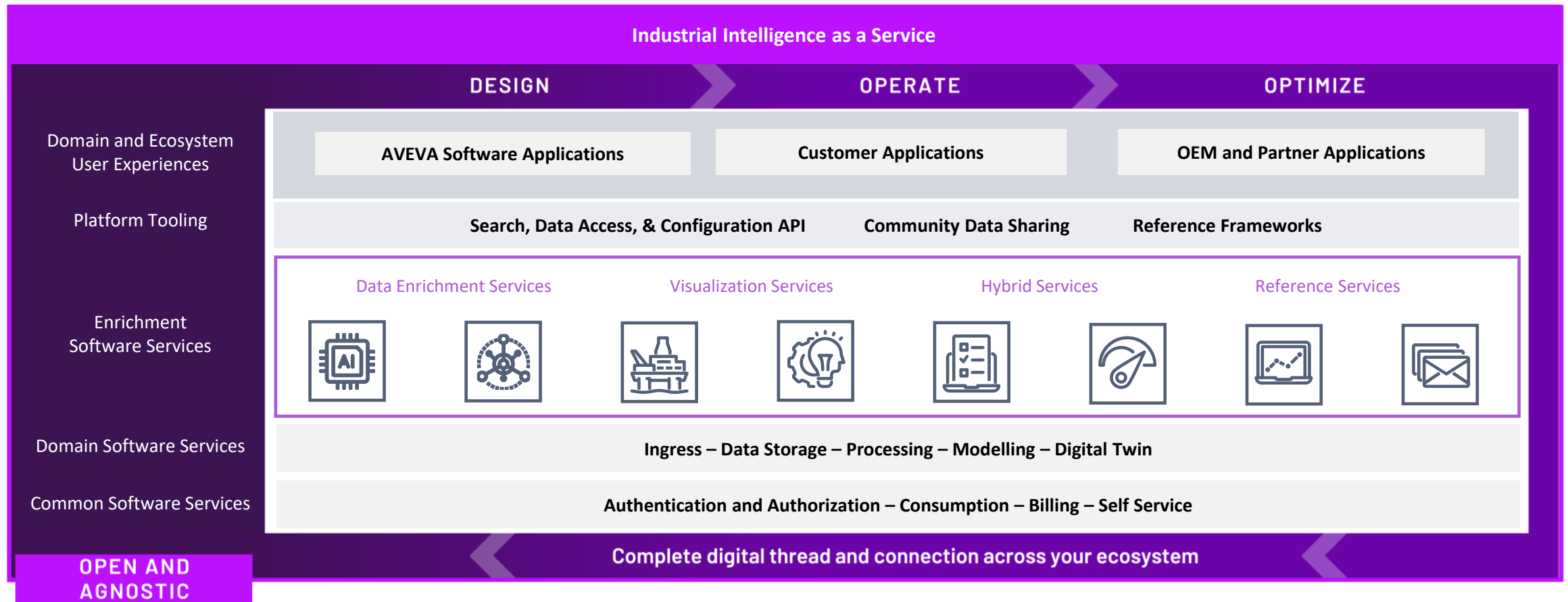
997.352

Showing 1 - 5 of 5. Items per page: 50

AVEVA

# Connecting people with industrial intelligence

Vision for the future: global, holistic optimization across the entire industrial ecosystem



# Learn more at AVEVA PI World

## Your roadmap to operational excellence

Rob McGreevy,  
Ronan de Hooge

## Give your teams the confidence to operate reliably and reduce risk

Kim Custeau

## OCS: OSIsoft Cloud Services

Elizabeth McErlean,  
Todd Brown

## Making agricultural data fair and FAIR

AxisTech

## The Future of Marine Digitization Lies at the edge

Helin Data

## AVEVA's cloud vision and strategy

Andreas Hartl,  
Gregg Le Blanc

## Enabling the edge convergence of IoT and OT in a managed landscape

Tim Sowell, Chris Felts

## PI System and OCS Roadmap

Laurent Garrigues,  
Brian Bostwick

## SDG&E's Data-driven community-based approach to attain grid reliability and sustainability

San Diego Gas & Electric

## OSIsoft PI Cloud Solution Data Sharing

Chevron

## Discover how AVEVA's industrial SaaS solutions accelerate transformational outcomes

Tim Sowell

## OCS Communities - Securely Sharing Data with Trusted External Business Partners

Todd Brown,  
Ryan McErlean

## Remote operations monitoring in OCS

Collin Bardini,  
Doug Broad

## Eyes on hands off, how the AVEVA PI platform fits the needs of real-time asset monitoring for ProRail and its partners

ProRail

Talk to an expert at the  
**Industrial Cloud & SaaS**  
expo booth

## AVEVA Insight: Overview and troubleshooting tips

AVEVA speakers, varies by region

## OCS: Data Science Enablement

Derek Endres,  
Kelsey Duffy

THANK YOU

Other languages and words visible include: DZIĘKUJĘ CI, NGIYABONGA, TEŞEKKÜR EDERİM, DANKIE, SPASIBO, GRAZIE, MATUR NUWUN, ХВАЛА ВАМ, MULȚUMESC, PAKMET CIZGE, 고맙습니다, GRAZIE, شكرًا, HVALA, FAAFETAI, ESKERRIK ASKO, HVALA, TEŞEKKÜR EDERİM, OBRIGADO, MERCI, DI OU MÈSI, ĎAKUJEM, UA TSAUG RAU KOJ, TI БЛАГОДАРАМ, СИПОС, WAZVIITA, CẢM ƠN BẠN, PAXMAT САГА, GRAZZI, PAKKA PÉR, MAHALO IĀ 'OE, TAKK SKALDU HA, EΥΧΑΡΙΣΤΩ, GRATIAS TIBI, DANK JE, AČIŮ, SALAMAT, TAK, DANKE, RAHMAT, MAHADSANID, MAHALE, KÖSZÖNÖM, GO RAIBH MAITH AGAT, БЛАГОДАРЯ, ТИ БЛАГОДАРАМ, WHAKAWHETAI KOE, DANKON, TANK, TAPADH LEAT, SALAMAT, KEA LEBONA, MISAOTRA ANAO, БАЯРЛАЛАА, TAPADH LEIBH, 謝謝, FALEMINDERIT, TI БЛАГОДАРАМ, СИПОС.

 [linkedin.com/company/aveva](https://www.linkedin.com/company/aveva)

 [@avevagroup](https://twitter.com/avevagroup)

#### ABOUT AVEVA

AVEVA, a global leader in industrial software, drives digital transformation for industrial organizations managing complex operational processes. Through Performance Intelligence, AVEVA connects the power of information and artificial intelligence (AI) with human insight, to enable faster and more precise decision making, helping industries to boost operational delivery and sustainability. Our cloud-enabled data platform, combined with software that spans design, engineering and operations, asset performance, monitoring and control solutions delivers proven business value and outcomes to over 20,000 customers worldwide, supported by the largest industrial software ecosystem, including 5,500 partners and 5,700 certified developers. AVEVA is headquartered in Cambridge, UK, with over 6,000 employees at 90 locations in more than 40 countries. For more details visit: [www.aveva.com](https://www.aveva.com)