AVEVA PI System Roadmap

Your roadmap to operational excellence!

Better data. Better business outcomes.

Asset health
DCP Midstream saved
$20-25 million
in first year

Energy efficiency
Air Liquide achieved
10x ROI
in operational savings in first 8 months

Process optimization
ArcelorMittal shipped
26M additional tons
for $120M in added revenue

Quality tracking
Deschutes postponed
$8 million
capital upgrade

Compliance & sustainability
TasWater sped up response time by
13 hours
and saved the local oysters

Safety & resilience
Qatar Power operated over
3,452 days
without lost-time accidents

AVEVA

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Inspiring innovations that seek more data leading to bigger outcomes.

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AVEVA Operations Info Management roadmap:

Guiding Principles

Seamless data infrastructure from edge to cloud

eliminate data silos, accelerate insight and support connected communities

Increased scope and value

meet and manage expanding data volume

Manageable software

lower the cost of ownership & increase performance, security and reliability

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Seamless data infrastructure, edge to cloud.

Challenges at the edge

Data from remote sources

Local history for applications

Linux or Windows platform

1000's of devices

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On the edge

- **OMF: Open Message Format**

- **PI Adapters**

- **Edge Data Store**

Small device, multi-platform

Ready off-the-shelf
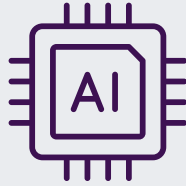
Flexible end points

Edge Management

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Seamless data infrastructure, edge to cloud.

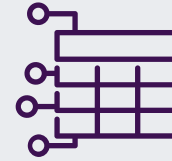## Challenges from innovative uses of data

Business Intelligence

Advanced analytics

Shared data sets

Asset service providers

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Process and
control systems

Sensors

PI Interfaces &
PI Connectors

PI Server

Asset Framework

Data Archive

PI Integrators

PI System Access

PI DataLink

PI Vision

Analytics

Applications

Reporting

Monitoring
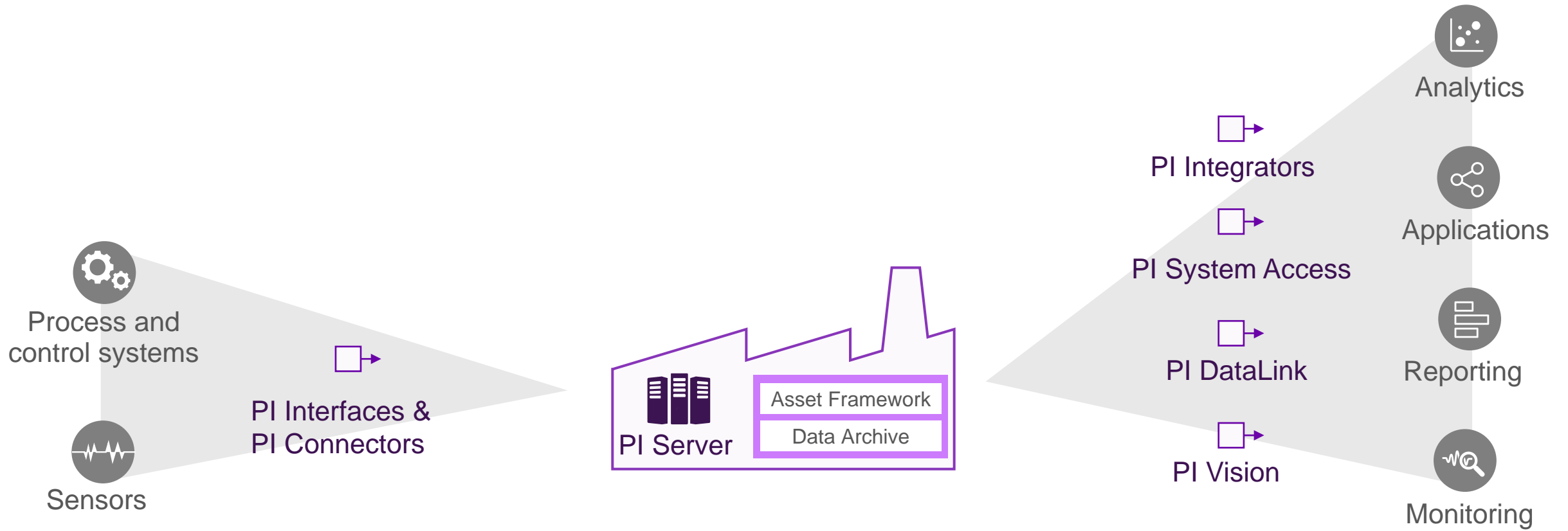
PI System focused on the asset and plant.

AVEVA Data Hub
- Visualization
  - Assets
  - Data Views
- Sequential data store

Edge Data Store
- Data ingress/egress
- Sequential data store

Remote assets

IoT gateways

Process and control systems

Sensors

PI Adapters

PI Interfaces & PI Connectors

PI Server to ADH

PI Server
- Asset Framework
- Data Archive

APIs

PowerBI Connector

PI Integrators

PI System Access

PI DataLink

PI Vision

AI / IoT platforms

Analytics

Applications

Reporting

Monitoring

The PI System seamless infrastructure
Leverage Asset Framework, AVEVA Data Hub, Assets and Communities.

Increased scope and value of data

Challenges with analyzing and sharing more data
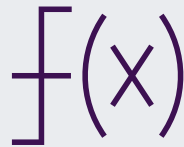
**Self service
analytics**

**Context
and calculations**
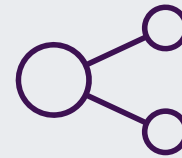
**Data shared
with context**

**Enterprise
dashboards**

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Increased scope and value

- **PI Vision**

- **AF Analytics**

- **PI to AVEVA Data Hub**
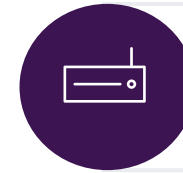
Ad-hoc calculations

Self service exploration

Analytics scale

PI Server to AVEVA Data Hub

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Shared situational awareness

AVEVA Unified Operations Center

PI Vision kiosk

Unified with context

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Manageable software, security and reliability

Challenges on premises

Cyber security

**Evolving
IT landscape**

**Validate
new releases**
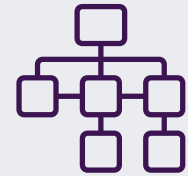
**100's
of PI Servers**

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Manageable Software

- **Secure Development Process**

- **Identity as a Service**

 Secure by design

 Scanning for issues

 Retire or update

 Modern authentication

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The AVEVA PI Server

New feature releases

PI Server 202x

Time

PI Server 2018
SP3 Patch 1

Patch 2

Patch 3

Patch 4

Critical fixes over time

Scripts to deploy and test

PI Test Server with subscription

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Delivering a complete digital thread, purpose-built for industry

Accelerate time to value with flexible, scalable, and trusted industrial hybrid SaaS solutions

DESIGN → OPERATE → OPTIMIZE

OPEN AND AGNOSTIC

Visualization

Multi-experience engineering and operations visualization across the enterprise

3rd party visualization

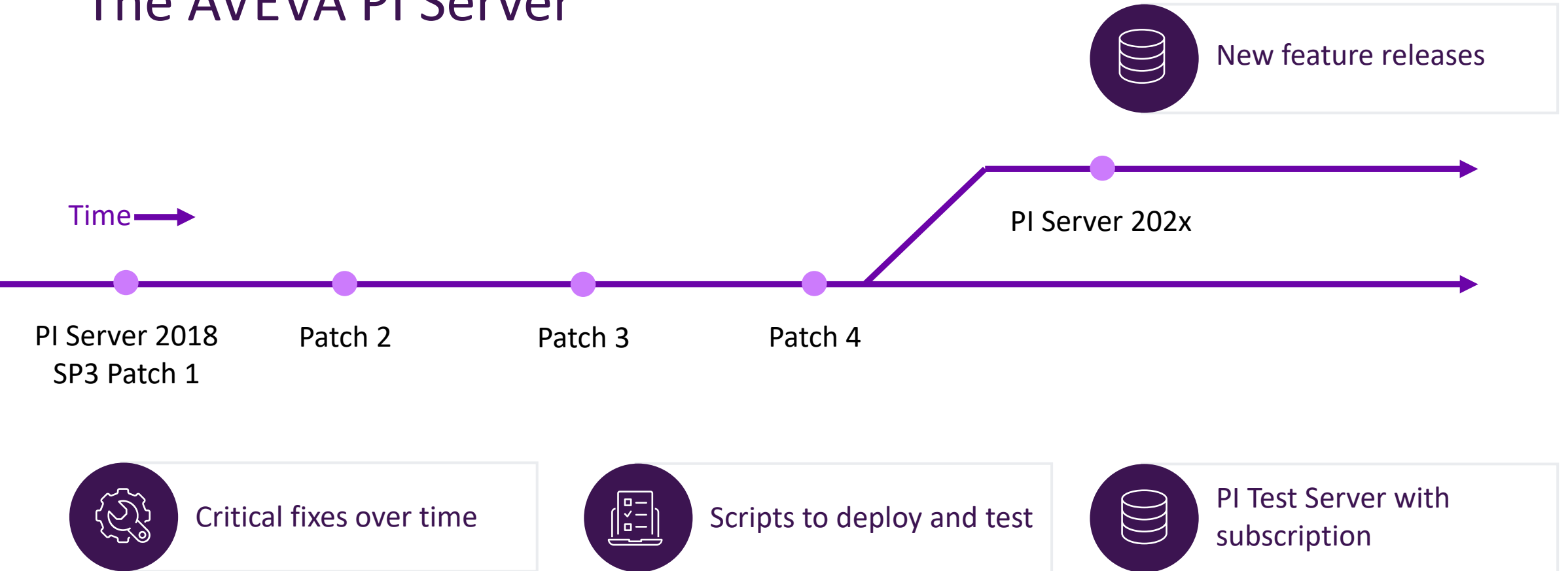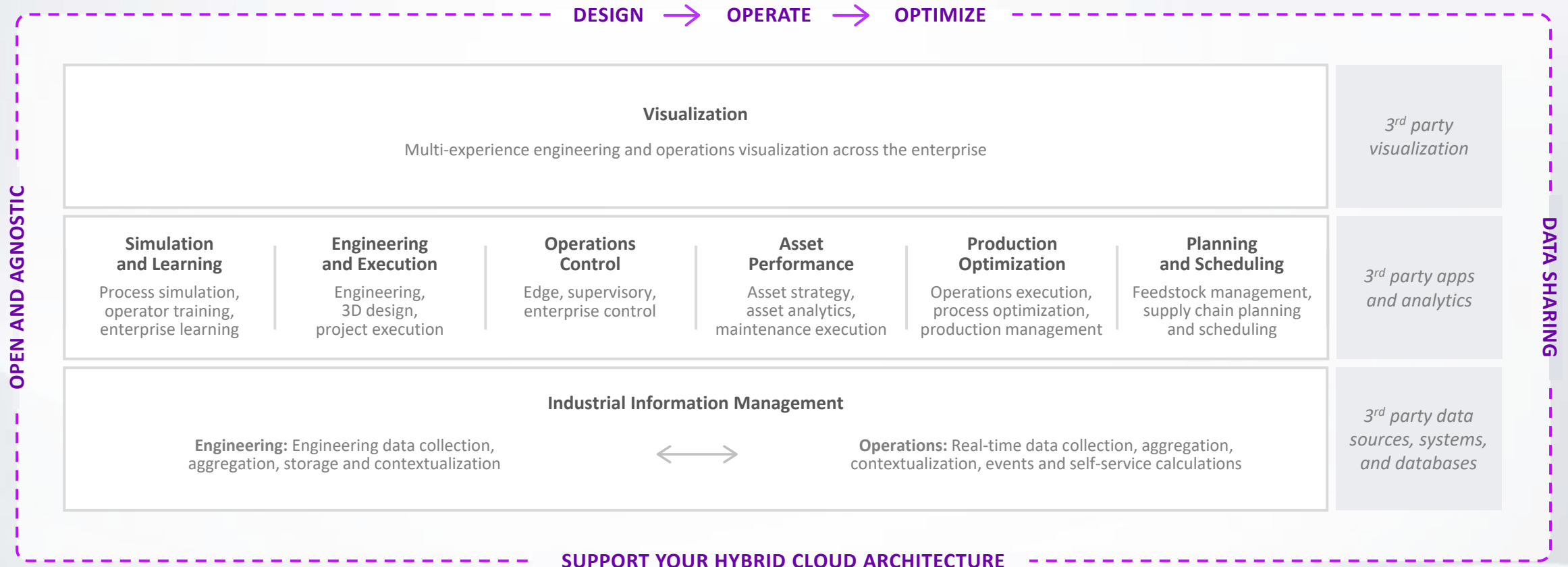| **Simulation and Learning**	**Engineering and Execution**	**Operations Control**	**Asset Performance**	**Production Optimization**	**Planning and Scheduling**
Process simulation, operator training, enterprise learning	Engineering, 3D design, project execution	Edge, supervisory, enterprise control	Asset strategy, asset analytics, maintenance execution	Operations execution, process optimization, production management	Feedstock management, supply chain planning and scheduling

3rd party apps and analytics

Industrial Information Management

Engineering: Engineering data collection, aggregation, storage and contextualization

←→

Operations: Real-time data collection, aggregation, contextualization, events and self-service calculations

3rd party data sources, systems, and databases

DATA SHARING

SUPPORT YOUR HYBRID CLOUD ARCHITECTURE

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The value of AVEVA and the PI System

Attend the talk at the end of this track today.

DESIGN → OPERATE → OPTIMIZE

OPEN AND AGNOSTIC

Visualization

Multi-experience engineering and operations visualization across the enterprise

3rd party visualization

Simulation and Learning	**Engineering and Execution**	**Operations Control**	**Asset Performance**	**Production Optimization**	**Planning and Scheduling**
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ABOUT AVEVA

AVEVA is a global leader in industrial software, driving digital transformation and sustainability. By connecting the power of information and artificial intelligence with human insight, AVEVA enables teams to use their data to unlock new value. We call this Performance Intelligence. AVEVA's comprehensive portfolio enables more than 20,000 industrial enterprises to engineer smarter, operate better and drive sustainable efficiency. AVEVA supports customers through a trusted ecosystem that includes 5,500 partners and 5,700 certified developers around the world. The company is headquartered in Cambridge, UK, with over 6,500 employees and 90 offices in over 40 countries.

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