

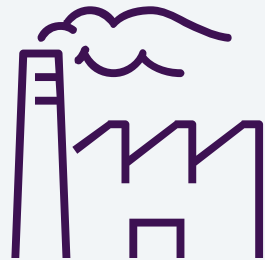
TUESDAY, MAY 17, 2022

Tapping into data from your industrial ecosystem on AVEVA™ Data Hub

Presented By: Tilo Kaschubek & Todd Brown

AVEVA

Industrial Operator Priorities



Industrial
Operator

Productivity
Efficiency
Profitability



- Customer centric



- Selectively approached



- Commodity mainly for IT

Disruption of our systems



Jan 2020, COVID-19



Jul 2021, Ahrtal



Feb 2022, Ukraine

Unseen **acceleration**
of market demands



Consumer desire
for green alternatives



ESG regulations



Commodity
price fluctuations

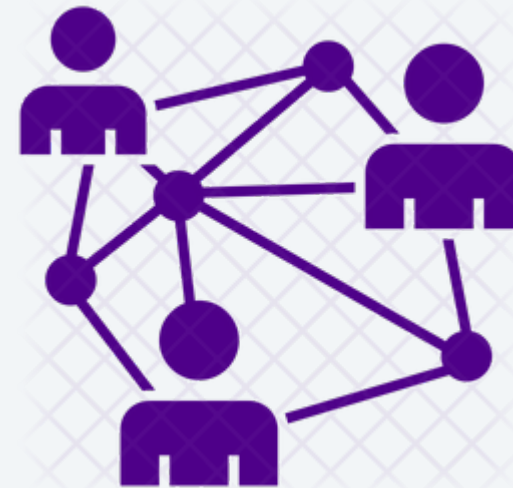
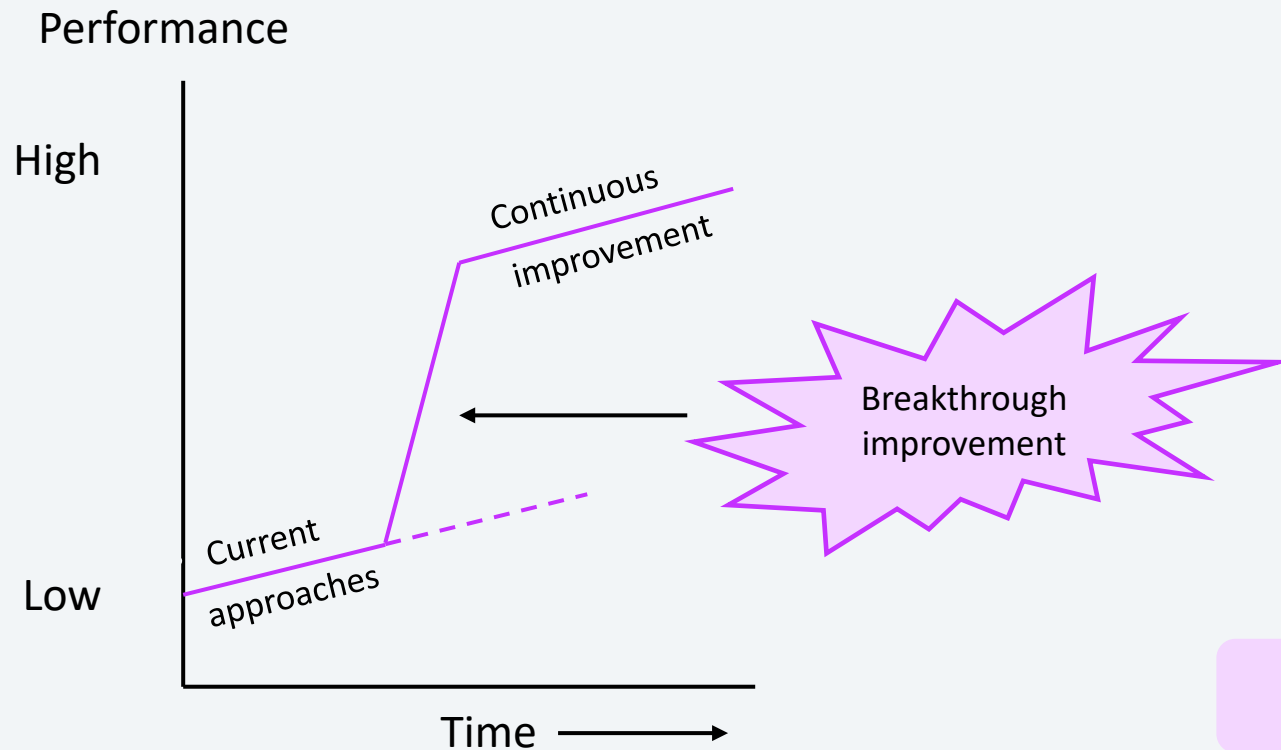


Supply chain and
service disruptions

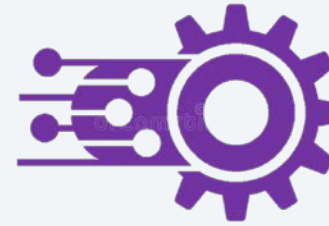


Labor shortages
and remote work

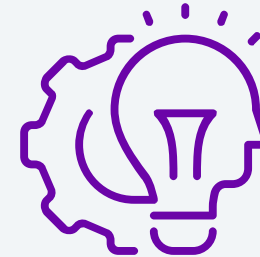
Break through improvement needed



New Digital Business Models



**Equipment
Suppliers**

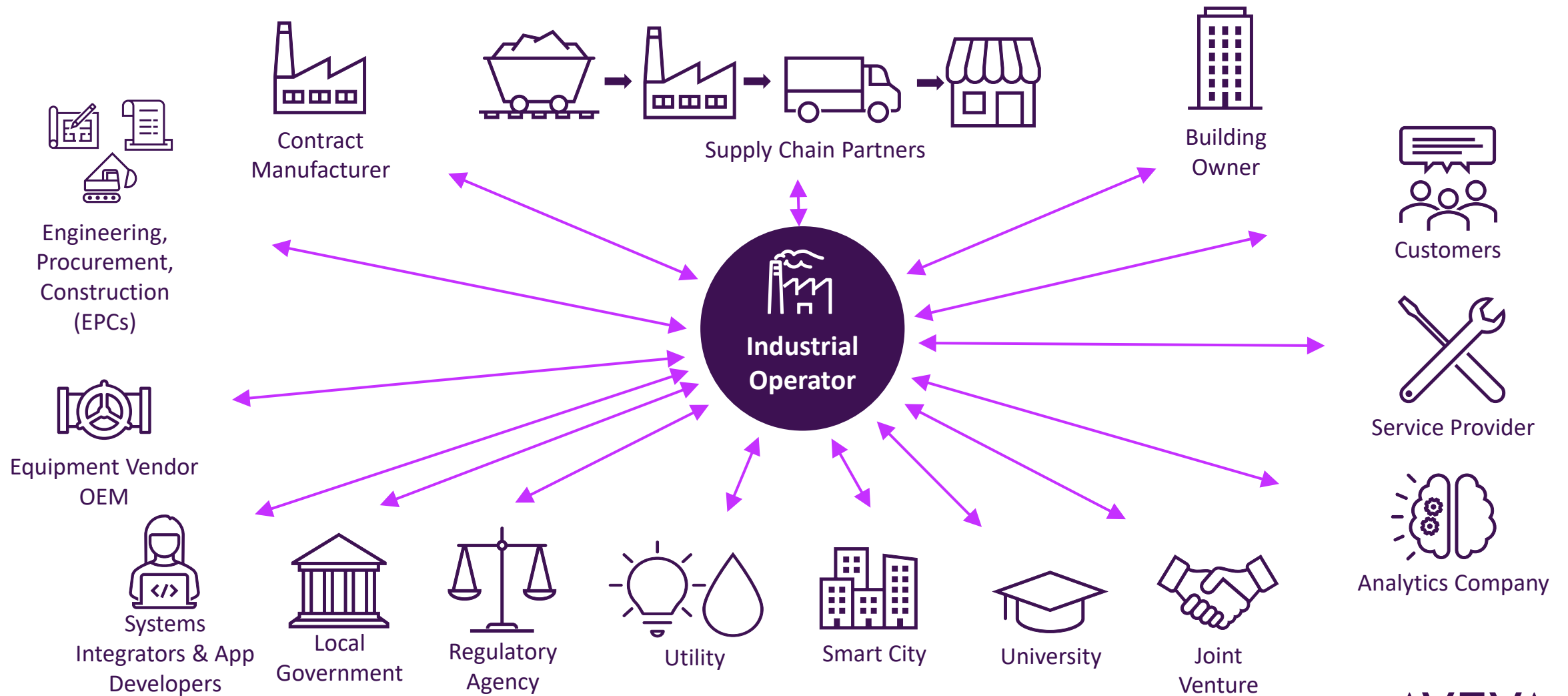


**Service
Provider**



Partners

Empowering an ecosystem to deliver customer value



Data sharing challenges today

From the age of the dinosaurs & some modern-day monkey business!



Come on site & download data



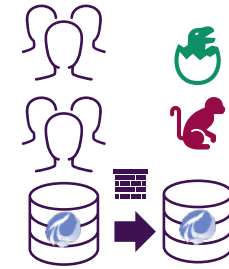
Export data / report & email



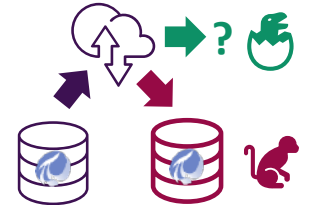
External users in our authentication & IT systems



VPNs or direct access to plant floor or custom apps w/csv, FTP, etc.



Duplicate 'customer facing' PI system



PI Cloud Connect



Stale, out of date data
Sparse snapshots of data, not granular
Very resource intensive
Analysis and value is severely delayed

Real time updating data
Full data granularity
Automated data copy to outside

Hybrid Industrial Cloud

Cloud Benefits

Scalability
Security
Elasticity
Redundancy



Industrial Requirements

Data Formats
Critical Infrastructure
On-prem/Hybrid
No IT resources

Connect the Community with Data



AVEVA Connect
with
AVEVA Data Hub

- Creating a community platform based on shared industrial data
- Connecting securely, sharing selectively and build to scale
- Dynamically create community teams and services based on the business critical issues

The hybrid industrial cloud platform

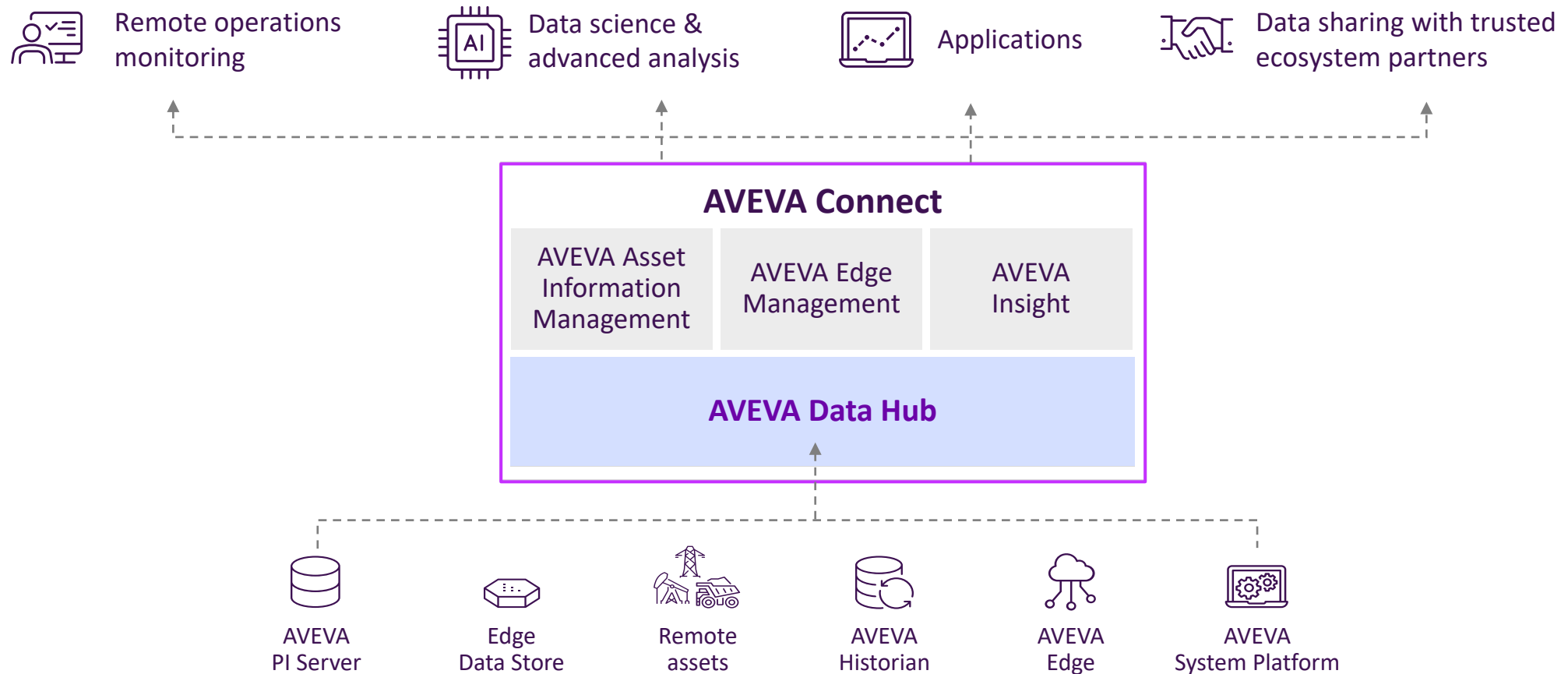
AVEVA CONNECT & AVEVA DATA HUB

Connected Community

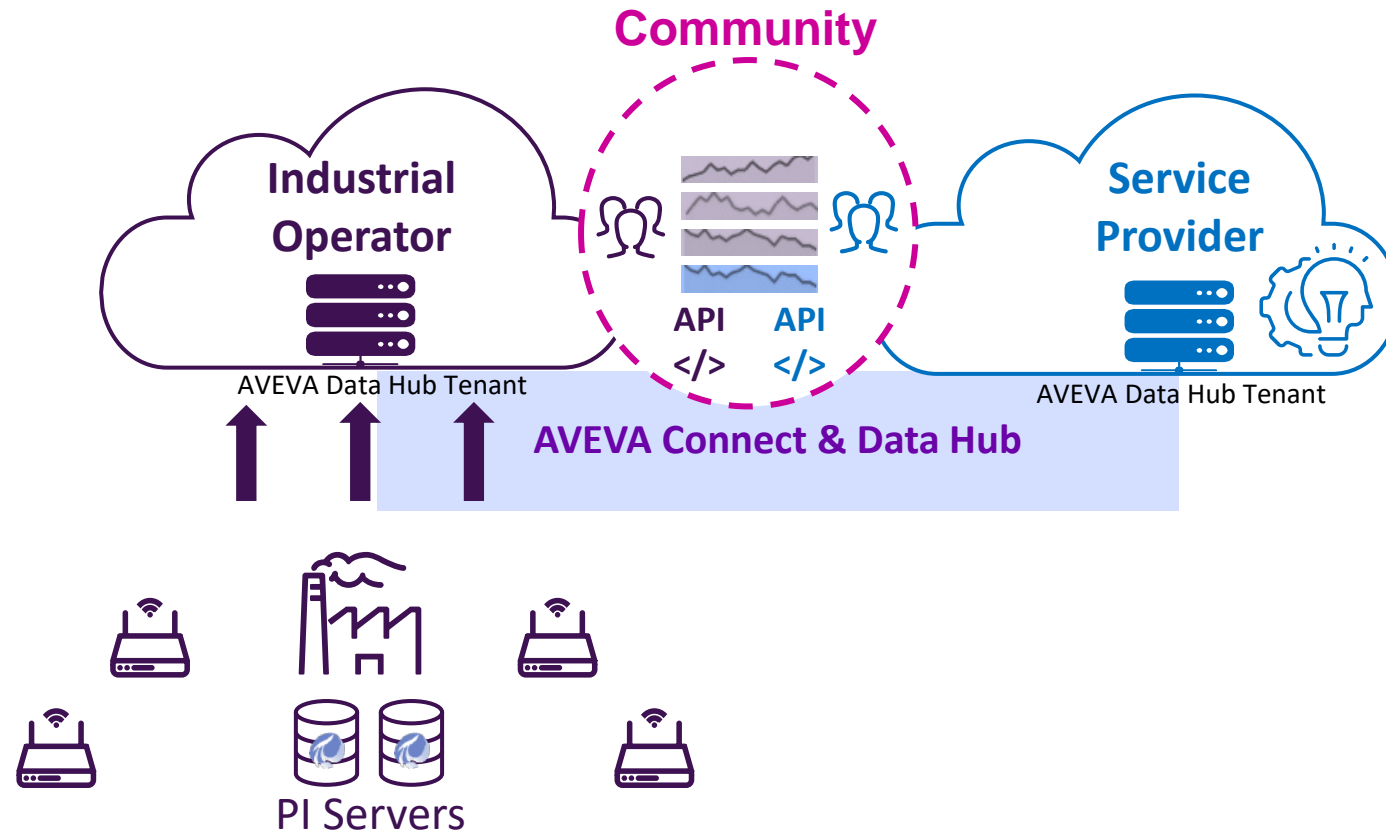


Connecting with your trusted ecosystem partners

AVEVA Connect enables a hybrid data architecture through cloud offerings



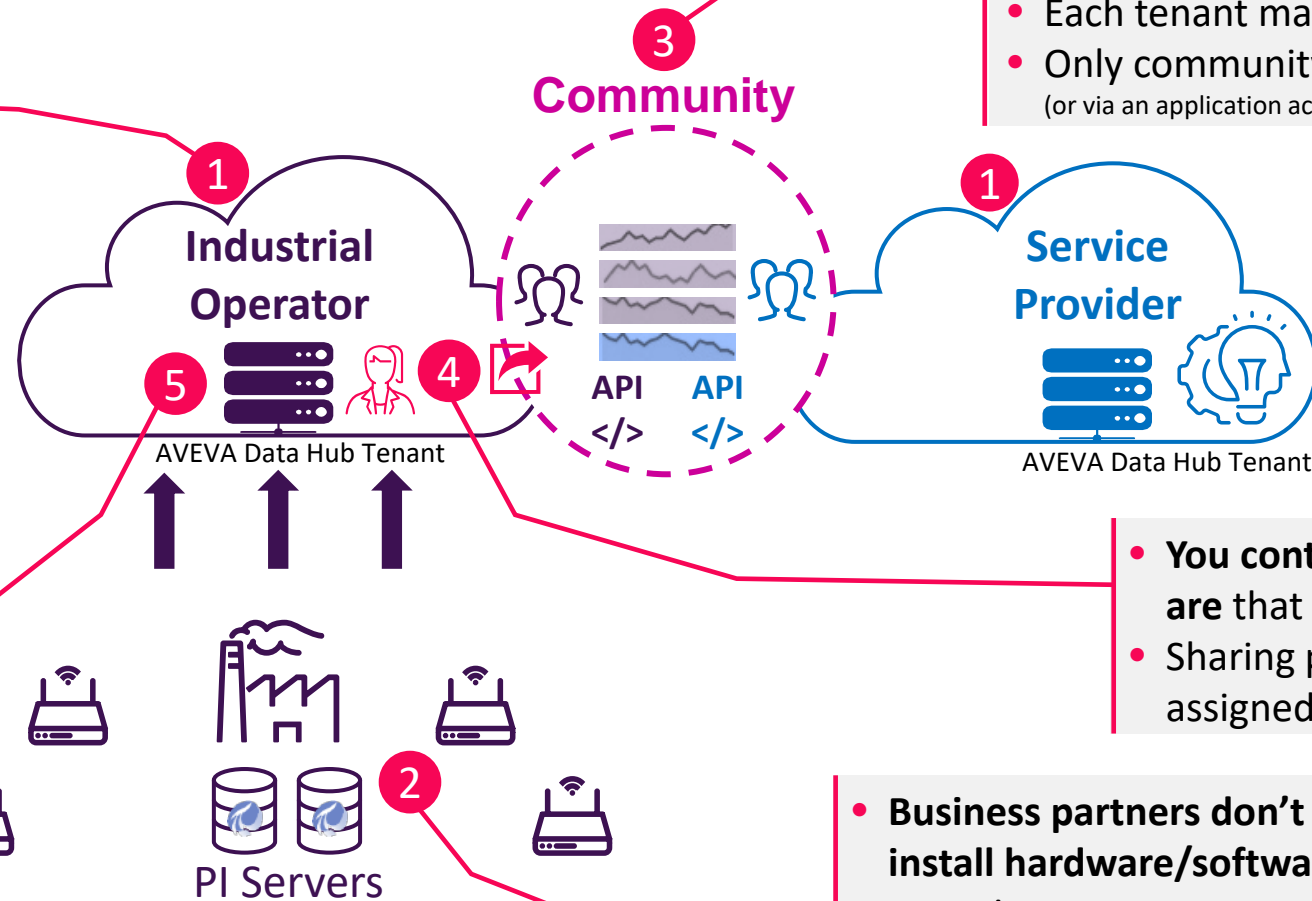
A more secure way to share operational data



A more secure way to share operational data

- True multi-tenant system
- **Natural separation of authentication, users, and data**
- Each tenant manages their own authentication & users
- No external users logging directly into your tenant
- Better protection of Intellectual Property (IP)

- Sharing provides *access* to data stored in your tenant
- **Data is not copied outside of your tenant** by AVEVA Data Hub

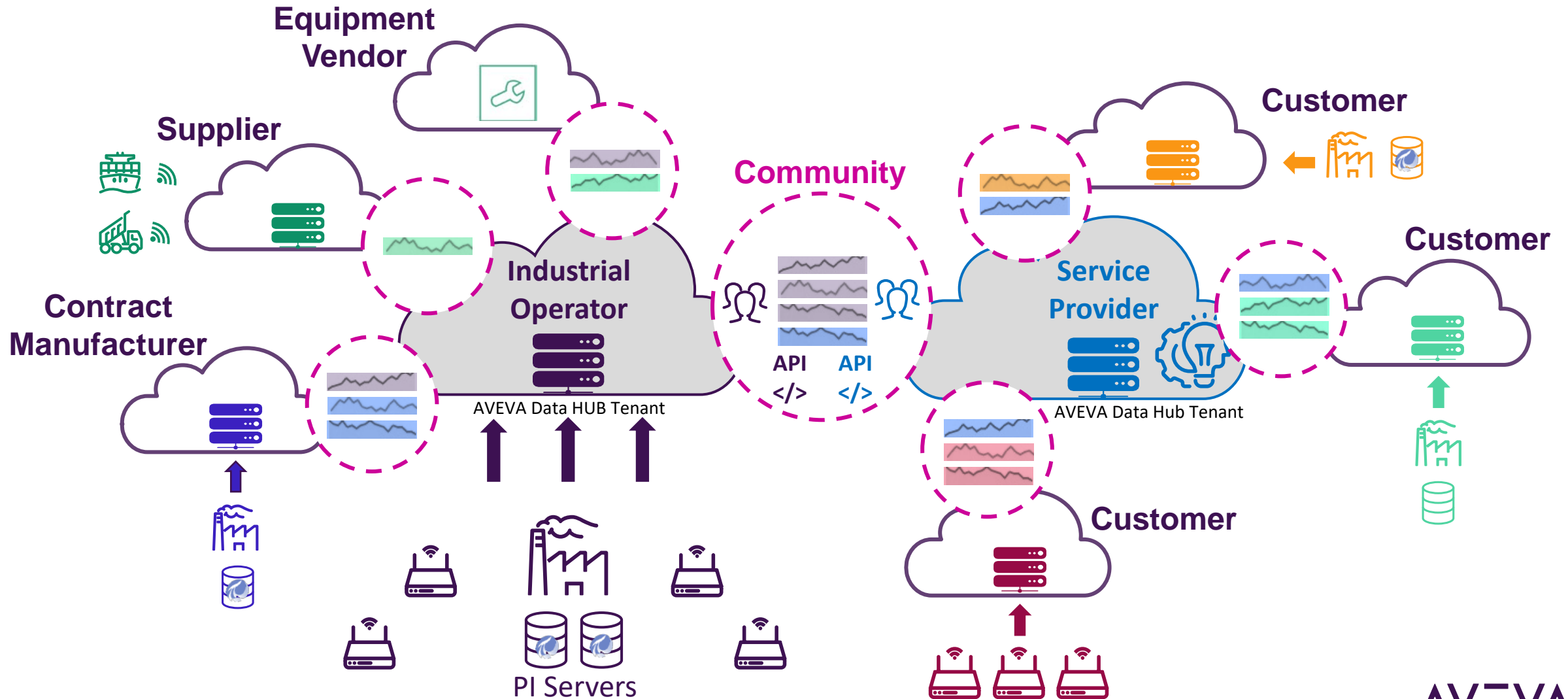


- **3-way handshake for Community formation & requires tenant admin approval**
- Communities are private
- Each tenant manages their community members
- Only community members can read shared data (or via an application accessing data via API)

- **You control who your “data stewards” are** that have resource sharing privileges
- Sharing privilege must be explicitly assigned

- **Business partners don’t need to install hardware/software** within your site to get access to your data

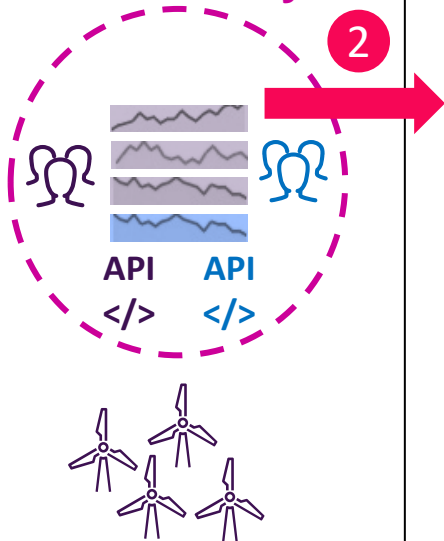
Connected Community: Powering your industrial ecosystem



Trend community shared operational data across tenants

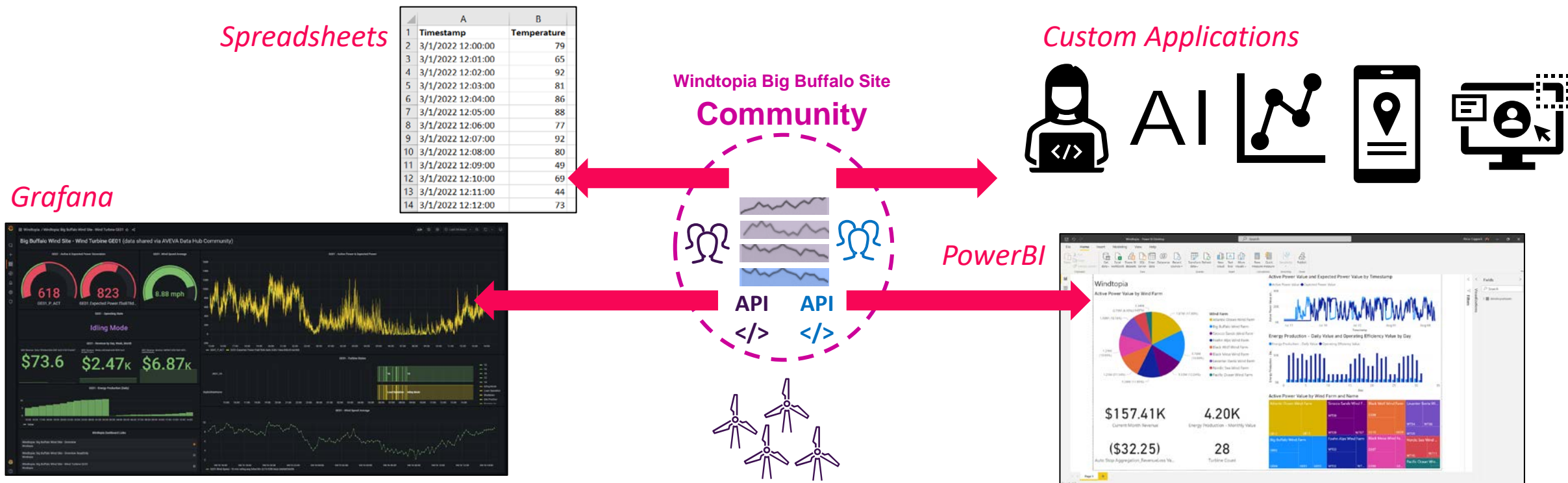
- Stream from my Tenant & Namespace

Windtopia Big Buffalo Site Community



Leverage AVEVA Data Hub API to access to shared data

3rd party tools & Custom applications



Get data from a community shared stream between a start time and end time

URI Path GET <https://uswe.datahub.connect.aveva.com/api/v1-preview/tenants/<TenantID>/namespaces/<NamespaceID>/streams/<StreamID>/data?startIndex=3/1/2022&endIndex=4/1/2022>
Headers: {community-id, <CommunityID>}



Renewable power data made available using AVEVA Data Hub

Challenges

- Need dataset in near-real time for operations instead of time-delayed CSV files.
- Share identical dataset with power scheduler.

Solution

- Disparate data sources aggregated and **shared via cloud-based AVEVA Data Hub**.
- **Analysis and reporting** with AVEVA Data Hub supports compliance requirements.

Results

- Analysis with data aggregated by **AVEVA Data Hub** has saved thousands of dollars on power purchases.
- Cloud-based solution **eliminates required IT infrastructure** and resources.
- Single platform for power datasets **reduces the time to onboard new staff**.

Lighthouse Project



AVEVA Data Hub Connected Community

Enables simple & secure operational data sharing across organizations



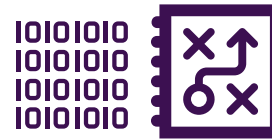
Achieve a more secure way of sharing your data



Manage your own users in your AVEVA Connect account



Easily connect to your trusted business partners in an AVEVA Data Hub community



Gain control over your shared data



optional

Works great with an AVEVA PI Server (but not required)



Scale your sharing to many business partners

Learn more about AVEVA Connect & AVEVA Data Hub

AVEVA Data Hub @ AVEVA PI World 2022 – Amsterdam

• Day 1: Cloud Data Platform Track

- AVEVA: AVEVA Connect vision & roadmap [14:00]
- AVEVA: Increasing the value of your existing data through innovation with AVEVA Data Hub [14:40]
- AVEVA: Tapping into data for your industrial ecosystem on AVEVA Data Hub [15:40] [\[this talk\]](#)
- AVEVA: Four Pillars of a Trusted Information Infrastructure [16:20]
- AVEVA: Lighten your load: How to accelerate time to value and streamline technology upkeep through SaaS [17:00]

• Day 2: Customer Presentations

- HENN: OSIsoft Cloud Services in discrete manufacturing / value chain approach [8:40]
- EDP Renewables: Analyzing Wind Power data in AVEVA Data Hub [9:45]
- Industrial Digital Solutions: Real Time Fleet Analytics with OCS [14:00]
- IMA LIFE: Leveraging the combination of on-prem PI Server and OCS cloud, to feed data analytics and machine learning applications [14:00]
- Enel: Leveraging on AVEVA Edge/Cloud solutions to satisfy Enel's new data needs [16:00]

• Day 3: AVEVA Product Deep Dives

- AVEVA: Customer Administration Best Practices for AVEVA Connect [10:00]
- AVEVA: Securely share data with your trusted business partners & customers using AVEVA Data Hub connected community [11:15] [\[Detailed Product talk on Community Data Sharing with Demos\]](#)
- AVEVA: The Data Value Chain: From Edge to Impact [13:30] [\[highly recommended\]](#)
- AVEVA: Data Collection On-premises and at the Industrial Edge [13:30]

Connected Industrial Community

AVEVA Connect: Industrial Cloud Platform



AVEVA Connect

- Create more value from your industrial operational data
- Address the business-critical issues by connecting a community
- Gradually grow from your current infrastructure
- Domain specific cloud services for industrial use cases





Tilo Kaschubek

Director Cloud, Channels & Community

- AVEVA
- tilo.kaschubek@aveva.com



Todd Brown


Staff Strategic Product Manager


- AVEVA
- todd.brown@aveva.com



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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.

Learn more at www.aveva.com