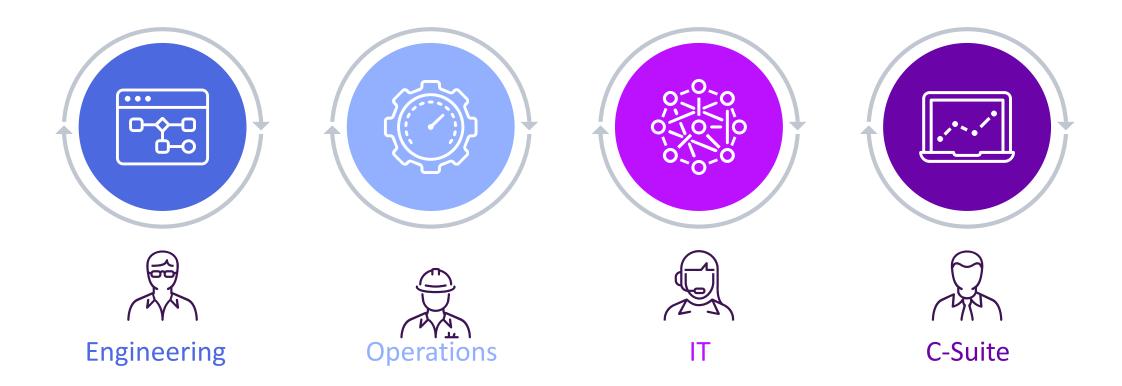
AVEVA APM
Innovations and Roadmap



# Work is being transformed

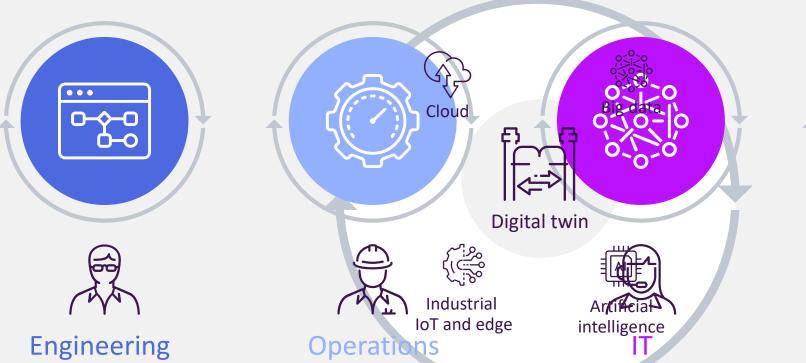
#### From siloed functional islands

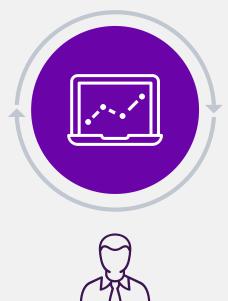




### To collaborative innovation

### Enabled by digital technology



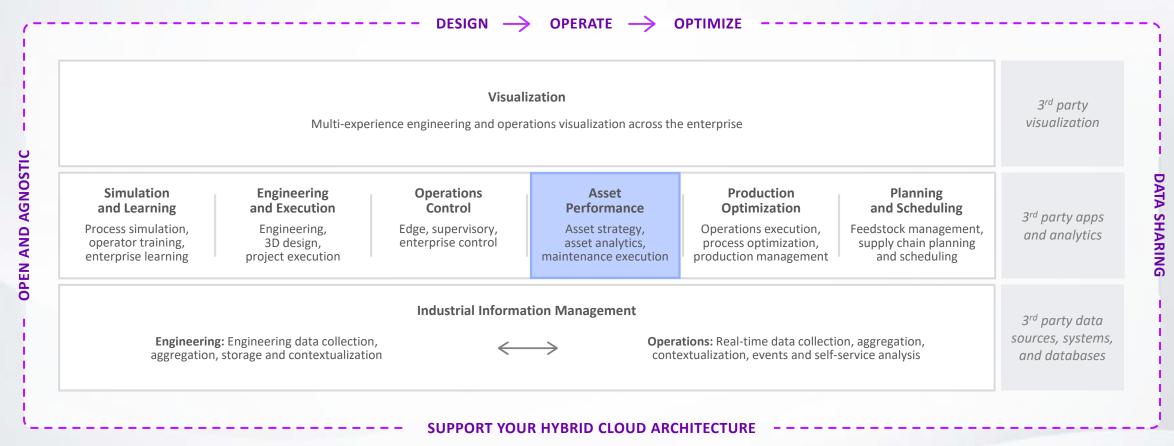


**C-Suite** 



# Operate critical assets reliably and safely

Focus on areas in need and improve asset lifespan with Al-powered guidance

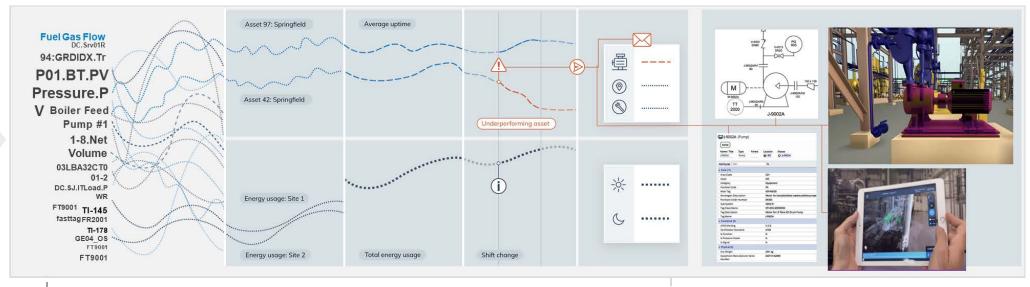


#### **Asset Strategy**

#### **Asset Analytics**

#### **Maintenance Execution**



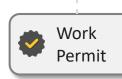




Optimized storage & access to massive volumes of operational data

Add structure and meaningful context to your operations data Automatically pinpoint important events in your operations

Transform raw data into actionable KPIs using streaming calculations Send automatic alerts to the right people with the right information Leverage digital information for a safe and efficient workforce





How can I ensure the **safety** of my workforce?



How can I operate our critical assets more reliably and safely?

How can I **optimize** my assets to meet production goals?





How can I drive visibility for the workforce for **improved decision** making



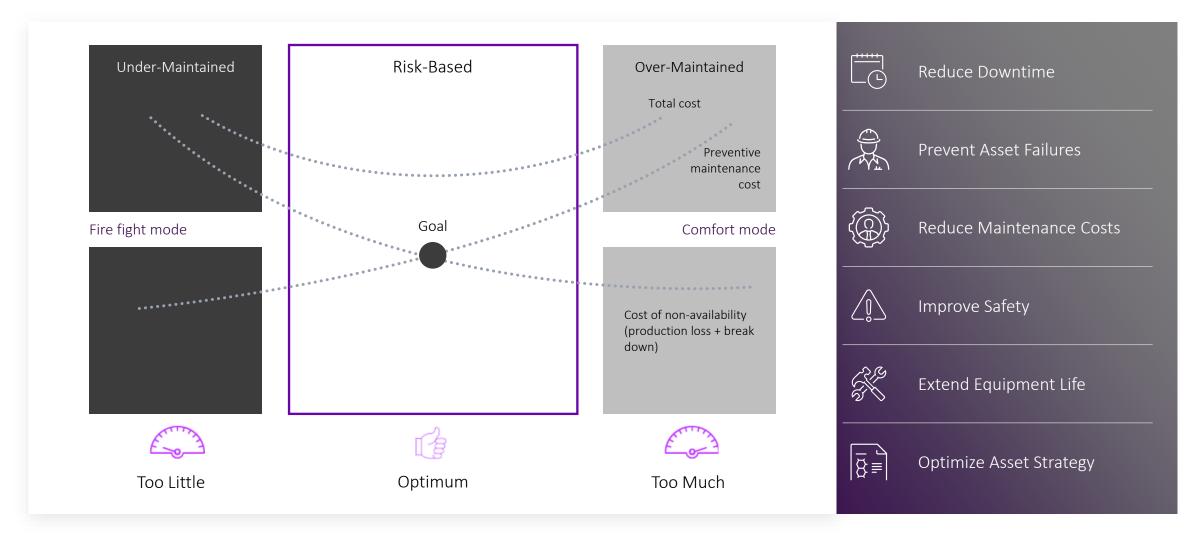
### Balance Risk Cost and Performance

**DESIGN OPERATE OPTIMIZE** Visualization Multi-experience engineering and operations visualization across the enterprise Leverage AI to eliminate Improved safety and Define, measure and unplanned downtime optimize the asset strategy reliability in maintenance **Asset Strategy Asset Analytics Asset Maintenance** Predictive and prescriptive analytics Mobile maintenance execution and workflows **Performance** Reliability Centered Maintenance (RCM) Remaining useful life Condition-based Maintenance Comprehensive asset library Root cause analysis Digital work permitting Asset strategy simulation and optimization Case and collaboration management Safe job analysis Failure mode and effect analysis (FMEA) Model template library and fault diagnostics **EAM** integration **Industrial Information Management** Engineering: Engineering data collection, Operations: Real-time data collection, aggregation, aggregation, storage and contextualization contextualization, events and self-service analysis



Asset

## Optimize your asset management strategy





## Roadmap Drivers and Direction

#### Customer Requirements are cornerstone

- Digital services and solutions for managing operational lifecycle safely and efficiently
- Seamless Integrations of data across platforms and solutions
- Reduced internal infrastructure

#### Competitive Landscape

- Traditional Competition expanding into new domains and new markets to preserve volume.
- Shifting to SaaS business models
- Highly funded startups with SaaS business models

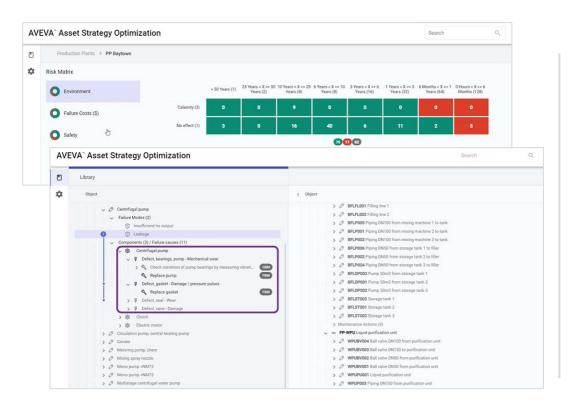
#### **Strategic Direction**

- OSI PI Integration
- Pivot to Cloud
- Industry Diversification
- Digital Twin
- Expand Partnerships



# Asset Strategy

#### Building an Asset Strategy that supports your strategic business objectives



- Balance risk, cost and performance
- Develop a maintenance strategy based on asset criticality to meet your corporate objectives
- Inclusive of integrated asset library
- Open EAM integration

Roadmap Deliveries: Modern user experience delivered in June 2022!!

#### **COMING NEXT**

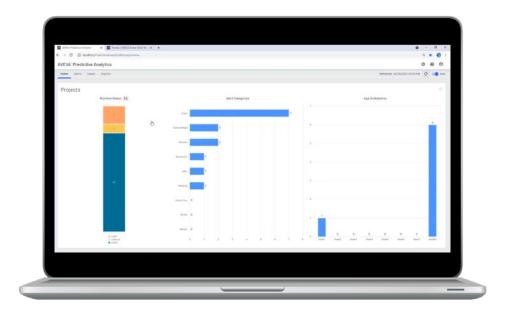
Integrated with predictive analytics

Demo



## Asset Analytics

Continued pivot to cloud use cases for connected worker, with purpose-built AI and visualization



- Reduce unplanned maintenance costs
- Increase workforce safety and efficiency
- Increase asset reliability
- Performance Indicators with production context

Roadmap Deliveries: Asset Framework integration to PI System, Enhanced Fault Diagnostics, sensor alert management and forecasting.

"PRiSM" algorithm leveraged by AVEVA Insight

#### **COMING NEXT**

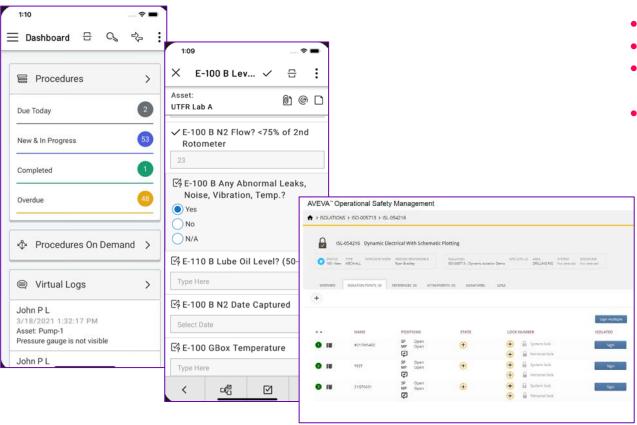
Automated Predictive Analytics Model Building with Asset Framework Analytics solution for Solar

Multiple Insight solutions in context with BI Gateway Enterprise



## Asset Inspection & Maintenance

#### Continued pivot to cloud use cases for connected worker



- Enables cultural change and best practices to drive reliability at the front line
- Improves plant reliability, safety and profitability
- Ensures workers execute all field tasks required to achieve reliable operations and maintenance
- Mitigate risk of intolerable economic, safety, and/or environmental consequences

Roadmap Deliveries: Additional data merge utilities for Mobile Operator Round upgrades, Cognex integration to support additional scanning capabilities for positive asset identification

Dynamic Isolations, mobile enhancements and split pipe tracking for Operational Safety Management

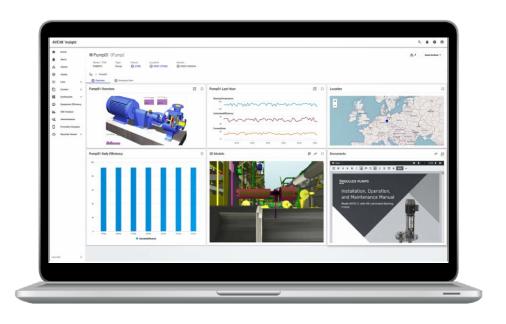
Insight EAM service to LimbleCMMS, open EAM integration

#### **COMING NEXT**

- Native PI integration for Mobile Operator Rounds leveraging OMF, Cloud attachment storage, Azure AD Authentication
  - Additional mobile equipment isolation capabilities



## Contextual asset information, improving reliability, efficiency and safety



- Empower strategic decision-making and increased collaboration across the enterprise
- Improved process and utilization of resources
- Increase workforce safety
- Improve asset reliability, availability and performance
- All the above via a self-service application with personalized dashboard creation within minutes

**Roadmap:** Ready for Lighthouse Program!





SCG Chemicals Thailand partners with AVEVA to create their Digital Reliability Platform

Extended their Digital Twin to operations to improve efficiency, reliability and safety



## 2021 Best Asset Monitoring Technology

## Digital Reliability Platform











## Petrobras

Technology as a Strategy:
The Connected Workforce

- Increase productivity while minimizing human errors with AVEVA Mobile Operator
- Connecting workers to the field and command centers
- Issue of work permits and maintenance orders by field workers



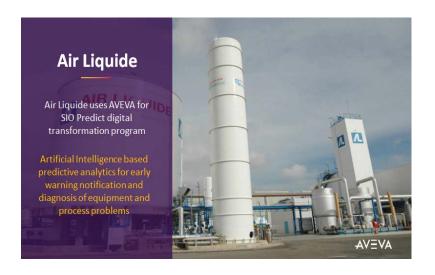
## Chevron

### **Asset Strategy Optimization**

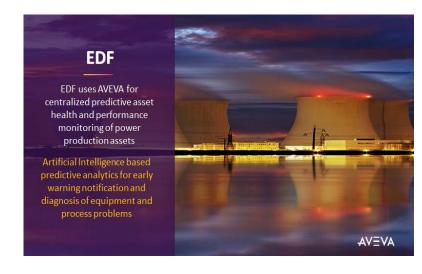
- Asset Strategy Library templates for standardization and best practices
- Use of simulation for optimization of maintenance strategies short/long term
- Root Cause Analysis
- Spare parts optimization
- Optimization of asset across 40+ platforms



## Experience Matters - Mature APM Install Base

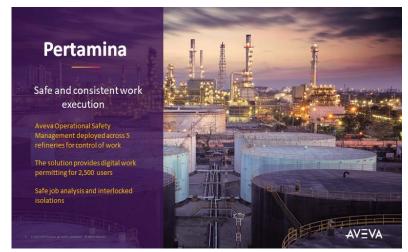






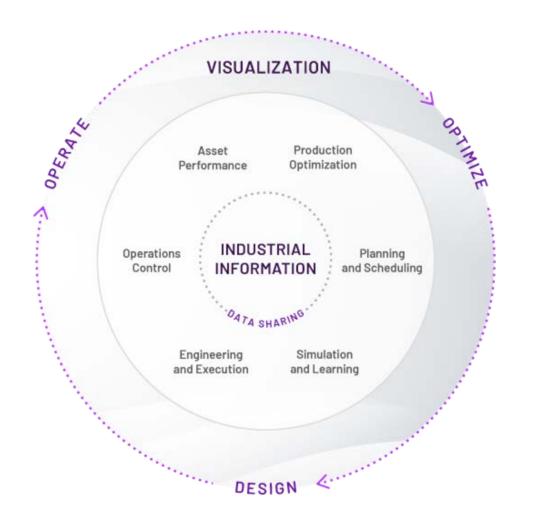








## Even more important to differentiate ourselves



Half a century of industry experience and knowledge, trusted by 20,000 customers worldwide

Breadth and depth of portfolio capabilities with **market leading positions** in operations information, HMI, MES, APM, 3D Design

AVEVA Connect industrial cloud platform and AVEVA Flex subscription program to accelerate time to value

**Global partner ecosystem** of **over 5,500** partners are ready to serve your needs whenever and wherever you need support

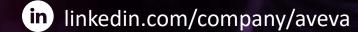
**Open and agnostic** solutions that leverage customer existing investments and enables a connected community across the ecosystem

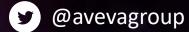


#### 謝謝

DZIĘKUJĘ CI TERIMA KASIH KÖSZÖNÖM E MATUR NUWUN XBAJA BAM MULŢUMESC TAS TIBI 済 OBRIGA TAKK SKALDUHA 炭 MERCI ざいました ロロロ MÈSI DERIT ĎAKUJEM HATUR NUHUN PAXMAT CAFA SIPAS JI WERE ТИ БЛАГОДАРАМ







#### **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

