AVEVA PI WORLD

Empower your operations teams to maximize efficiency, productivity, collaboration and quality
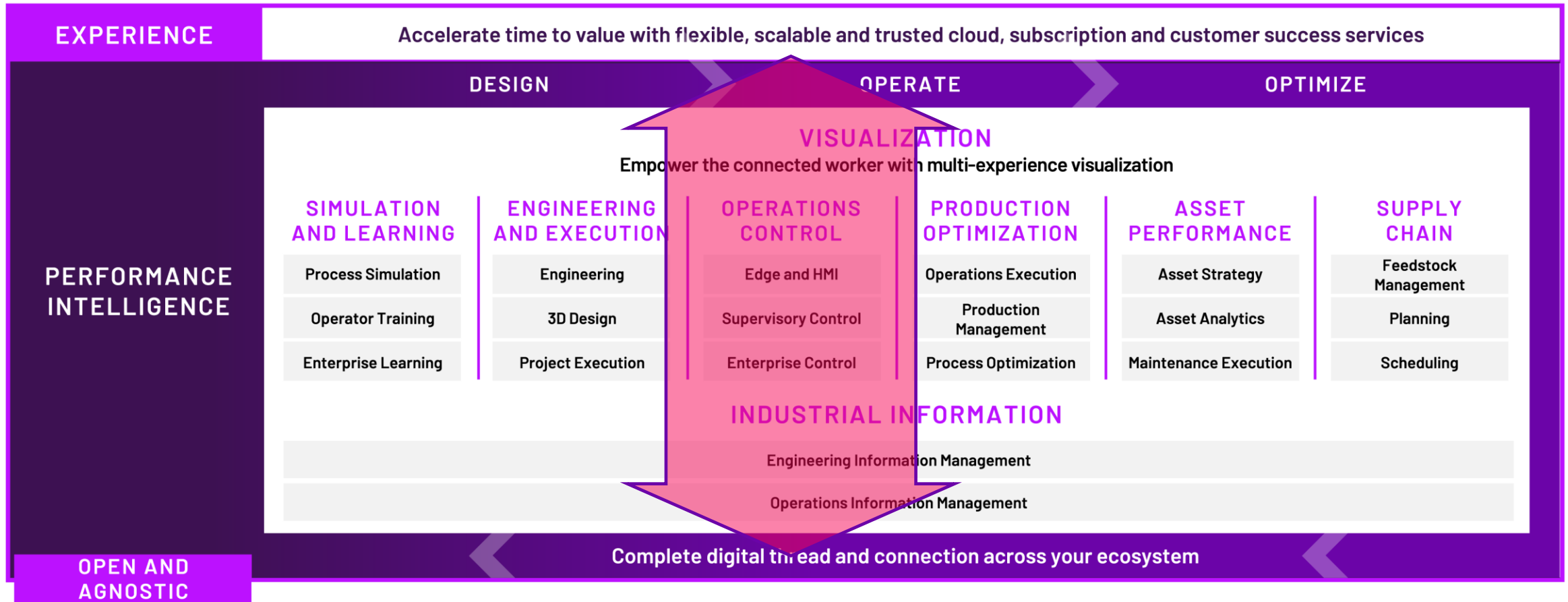
Presented By: Rashesh Mody

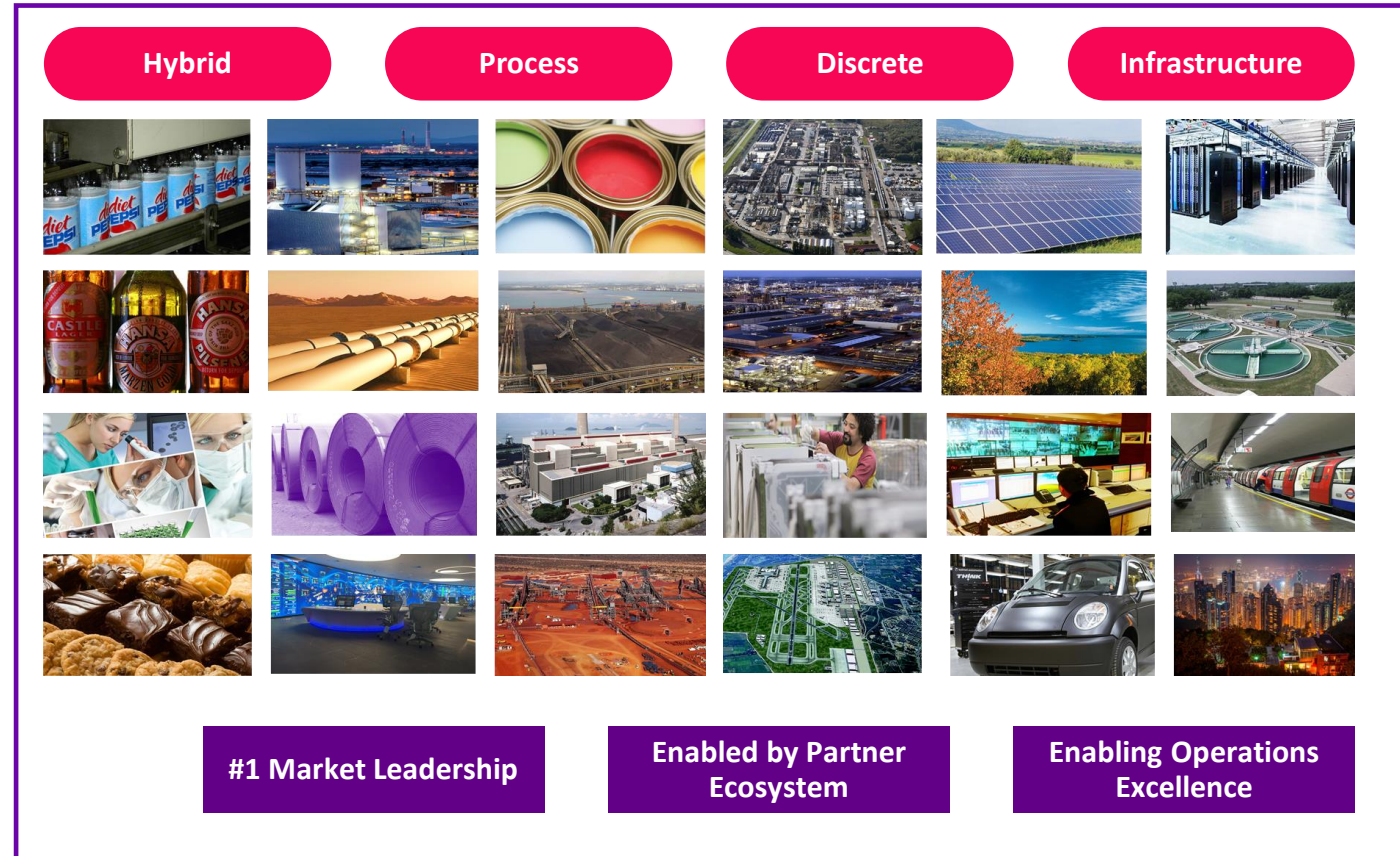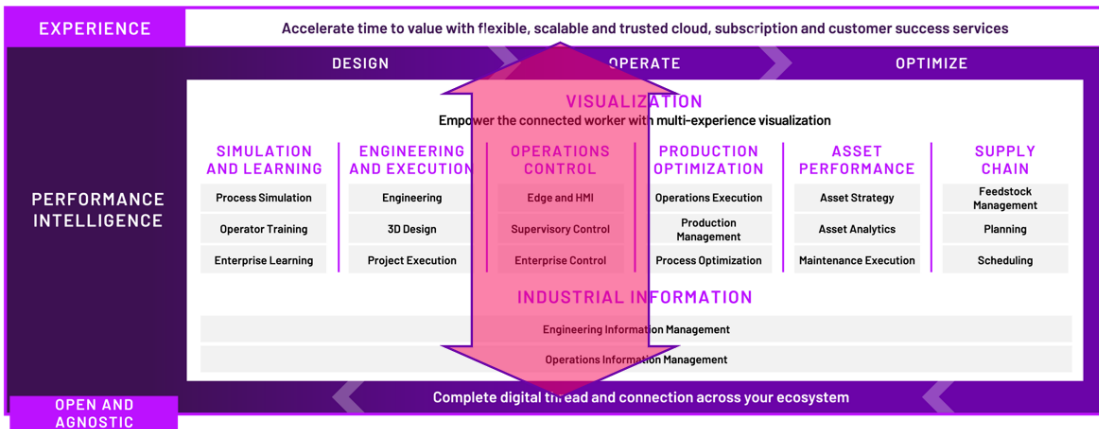Sr. VP - Monitor and Control Business

AVEVA

Unlocking Performance Intelligence

Accelerating digital transformation of the industrial world

Unlocking Performance Intelligence

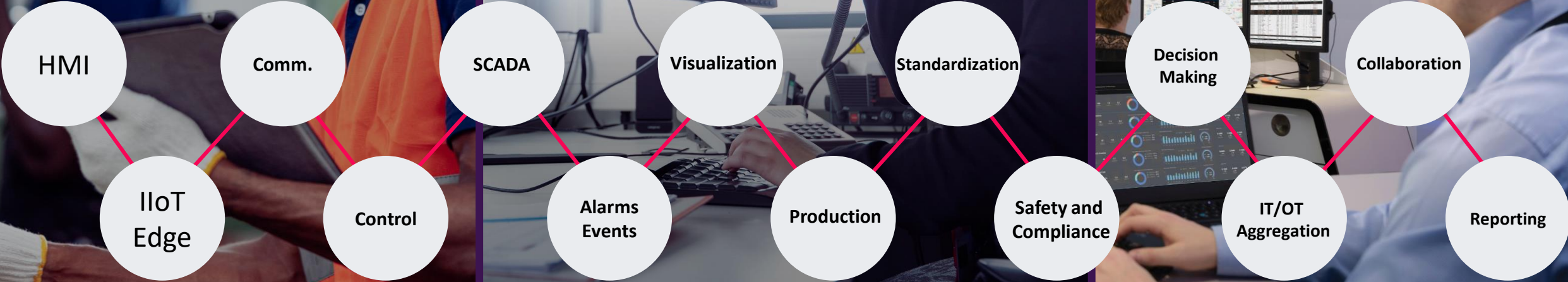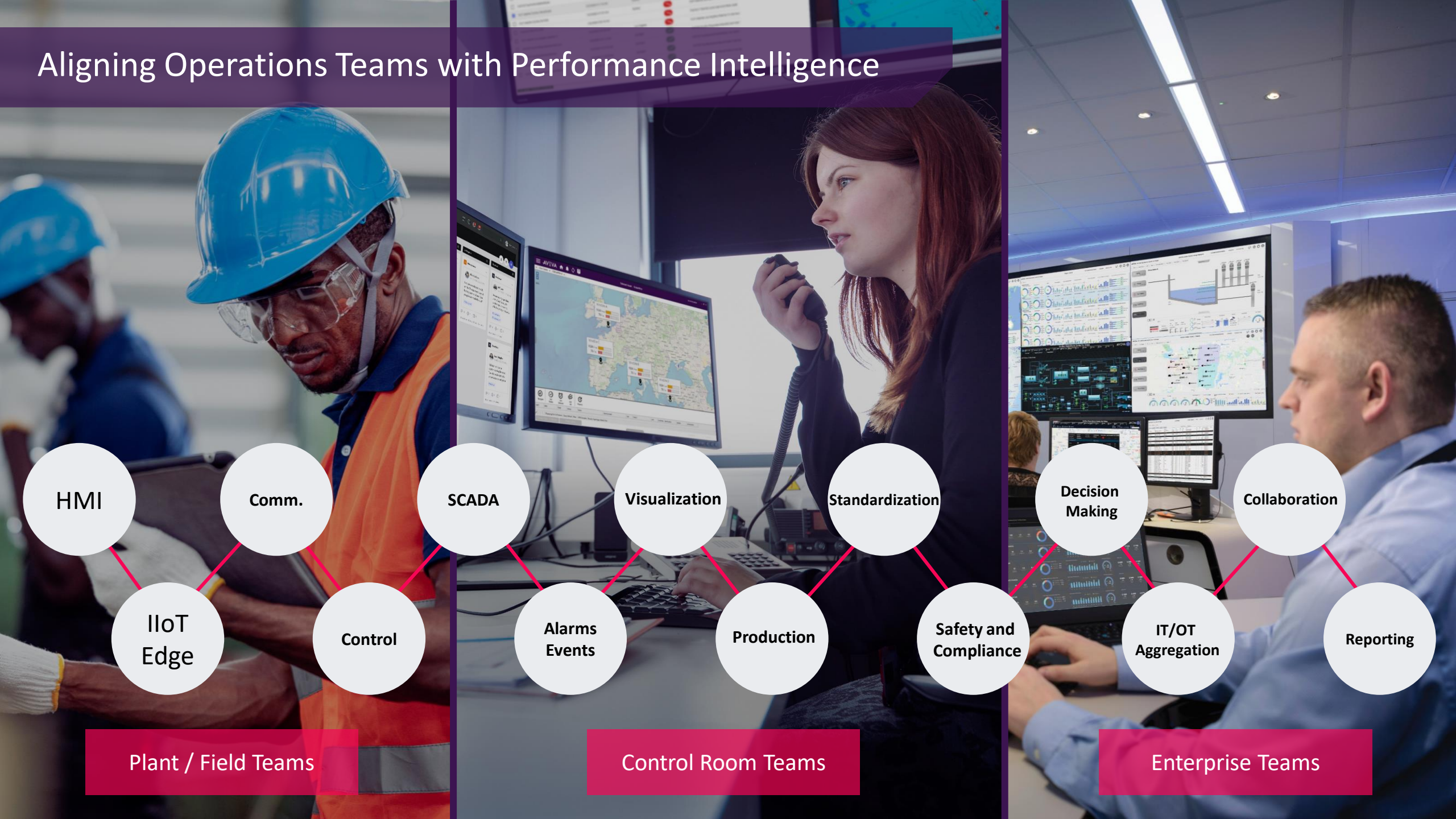Accelerating digital transformation of the industrial world

| Hybrid | Process | Discrete | Infrastructure |

EXPERIENCE — Accelerate time to value with flexible, scalable and trusted cloud, subscription and customer success services

| | DESIGN | | OPERATE | | | OPTIMIZE |

VISUALIZATION
Empower the connected worker with multi-experience visualization

PERFORMANCE INTELLIGENCE

SIMULATION AND LEARNING	ENGINEERING AND EXECUTION	OPERATIONS CONTROL	PRODUCTION OPTIMIZATION	ASSET PERFORMANCE	SUPPLY CHAIN
Process Simulation	Engineering	Edge and HMI	Operations Execution	Asset Strategy	Feedstock Management
Operator Training	3D Design	Supervisory Control	Production Management	Asset Analytics	Planning
Enterprise Learning	Project Execution	Enterprise Control	Process Optimization	Maintenance Execution	Scheduling

INDUSTRIAL INFORMATION
Engineering Information Management
Operations Information Management

Complete digital thread and connection across your ecosystem

OPEN AND AGNOSTIC

#1 Market Leadership

Enabled by Partner Ecosystem

Enabling Operations Excellence

AVEVA

Operations Control

Focus Areas

Align Operations Teams

Enterprise Visualization

Intelligent Midstream Operations

AVΞVA

Aligning Operations Teams with Performance Intelligence

HMI

Comm.

IIoT Edge

Control

Plant / Field Teams

SCADA

Visualization

Alarms Events

Production

Control Room Teams

Standardization

Safety and Compliance

Decision Making

IT/OT Aggregation

Collaboration

Reporting

Enterprise Teams

Bring a smarter future into focus with the **Confidence to Operate** from edge to enterprise

Collaboration

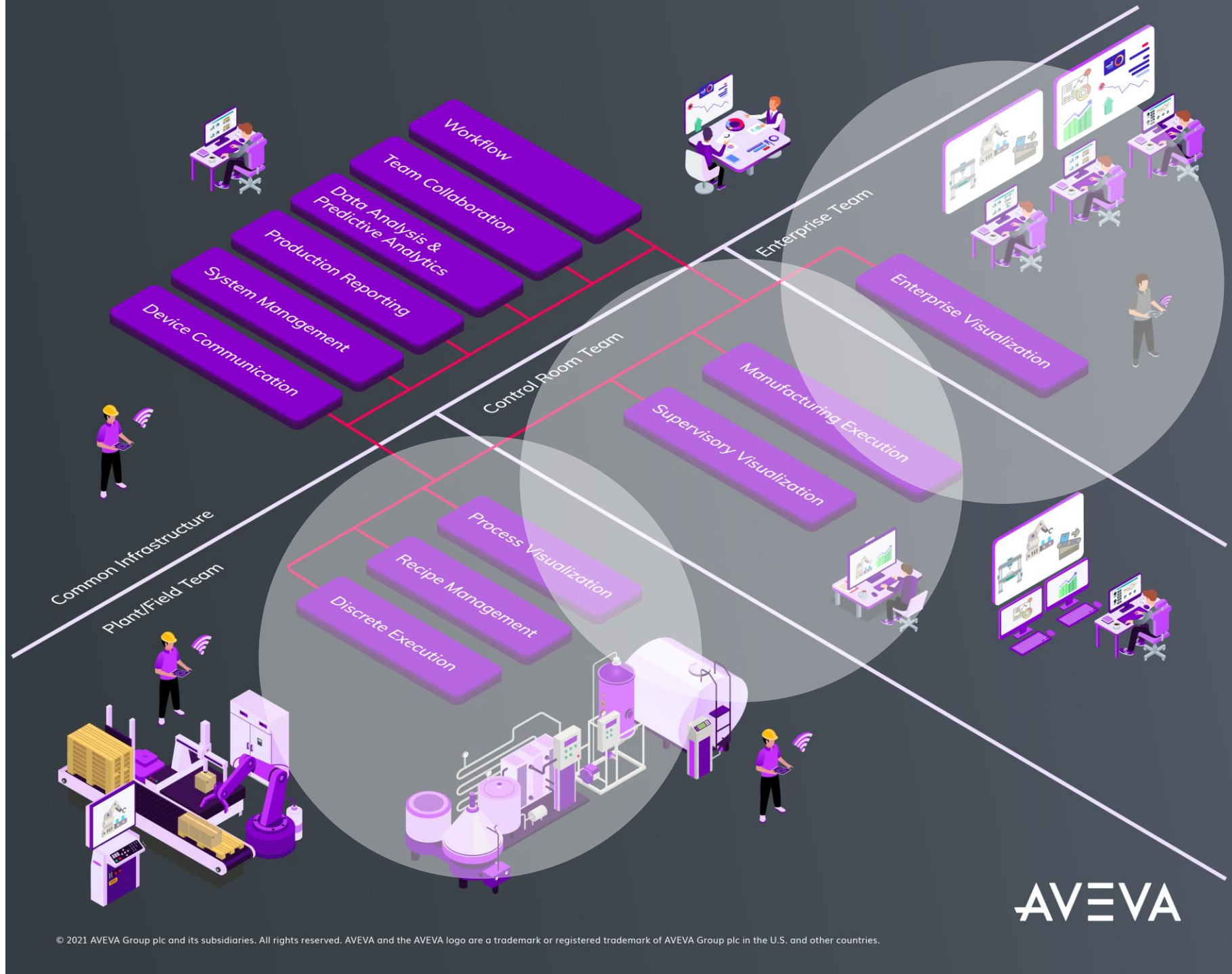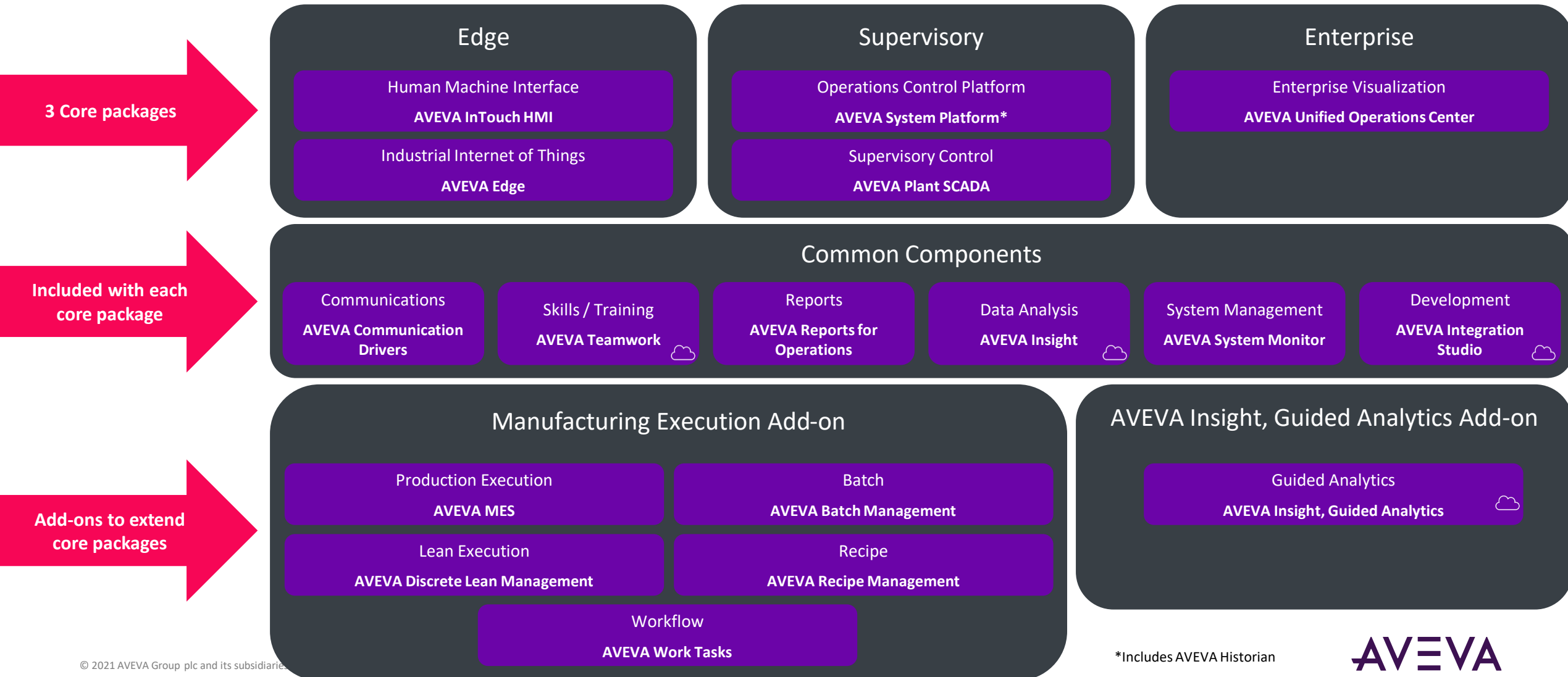Line-of-Sight Visibility

Remote Work

Standardization

Common Infrastructure

Device Communication
System Management
Production Reporting
Data Analysis & Predictive Analytics
Team Collaboration
Workflow

Plant/Field Team

Discrete Execution
Recipe Management
Process Visualization

Control Room Team

Supervisory Visualization
Manufacturing Execution

Enterprise Team

Enterprise Visualization

AV∃VA

New offering: AVEVA Operations Control – an AVEVA Flex Subscription

3 Core packages

Edge

Human Machine Interface
AVEVA InTouch HMI

Industrial Internet of Things
AVEVA Edge

Supervisory

Operations Control Platform
AVEVA System Platform*

Supervisory Control
AVEVA Plant SCADA

Enterprise

Enterprise Visualization
AVEVA Unified Operations Center

Included with each core package

Common Components

Communications
AVEVA Communication Drivers

Skills / Training
AVEVA Teamwork

Reports
AVEVA Reports for Operations

Data Analysis
AVEVA Insight

System Management
AVEVA System Monitor

Development
AVEVA Integration Studio

Add-ons to extend core packages

Manufacturing Execution Add-on

Production Execution
AVEVA MES

Batch
AVEVA Batch Management

Lean Execution
AVEVA Discrete Lean Management

Recipe
AVEVA Recipe Management

Workflow
AVEVA Work Tasks

AVEVA Insight, Guided Analytics Add-on

Guided Analytics
AVEVA Insight, Guided Analytics

*Includes AVEVA Historian

AVEVA

HMI/SCADA to Operations Control

Comprehensive and best-of-breed solutions delivering proven results

Engineering efficiency

Operational agility

Asset Performance

People collaboration

Technology
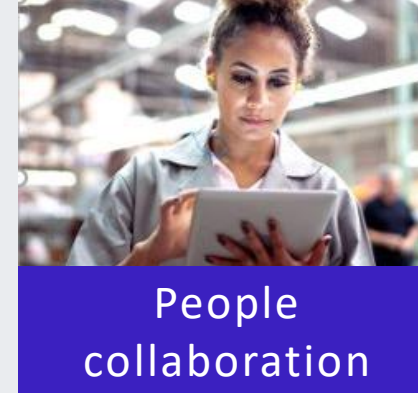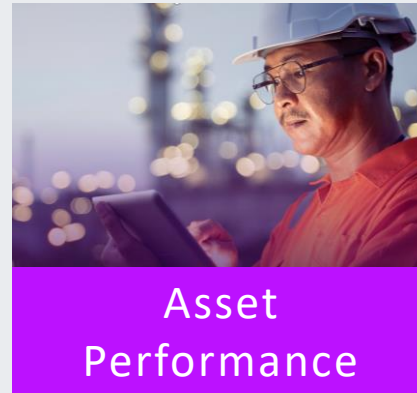
- Integration studio
- Industry Graphics
- Cloud common storage

- Collaboration and teamwork
- Next gen graphics
- Reducing IT cost
- Openness and extensibility (MQTT, OPC UA)
- Reporting

- Predictive Analytics
- AI/ML based Vision

- Teamwork
- Mobile Operations
- Remote work
- Knowledge/Skill
- Reporting
- SME troubleshooting

- AI/ML
- Cloud
- Vision
- Standardization
- MQTT/OPC UA

AVEVA

How AVEVA is making acceleration possible

Industrial IOT
and Edge Device Management

Geographically Distributed Operations

Standardized Operations
Control

Unified Visibility Across Sites

AVEVA

Drive to Unify

Transform operations by increasing visibility and accessibility to context driven actionable information

Challenges

Organizations lack collaboration across different departments, information is dispersed in multiple systems and data sources, and decision makers lack timely visibility into operations performance metrics.

Ideal Solution

According to research by McKinsey, cross-functional operations transformations typically outperform their single-function counterparts by between 30 and 40 percent.

Desired Outcomes

To remain competitive, decision-makers require an enhanced layer of intelligence ensuring that an organization's data works in service to organizational goals.

AVEVA

Unified Operations Center - Enterprise Visualization

Converge and contextualize for end-to-end enterprise visibility

Enhanced layer of intelligence that ensures data works in service of organizational goals

AVEVA

Unified Operations Center Video

Industry Specific Unified Operations Centers templates

UOC for Data Centers

UOC for Smart Cities

UOC for Oil & Gas

UOC for Marine

UOC for Mining

UOC for Water
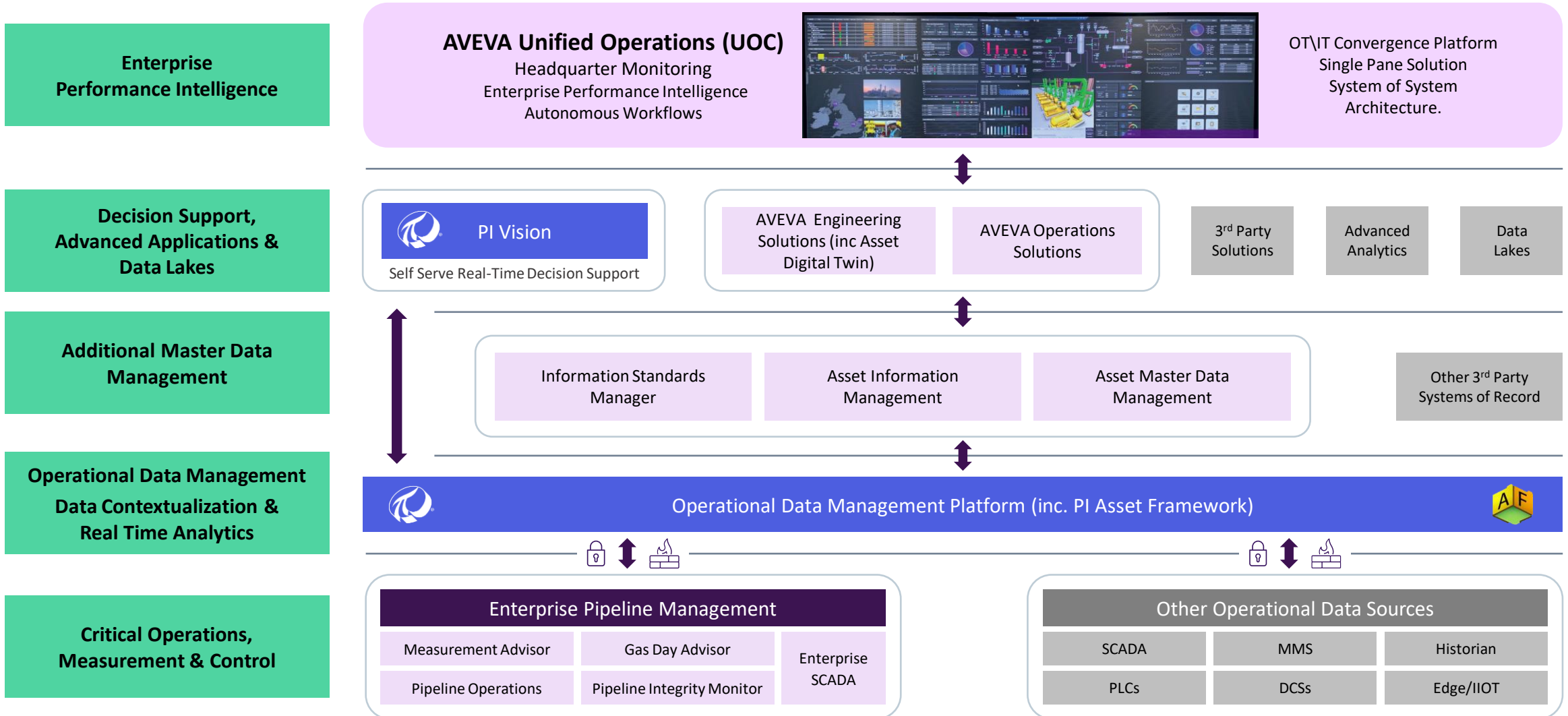

UOC for Renewables

AVEVA

Delivering performance intelligence

Integrated end-to-end industrial software to drive trusted outcomes across the ecosystem

Multi-Experience Visualization

Process simulation	Engineering and design	Project execution	Asset performance	Value chain optimization
Conceptual design	FEED, detailed design	Contract risk and ERM	Strategy, analytics, maintenance	Supply chain, execution

PI System

IIoT • On-prem • Cloud
Open ecosystem

PI Server

Portfolio Integration Focus

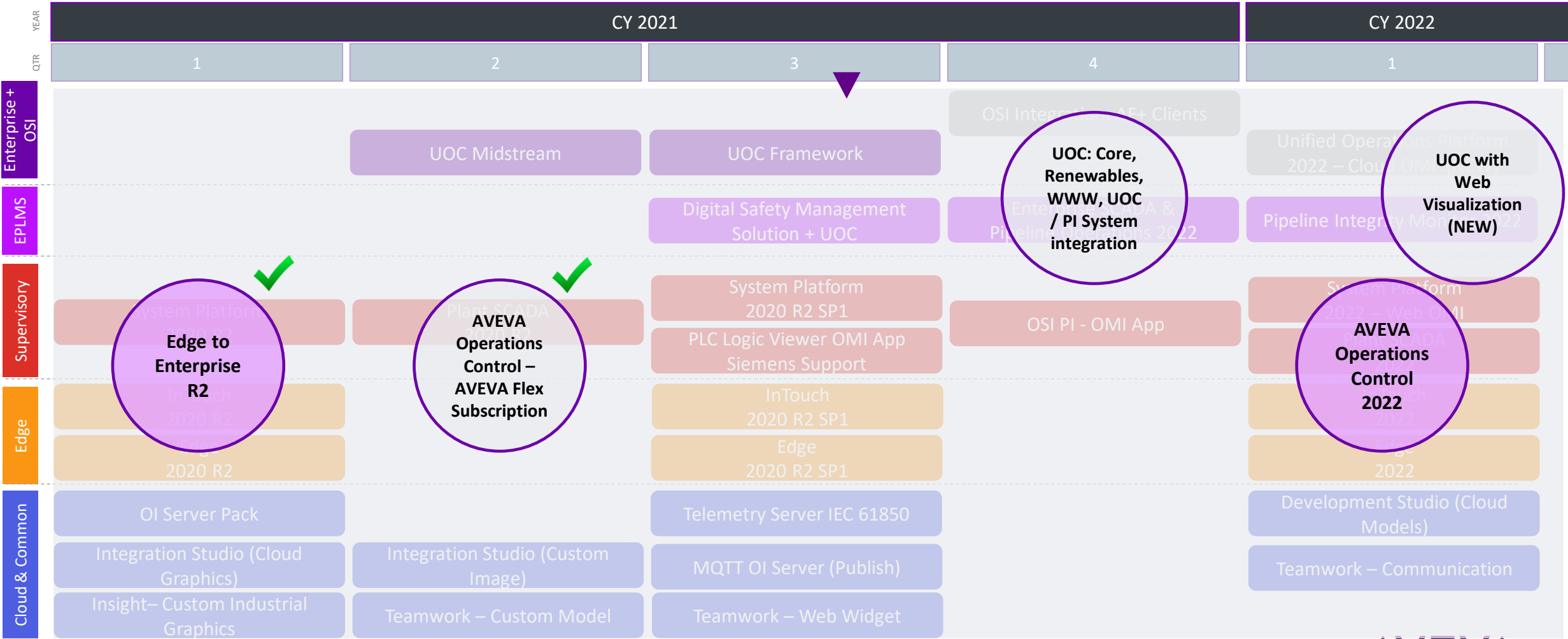| Operations control	Local control	Supervisory control	Enterprise control
Edge, site, enterprise			

(1) Better data
Accuracy, reliability, context, scope and scale

(2) Smarter solutions
With better integration, while maintaining neutrality

(3) Proven outcomes
Efficiency, agility, reliability, sustainability

AV≡VA

Intelligent Midstream

Enterprise Performance Intelligence

AVEVA Unified Operations (UOC)
Headquarter Monitoring
Enterprise Performance Intelligence
Autonomous Workflows

OT\IT Convergence Platform
Single Pane Solution
System of System
Architecture.

Decision Support, Advanced Applications & Data Lakes

PI Vision

Self Serve Real-Time Decision Support

AVEVA Engineering Solutions (inc Asset Digital Twin)

AVEVA Operations Solutions

3rd Party Solutions

Advanced Analytics

Data Lakes

Additional Master Data Management

Information Standards Manager

Asset Information Management

Asset Master Data Management

Other 3rd Party Systems of Record

Operational Data Management

Data Contextualization & Real Time Analytics

Operational Data Management Platform (inc. PI Asset Framework)

AF

Critical Operations, Measurement & Control

Enterprise Pipeline Management

Measurement Advisor

Gas Day Advisor

Enterprise SCADA

Pipeline Operations

Pipeline Integrity Monitor

Other Operational Data Sources

SCADA

MMS

Historian

PLCs

DCSs

Edge/IIOT

M&C Roadmap – CY 2021

YEAR	CY 2021				CY 2022	
QTR	1	2	3	4	1	
Enterprise + OSI		UOC Midstream	UOC Framework	OSI Integration AF+ Clients	Unified Operations Platform 2022 – Cloud OMI	
EPLMS			Digital Safety Management Solution + UOC	Enterprise SCADA & Pipeline Operations 2022	Pipeline Integrity Monitor 2022	
Supervisory	System Platform 2020 R2	Plant SCADA 2020 R2	System Platform 2020 R2 SP1 / PLC Logic Viewer OMI App Siemens Support	OSI PI - OMI App	System Platform 2022 – Web OMI / Plant SCADA	
Edge	InTouch 2020 R2 / Edge 2020 R2		InTouch 2020 R2 SP1 / Edge 2020 R2 SP1		InTouch 2022 / Edge 2022	
Cloud & Common	OI Server Pack / Integration Studio (Cloud Graphics) / Insight– Custom Industrial Graphics	Integration Studio (Custom Image) / Teamwork – Custom Model	Telemetry Server IEC 61850 / MQTT OI Server (Publish) / Teamwork – Web Widget		Development Studio (Cloud Models) / Teamwork – Communication	

- ✔ Edge to Enterprise R2
- ✔ AVEVA Operations Control – AVEVA Flex Subscription
- UOC: Core, Renewables, WWW, UOC / PI System integration
- AVEVA Operations Control 2022
- UOC with Web Visualization (NEW)

Dates Subject to Change

20

AVEVA

This presentation may include predictions, estimates, intentions, beliefs and other statements that are or may be construed as being forward-looking. While these forward-looking statements represent our current judgment on what the future holds, they are subject to risks and uncertainties that could result in actual outcomes differing materially from those projected in these statements. No statement contained herein constitutes a commitment by AVEVA to perform any particular action or to deliver any particular product or product features. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect our opinions only as of the date of this presentation.

The Company shall not be obliged to disclose any revision to these forward-looking statements to reflect events or circumstances occurring after the date on which they are made or to reflect the occurrence of future events.

AVΞVA

in linkedin.com/company/aveva

🐦 @avevagroup

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

AVEVA