

Transforming to an integrated approach to asset lifecycle management

Chris Cran – Programme Director - ALM

AVEVA



Over 95%
of major projects are
delayed or over budget.

Just 31%
come within 10% of
cost baselines

Only 25%
come within 10% of
original deadlines

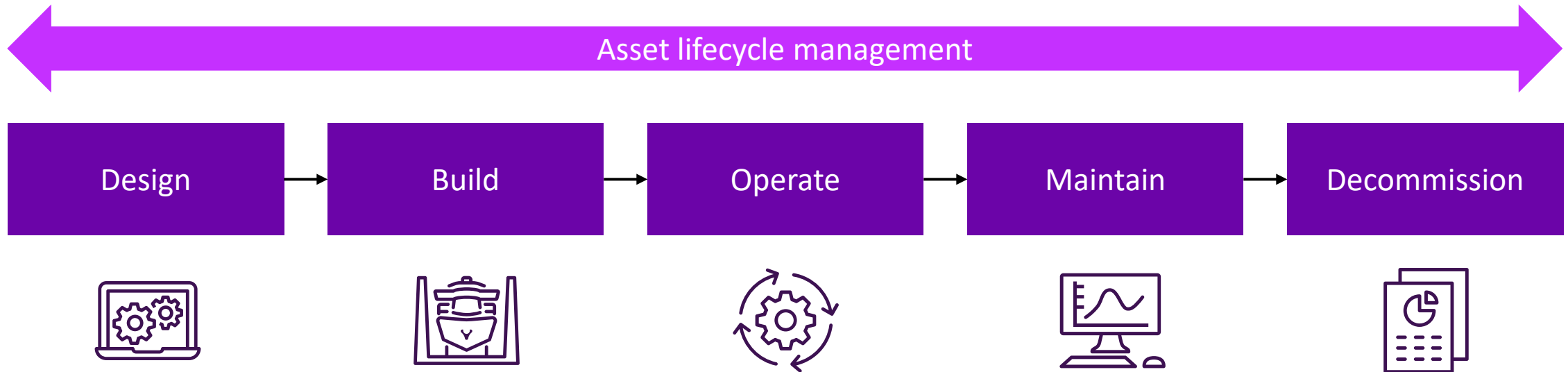
Accenture



“Complex projects generate huge amounts of data...Management teams need a **better way** to access and interpret all their data.”

McKinsey & Company

A detailed digital thread through the *entire* asset lifecycle



CONNECT

Industrial intelligence for the connected industrial economy

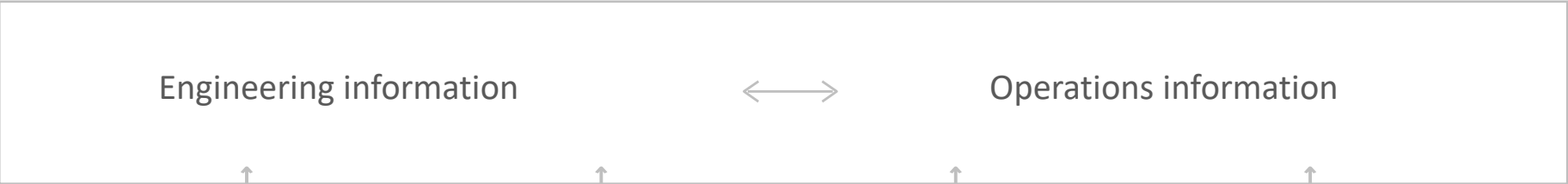
Seamless experience



Applications and analytics



Information

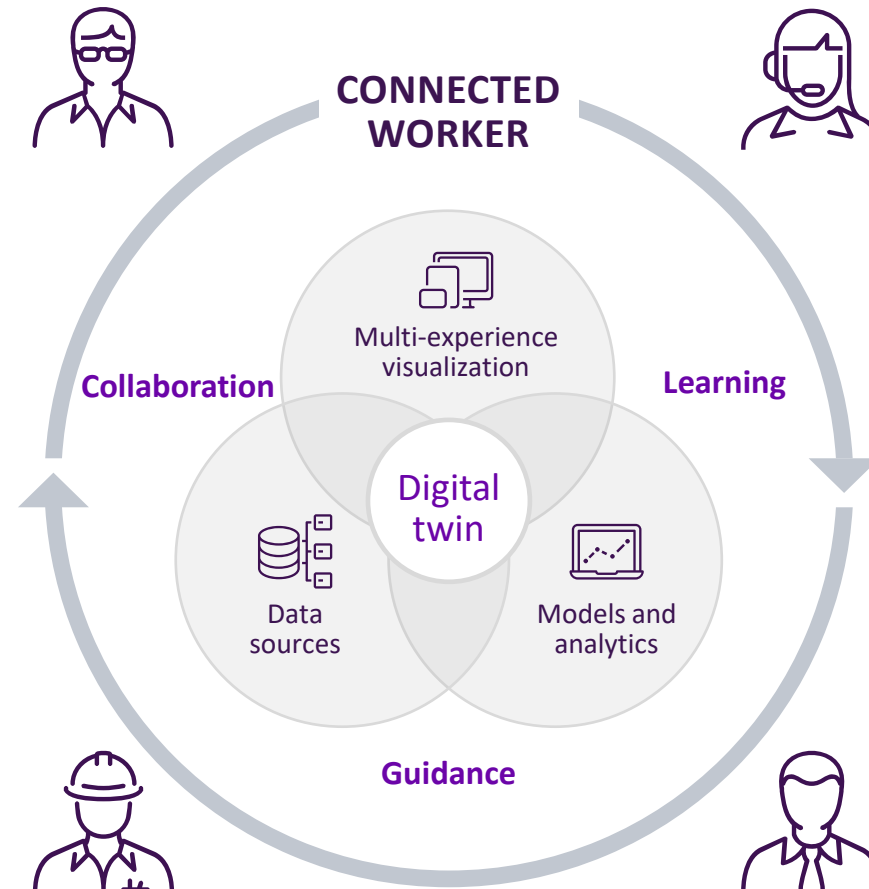


Assets and devices



To empower the connected worker

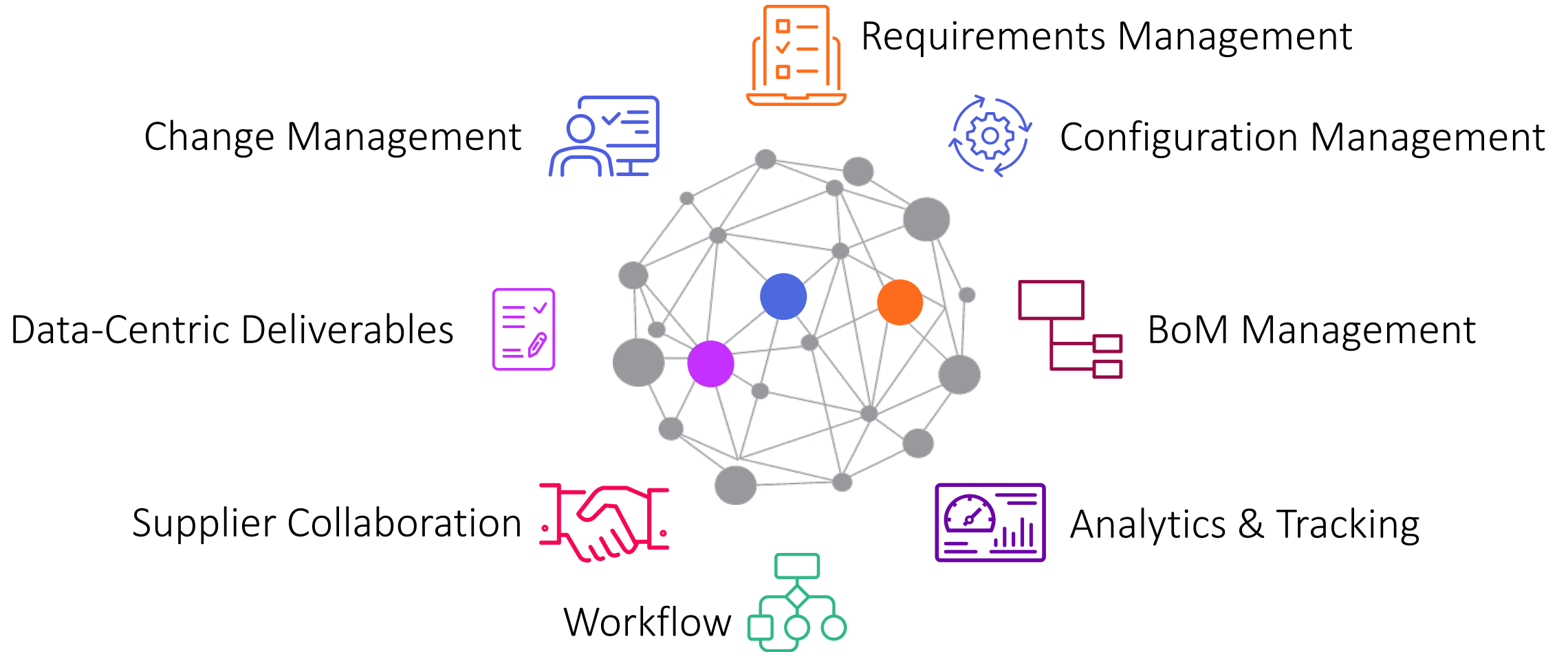
With a comprehensive digital twin across engineering and operations



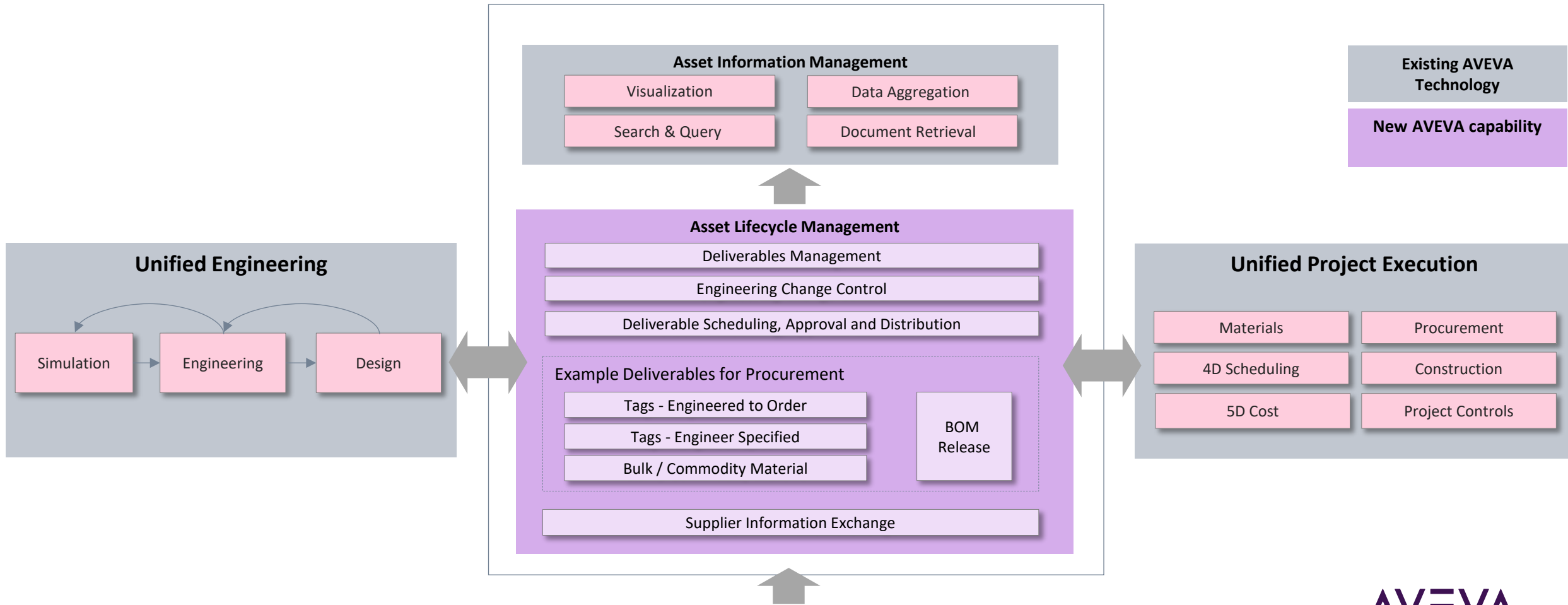
Asset Lifecycle Management



Asset Lifecycle Management



ALM Strategy



AVEVA™ Unified Engineering

The first release of Asset lifecycle management builds on AVEVA's established engineering products to create additional value for our customers

Next-gen
P&ID

Out-of-the-
box (OOTB)
config and
content

Enhanced
integration
services

Asset
lifecycle
management
(ALM)

AVEVA™
Unified
Engineering

Single
installation
package

Communities
> Cross
account
collaboration

Advanced
real-time
collaboration

CONNECT
evolution

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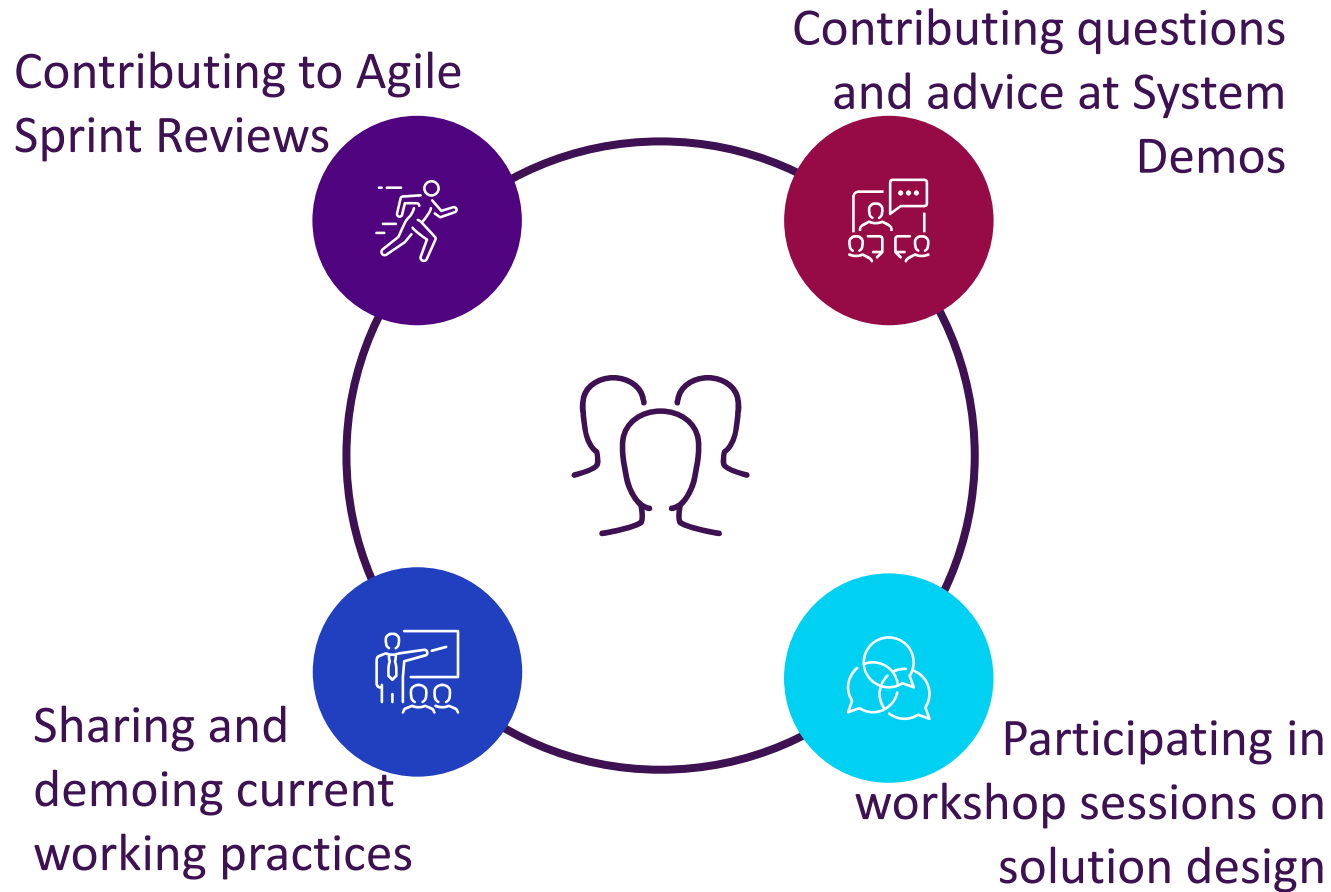
CONNECT
evolution

ASSET LIFECYCLE MANAGEMENT

AVEVA Deliverables Management

AVEVA

Customer Lighthouse Programme

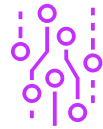


Data-centric Deliverables Management

Going beyond documents



Objects



Data



Schematics



Data Sheets



Collaboration



Compliance



Quality



Analytics &
Tracking

AVEVA™ Deliverables Management

Workflow



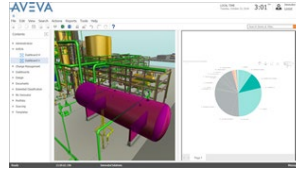
Any Users

View | Decide | Share

Data Aggregation Platform

AIM and AVEVA CVS

Deliverables made available for visualization



Build & Commission

Deliverables referenced in project execution processes

Process and Operations

Power Ops Management

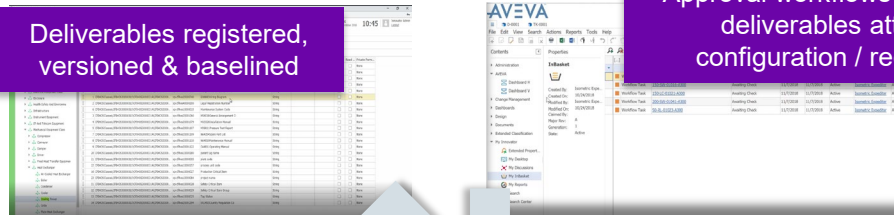
Maintain & Service

Deliverables referenced in ops & maintenance processes

Asset lifecycle management (ALM)

Deliverables registered, versioned & baselined

Approval workflows executed and deliverables attached to configuration / requirements

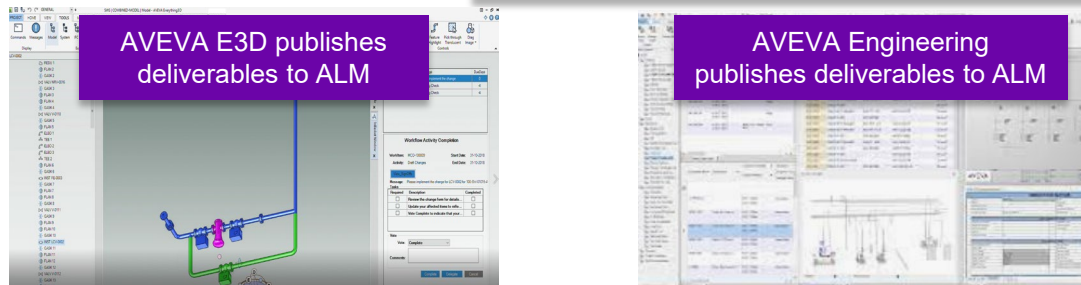


Unified Engineering

Comments on Deliverables are addressed

AVEVA E3D publishes deliverables to ALM

AVEVA Engineering publishes deliverables to ALM



Requirements Engineer /
Program Manager

Analyze | Investigate | Validate



3D Designer

Design | Modify

AVEVA™ Deliverables Management

Initiating change at the source of the project data

- Capture data-centric project deliverables
- Flexible approval workflows – no need to lock-out a full assembly part number
- Flexible data model
- Direct access through AVEVA™ Unified Engineering
- Integrate with Status Control
- Baseline and version engineering objects, data, schematics and documents

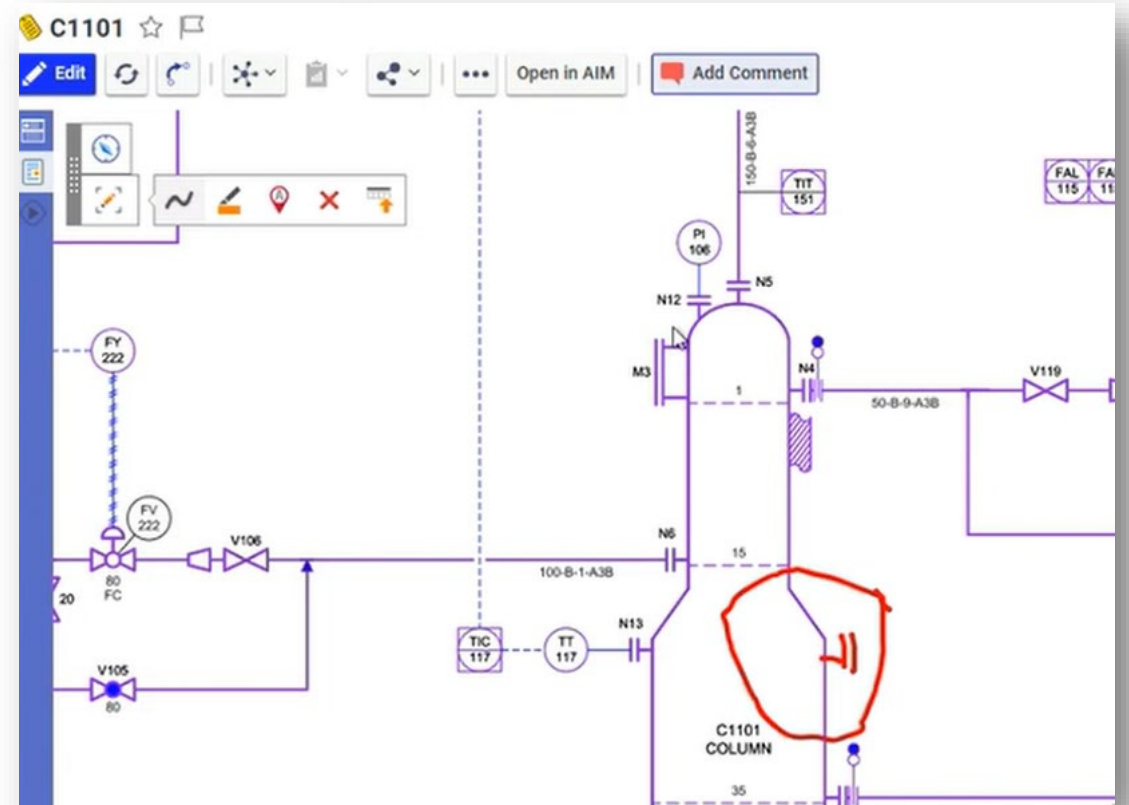
The screenshot displays the 'Tags' section of the AVEVA Deliverables Management interface. The interface includes a left-hand navigation pane with sections for Status, Action, and Other. The main content area shows a table of tags with columns for Tag#, Tag Description, Fill. %, State, Is Used, Installed, Action, and Validated. The table contains four rows of tag data, with the last row (20PA001) highlighted.

Tag#	Tag Description	Fill. %	State	Is Used	Installed	Action	Validated
20BSV1240	2ND STAGE SEPARATOR	73	Checked Out	<input type="checkbox"/>	<input type="checkbox"/>	-- Not Select	<input checked="" type="checkbox"/>
20BSV1340	3RD STAGE SEPARATOR	72	Checked Out	<input type="checkbox"/>	<input type="checkbox"/>	-- Not Select	<input checked="" type="checkbox"/>
20BSV1454	ELECTROSTATIC COALESCER	72	Checked Out	<input type="checkbox"/>	<input type="checkbox"/>	-- Not Select	<input checked="" type="checkbox"/>
20PA001	NEW MANUAL PUMP	12	New	<input checked="" type="checkbox"/>	<input type="checkbox"/>	-- Not Select	<input checked="" type="checkbox"/>

AVEVA™ Deliverables Management

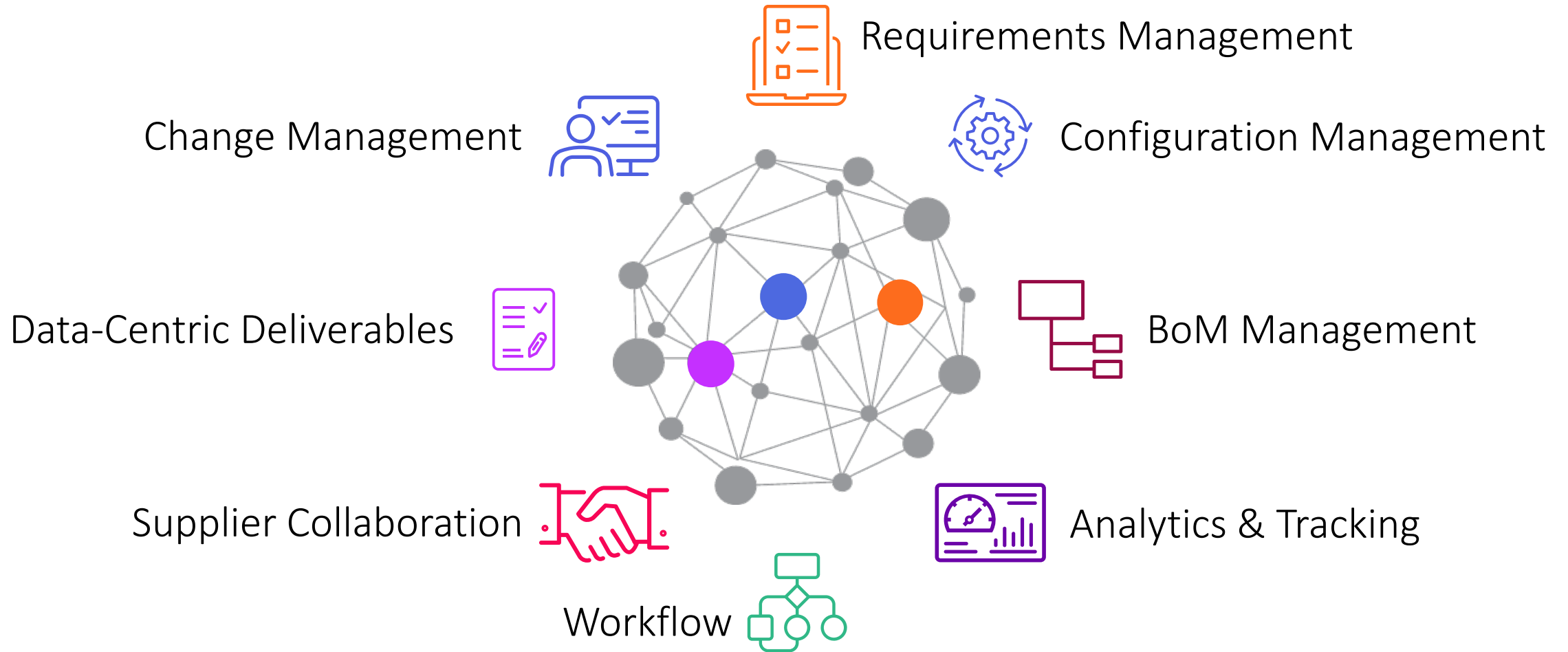
Initiating change at the source of the project data

- Accelerates turnaround with rapid feedback loops and real-time discussion threads
- Intelligent commenting and markup on objects (basic change control), schematics, and documents
- External feedback capability
- API's provide access to released data for the entire asset lifecycle (commissioning, operations, maintenance etc.)



Roadmap

Asset Lifecycle Management



Asset Lifecycle Management Capabilities

Time Horizons

NOW



Object & Data-
Centric
Deliverables

NEXT



Automated data
validation



Change
Management

FUTURE



Requirements
Management



BoM
Management



Supplier
Collaboration



Configuration
Management

Data Validation as a Service



Application Programming Interface (API)

Designed from the ground up as an Application Programming Interface (API).

VaaS can be embedded in other AVEVA Applications, AVEVA Partner Solutions, or 3rd Party offerings.

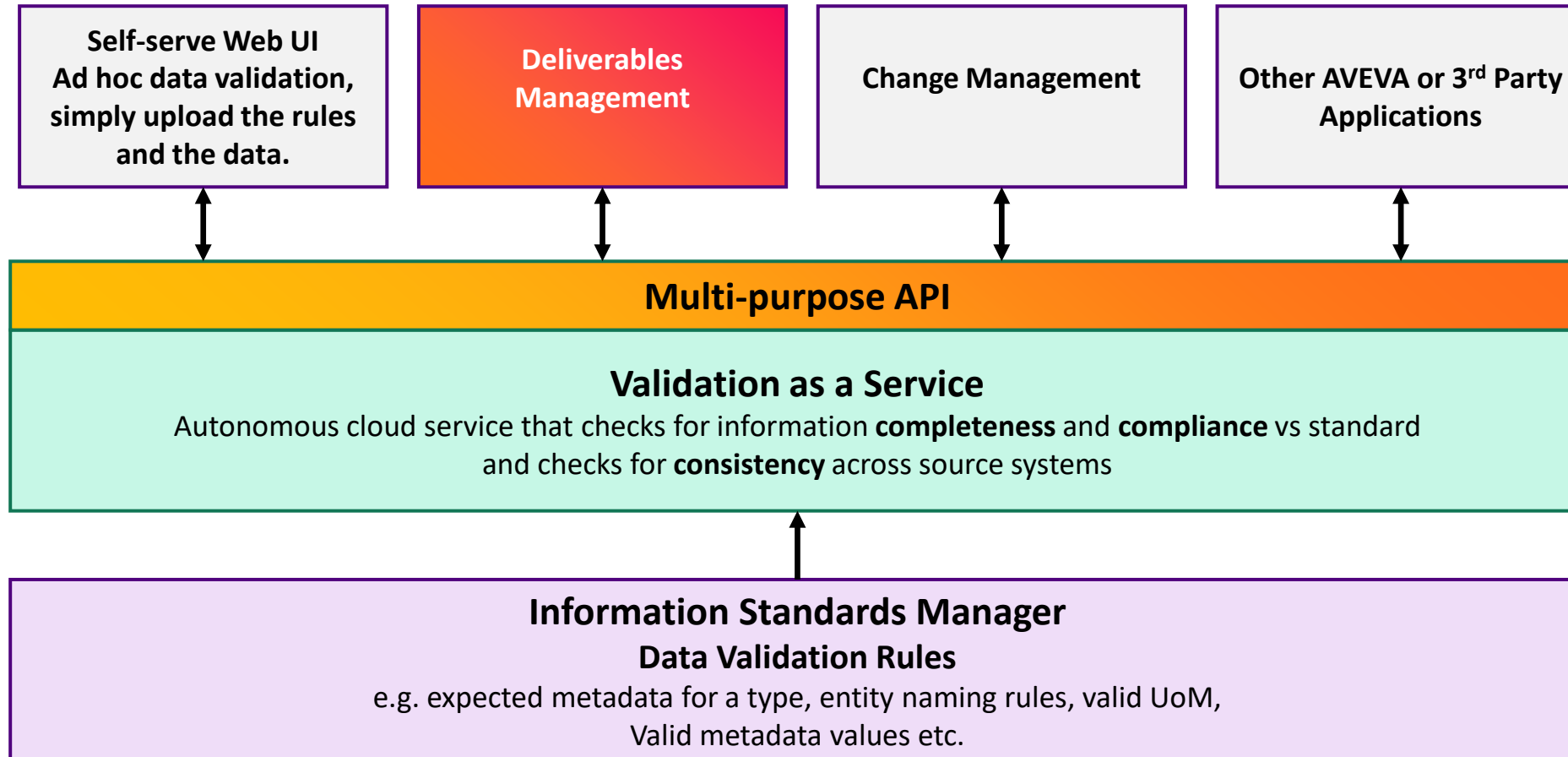


Self-service Web User Interface

A cloud native web portal for users to perform manual or adhoc validations of data. For example, for internal progress reporting, in preparation for hand over to a customer, or to assess the quality and integrity of data received from a supplier.

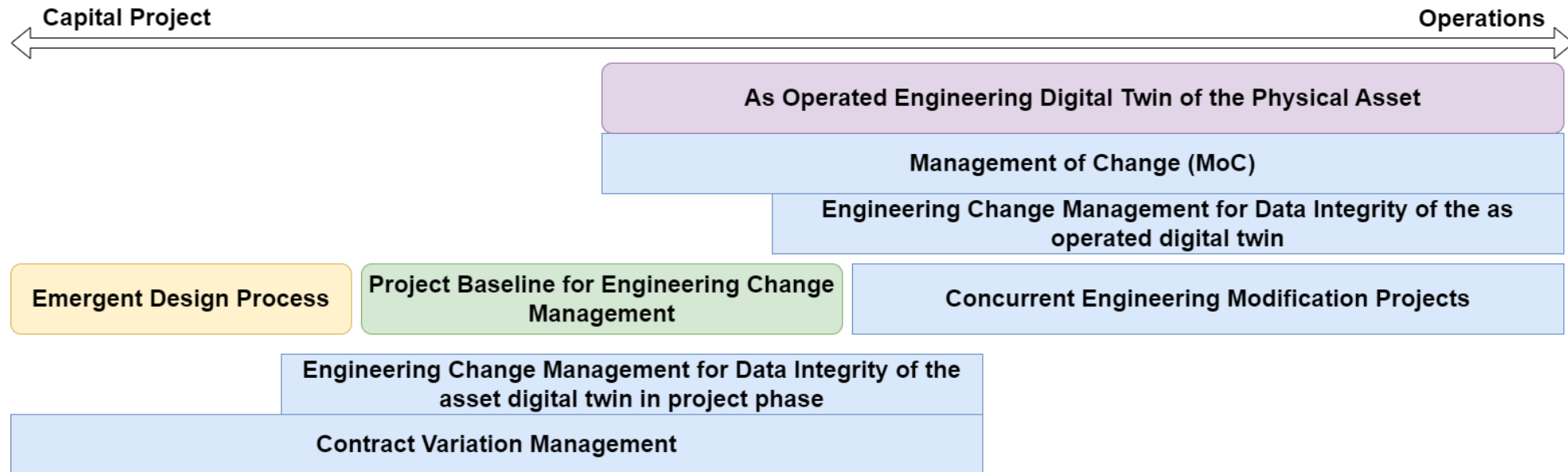
Validation as a Service in ALM

Instant and comprehensive data validation support for multiple scenarios



Change Management

“Manage changes against an established baseline to ensure data integrity”



Lighthouse Program

- Program duration 9 months
- Program Engagement Fee for 3-4 Program Partners
 - EPC
 - Nuclear
 - Marine
- In partnership, AVEVA's prioritised investment towards digital transformation in conjunction with Aras
 - AVEVA Aras Business Unit (AABU)
- Regional Executive Sponsor
- Early access to Software and Solutions
 - Access to AABU Scrum Teams on each iteration
 - Allocation a Lighthouse CSM
- Ability to guide
 - Development
 - Roadmaps
 - Go To Market Approach
- Result
 - PoC Use case assessment and proof points
 - MVP for Deliverables Management

Lighthouse Program

Early access to cutting-edge technology



Open Innovation – Lighthouse Programme



- Always been customer-driven
 - Traditionally, innovation led by AVEVA
- Transforming to customer-centred
 - Innovation shared by AVEVA and Customers, together
 - It's not what we do, it's what you adopt which is our imperative
 - Open Innovation
- We see you as the most important source of innovation
 - Experiences and needs drive new services & solutions
- A cross-section of segments to expand solution horizon
 - Ensure insights represent broad customer base
- More than market research, integrated into the innovation process via
 - Workshops
 - Testing of concepts
 - Accelerated Development
- Anchored on 3 principles:
 - Customer-centred
 - Rapid Iterative Process
 - Quality Driven

Lighthouse Program

Early access to cutting-edge technology



Lighthouse options for engagement

- Co-development (as with McDermott)
 - High contact – high commitment
 - Joining fee
 - Active participant in Agile Ceremonies (Sprint Reviews & System Demos)
 - Sharing existing processes, procedures, data, demoing current tools
 - Design workshops
 - Direct access to R&D and Portfolio
 - A voice in prioritisation and Roadmap
 - Hands-on access to in-development sandbox and pre-release software
- Contributors (e.g. KBR, SOFEC)
 - Ad-hoc or limited scope engagements
 - No joining fee
 - Sharing existing processes, procedures, data, demoing current tools
 - Feedback at design reviews
 - Visibility on Roadmap and priorities
 - Access to pre-release software / 'beta' testing

Questions?

Please wait for the microphone.
State your name and company.



Please remember to...

Navigate to this session in the mobile app to complete the survey.



**And please visit us on the Digital Twin booth
in the Innovation Zone to learn more and
see a demo...**

Thank you!

Recommended Sessions

Aras: Rethinking Digital Thread for Product and Asset Lifecycle Management

Aras

Wednesday, October 16 @ 10:45 am
Room 380

Capital project synergy: EPCs and OOs in the energy transition

Engineering Roundtable Discussion

Thursday, October 17 @10 am

Room 350



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ABOUT AVEVA

AVEVA is a world leader in industrial software, providing engineering and operational solutions across multiple industries, including oil and gas, chemical, pharmaceutical, power and utilities, marine, renewables, and food and beverage. Our agnostic and open architecture helps organizations design, build, operate, maintain and optimize the complete lifecycle of complex industrial assets, from production plants and offshore platforms to manufactured consumer goods.

Over 20,000 enterprises in over 100 countries rely on AVEVA to help them deliver life's essentials: safe and reliable energy, food, medicines, infrastructure and more. By connecting people with trusted information and AI-enriched insights, AVEVA enables teams to engineer efficiently and optimize operations, driving growth and sustainability.

Named as one of the world's most innovative companies, AVEVA supports customers with open solutions and the expertise of more than 6,400 employees, 5,000 partners and 5,700 certified developers. The company is headquartered in Cambridge, UK.

Learn more at www.aveva.com