

NOVEMBER 15, 2022

---

# Effectively Control Your Data for Traceability and Compliance Across the Lifecycle

Malcolm Panthaki | VP of Analysis Solutions | Aras

Alan Mendel | VP Business Development | Aras



**AVEVA**

---

# Agenda

- AVEVA's Asset Lifecycle Management (ALM) Program, powered by Aras
- Who is Aras?
- Aras Case Studies:
  - ✓ NuScale Power
  - ✓ Leading global EPC

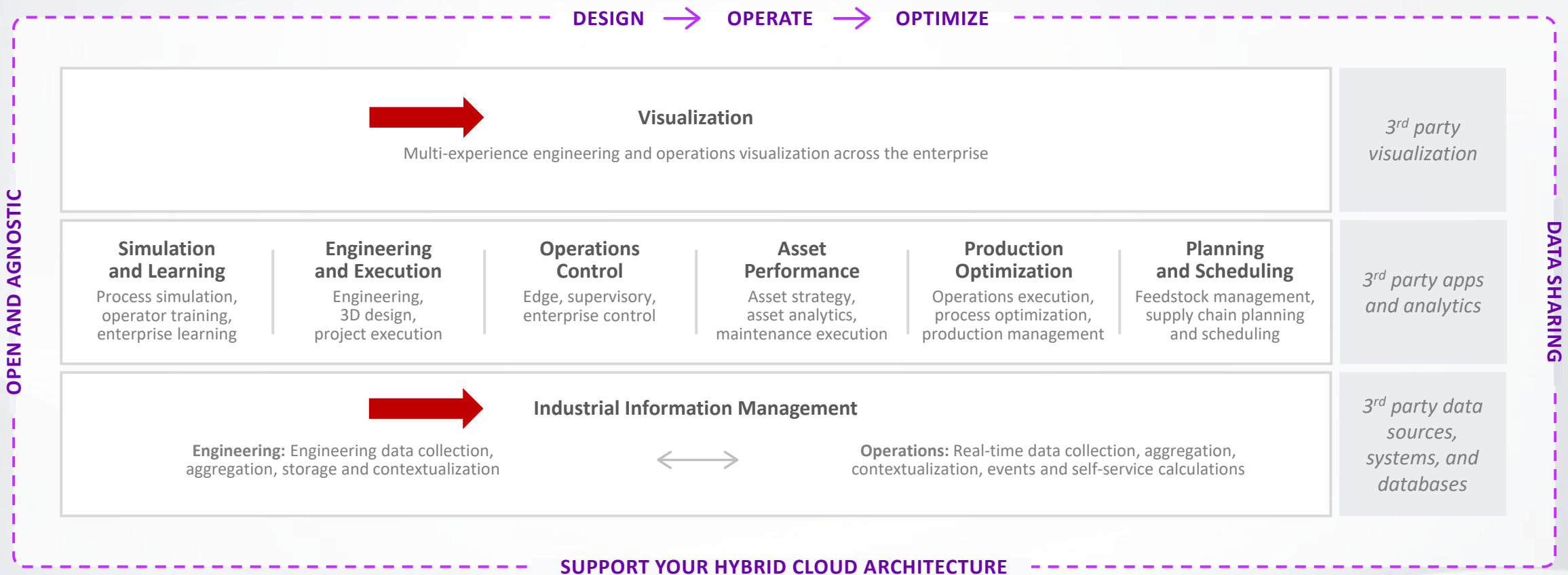
---

# AVEVA's Asset Lifecycle Management Program Powered by Aras



# Delivering a complete digital thread, purpose-built for industry

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



# The Digital Twin : Information mastery across the asset lifecycle

A unified data platform for better and faster decision-making combining both the engineering and operational data segments of industrial information.

## Data Aggregation

Aggregate and align information from multiple sources to create a single source of truth for a given piece of data

## Data in Context

1D/2D/3D contextual enrichment of information to improve the quality and speed of decisions

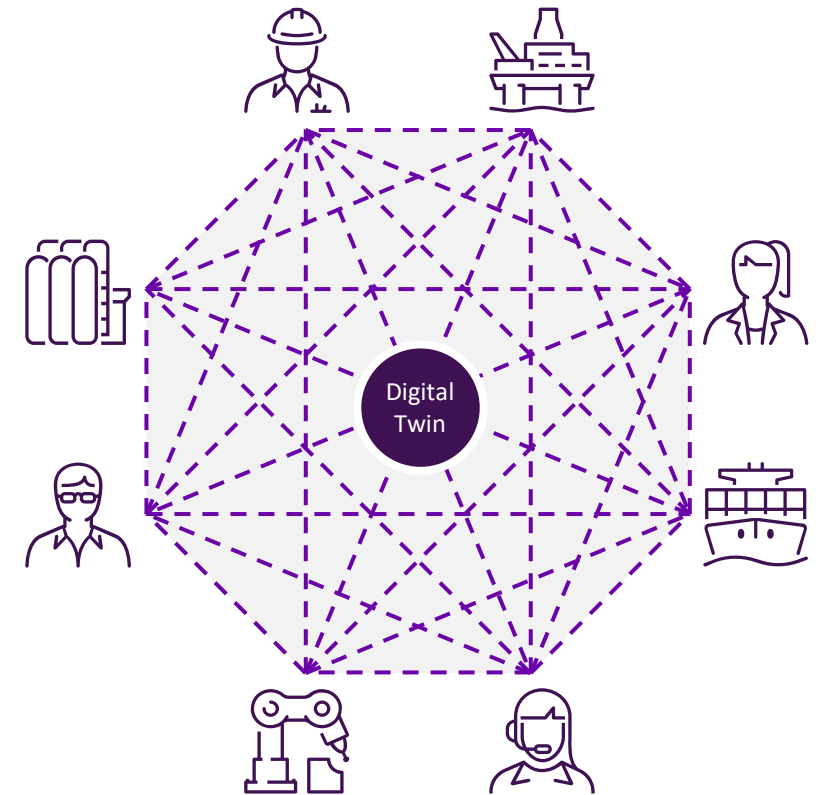
## Data Management

Configuration, change management, approval and baselining of engineering data and requirements.

## Data Sharing

Democratize access to information for internal and external stakeholders (OEMs, Partners, etc.)

## UNIFICATION OF DATA IN THE DIGITAL TWIN



# The Digital Twin : Information mastery across the asset lifecycle

A unified data platform for better and faster decision-making combining both the engineering and operational data segments of industrial information.

## Data Aggregation

Aggregate and align information from multiple sources to create a single source of truth for a given piece of data

## Data in Context

1D/2D/3D contextual enrichment of information to improve the quality and speed of decisions

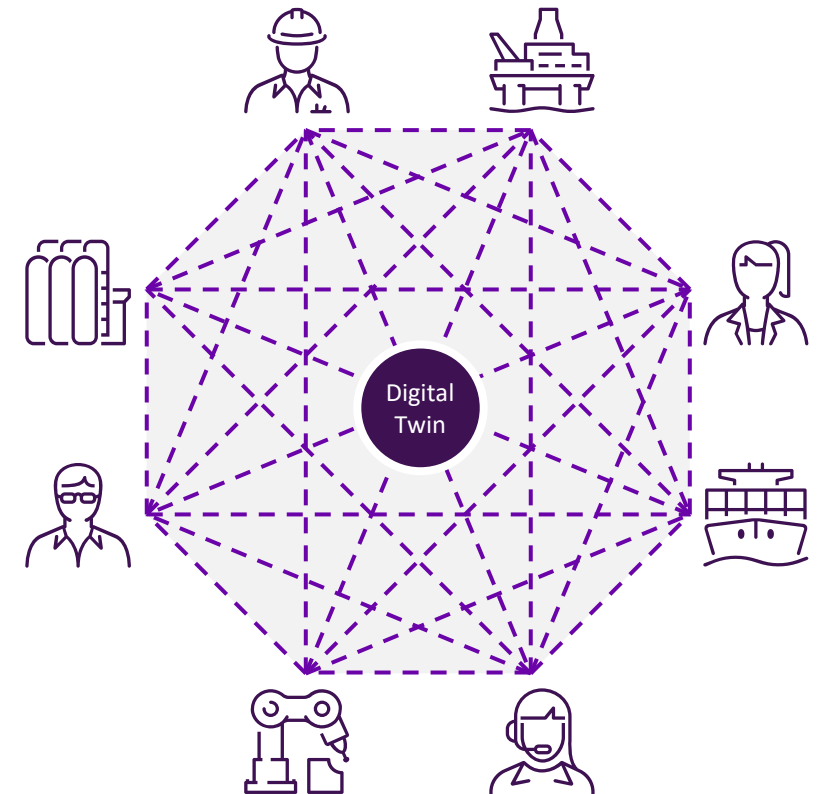


Configuration, change management, approval and baselining of engineering data and requirements.

## Data Sharing

Democratize access to information for internal and external stakeholders (OEMs, Partners, etc.)

## UNIFICATION OF DATA IN THE DIGITAL TWIN





# AVEVA Asset Lifecycle Management (ALM)

## Statement of Intent

- AVEVA will release the first stage of a cross portfolio ALM capability in 2023
- **The ALM capability will be based on Aras Innovator tightly integrated into the AVEVA industrial information platform**
- The ALM capabilities will be released in phases throughout 2023-2024
- ALM will co-exist with AVEVA Unified Engineering & Asset Information Management (AIM)
- Early releases of capability will be available from Q3 2023 on an accelerated timeline for
  - Lighthouse Customers
  - Early Access Program

---

# Who is Aras?



# Aras for Product Lifecycle Management (PLM)

## PURPOSE

Enable our customers to create safe and innovative products that play an **essential** role in our lives



## VISION

**Transform** the way the world makes products



## MISSION

Reinvent software for engineering and manufacturing to empower our customers with the **flexibility** to overcome tomorrow's challenges





# Megatrends Speeding Up Change and Disruption

**Smart, Connected  
& Autonomous**

**Accelerating  
Complexity**

**Cloud**

**Embedded Software**

**Materials Advancements**

**Electrification**

**Simulation**

**Additive Manufacturing**

**Generative  
Design**

**Systems  
Engineering**

**Industry 4.0**

**IoT  
Connectivity**

**Security**

**Sustainability**

**Workforce Transformation**

**Agile  
Processes**

**New Regulations &  
Compliance**

**Product-as-a-Service**



# Global Industrial Organizations are Struggling to Adapt

Fragmented  
processes

Disconnected

Incompatible tools

Data silos

Hard coded systems

Difficult and  
slow to change

A resilient platform  
for PLM and  
industrial digital  
solutions

# Our Disruptive Advantages

Enterprise SaaS

Powerful | Unmatched capabilities

Low-code platform

Flexible | Adapt faster | Upgrade faster

Digital thread

Open | Unlimited connectivity



# Fastest Growing in Our Category

**40%**

ARR growth in 2021

**>30%**

seven year compounded  
annual growth

**95%**

gross retention rate  
of subscriptions

**450+**

subscribers worldwide

**900+**

employees globally

**150+**

partners worldwide

# Global Enterprises Use Aras to Design, Build, and Operate Complex Products



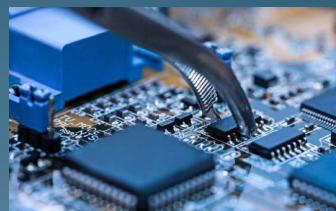
AEROSPACE



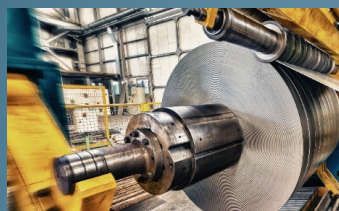
AUTOMOTIVE



DEFENSE



HIGH-TECH  
ELECTRONICS



INDUSTRIAL



MEDICAL DEVICES



AIRBUS



Carestream



Nidec

Kubota

BAE SYSTEMS

BOMBARDIER



CUBIC

NXP



HITACHI



Dräger



muRata



NORTHROP GRUMMAN



FUJIFILM



DENSO

RENESAS

ottobock.



LORD



# Digital Transformation Platform

Enterprise SaaS

Low-Code Platform

Digital Thread



Requirements  
Engineering



Systems  
Architecture



Program  
Management



Simulation  
Management



Variant  
Management



Product  
Engineering



Component  
Engineering



Technical  
Documentation



Manufacturing  
Process  
Planning



Quality  
Management  
System



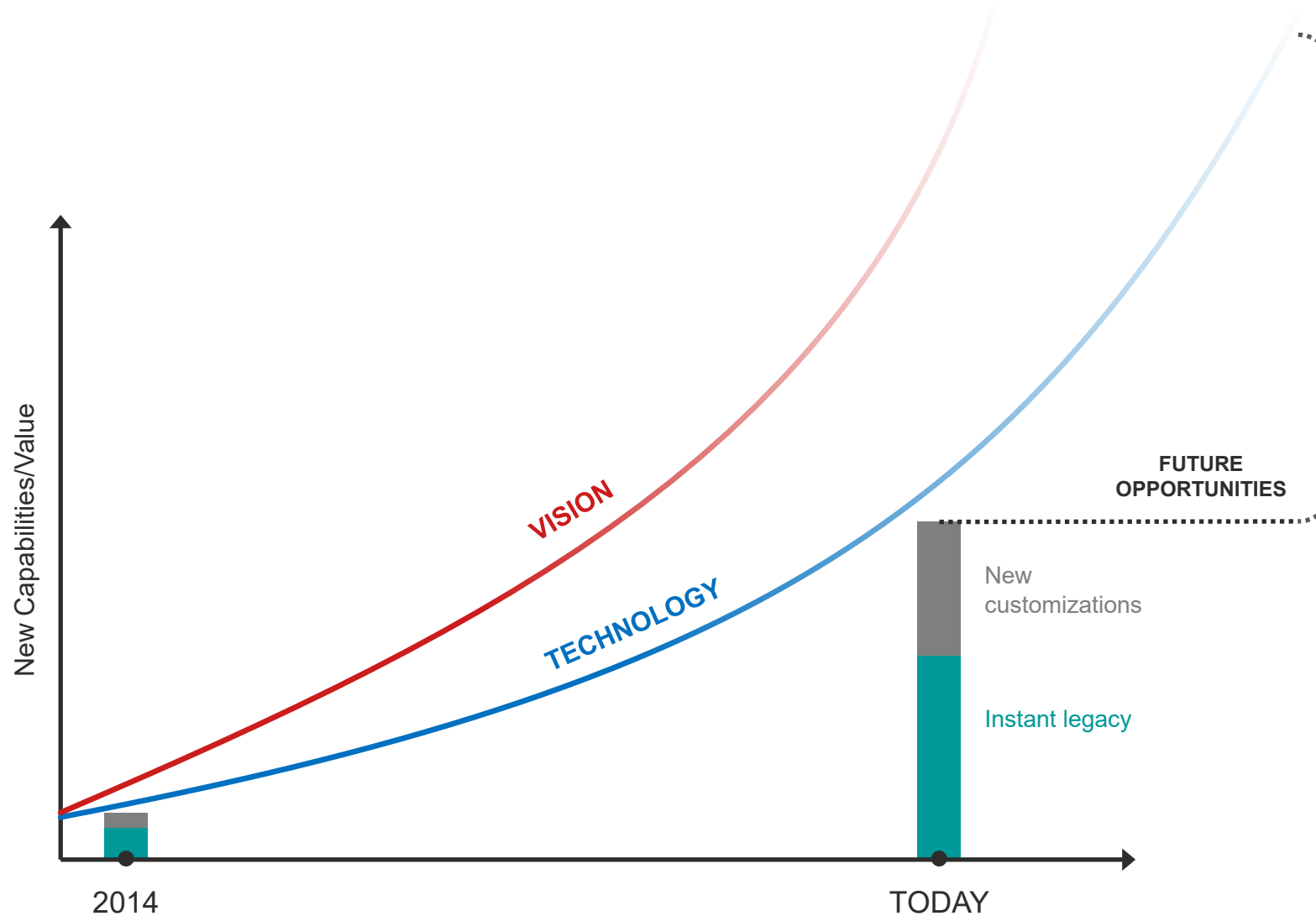
Digital  
Twin Core

INDUSTRIAL LOW-CODE MODELING ENGINE




PLATFORM SERVICES

REPOSITORY

# Are you Keeping Pace with Change?



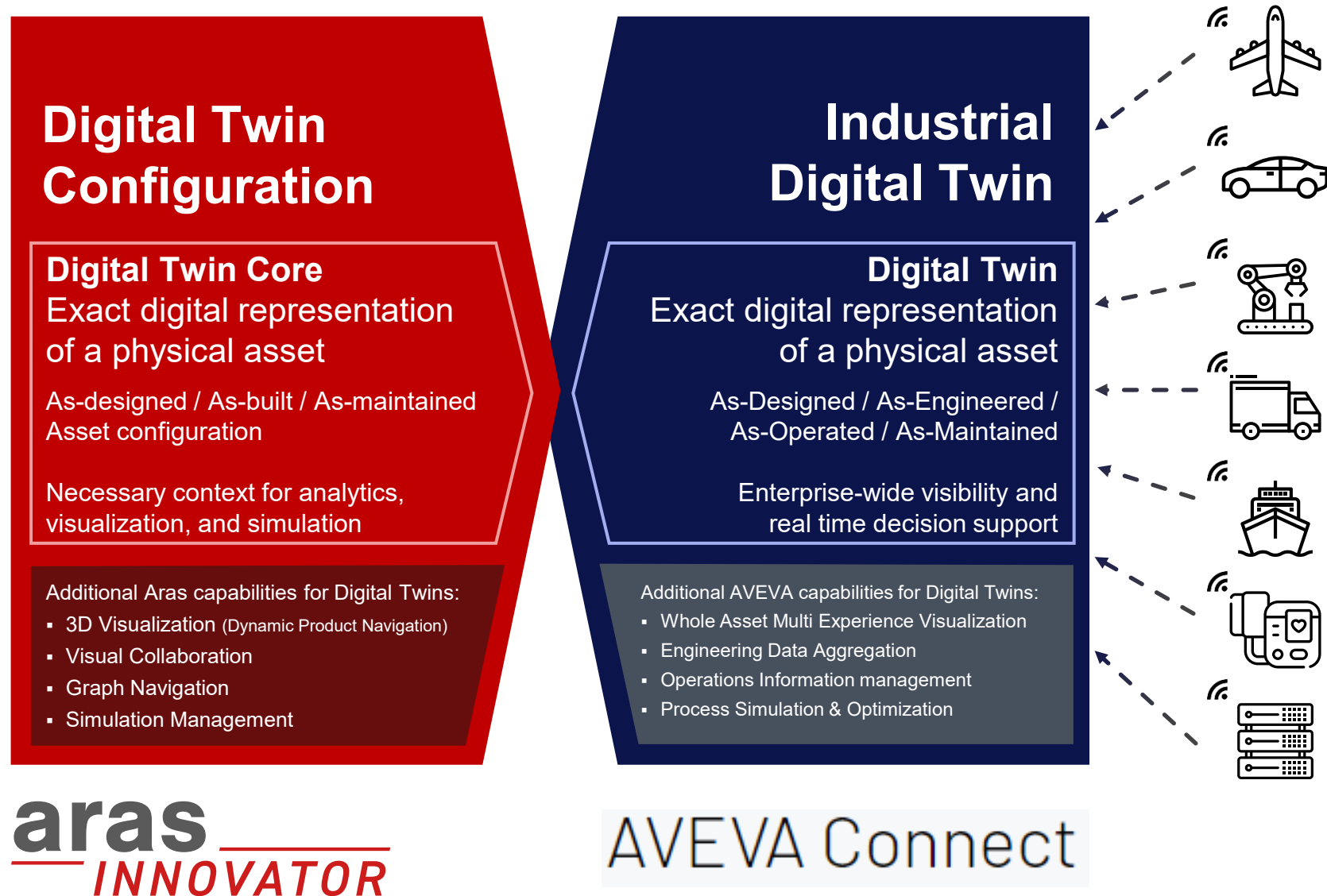
## PLM Upgrade Comparison

	Siemens	Dassault Systèmes	PTC	Aras
 Years between	12.4	8.8	8.3	1.5
 Months to complete	14	13	11	3
 Average cost	\$1.2M	\$987k	\$723k	\$46k

CIMdata Study



# Context for Building, Sustaining, and Using Industrial Digital Twins



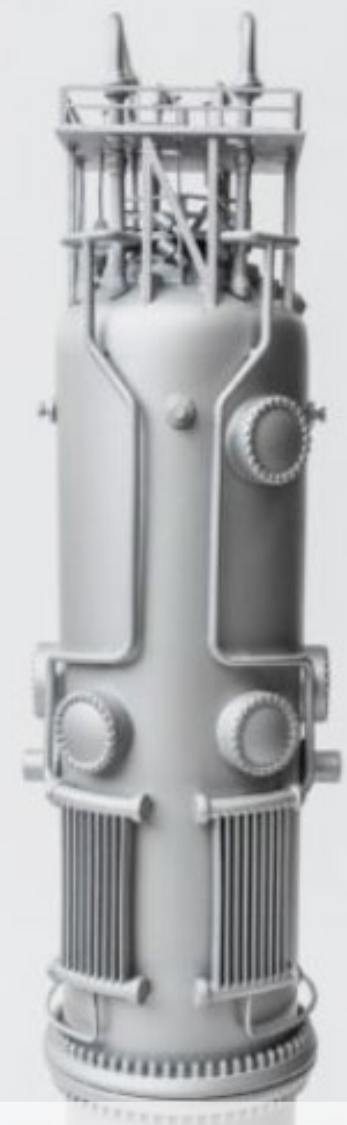
---

# Aras Case Studies

**NuScale Power / SMR Nuclear Technology provides a safe, simple, small, economical, scalable nuclear power generator designed to meet today's energy demands.**

▪ **Challenges:**

- Designs must still satisfy the same requirements of traditional plants
- Design requirements come in many forms and changes come at various times
- Legacy plants have struggled largely because information is document based
- While NuScale's SMR design is much simpler, they must still meet the same requirements for safety, regulations, and quality as those of a traditional nuclear plant.
- Simpler doesn't mean fewer requirements
- Looking for a "one stop shop" for requirements



## ▪ Solution:

- With Aras Innovator, NuScale took a simpler approach to PLM
- Configuration and customization replace out-of-the-box systems and provide long term value
- Use Aras Innovator for configuration management from design and concept through decommissioning
- Manage all variants in one place
- Need the ability to trace those requirements down to the part level at any given time

## ▪ Why Aras?

- Unique architecture adapts to meet changing business needs
- Replace disruptions with regular upgrades that include customized functionality
- Lifecycle traceability via digital thread and digital twin functionality
- Scalable platform, regular upgrades including customized functionality
- Open connectivity; tool agnostic

*With Aras we believe we will realize the benefits of the digital thread sooner, at lower cost, with a platform that can transform with NuScale. The unique architecture easily adapts to meet the changing processes and business requirements of our company and industry. Customization is not only allowed, but encouraged, with solutions tailored to our needs, rather than tailoring our processes to the software.*

*- Neil Olivier, Director of Corporate Services, NuScale*

# This EPC is a leading engineering and technology company that selected Aras Innovator to advance its energy transition strategy

## Solution

- Deploy Aras Innovator to support digital-by-design approach
- Full project lifecycle traceability and optimization

## Why Aras?

- Standardized data flows and seamless collaboration between disciplines
- Easy access to past project information to increase engineering re-use
- Ease of data integration for actionable reporting
- Supports creation of a digital twin backbone

## Benefits:

- Support faster delivery of new energy projects
- Decrease Investment Risk
- Increase efficiency and reduction of cycle times
- Create foundation for enhanced digital services offers following plant handover



*“Digitalization is one of our key enablers to drive operational competitiveness and support our energy transition targets. This partnership with Aras demonstrates our leading position in the industry’s digital transformation and our commitment to adopting a digital-by-design approach to develop and scale up new energy solutions. Our clients are very receptive to our data-centric approach, as it aligns with their vision of collaborative project execution.”*

**Leading EPC Company**  
Also, an AVEVA customer

# Here's Why AVEVA Chose Aras...

SaaS-driven Approach  
All Functionality, All Flexibility

Low-code platform  
Rapid Development

Flexible  
Adapt faster | Upgrade faster

Open | Unlimited connectivity  
Vendor Agnostic

Audit Trail for the Industrial Digital Twin  
Data Lifecycle and Config/Change Mgmt





Malcolm Panthaki

VP of Analysis Solutions

Aras  
mpanthaki@aras.com



Alan Mendel

VP Business Development

Aras  
amendel@aras.com



<http://www.aras.com>

# 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.




# Thank you!



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.

 [linkedin.com/company/aveva](https://www.linkedin.com/company/aveva)

 [@avevagroup](https://twitter.com/avevagroup)

#### ABOUT AVEVA

AVEVA is a global leader in industrial software, sparking ingenuity to drive responsible use of the world's resources. The company's secure industrial cloud platform and applications enable businesses to harness the power of their information and improve collaboration with customers, suppliers and partners.

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. With operations around the globe, we are headquartered in Cambridge, UK and listed on the London Stock Exchange's FTSE 100.

Learn more at [www.aveva.com](https://www.aveva.com)