AVEVA

On-time, on-budget capital projects

This is execution with a digital twin



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Benefits for EPCs

Benefits for owner-operators

How AVEVA can help you create a digital twin Proven results

Why AVEVA?



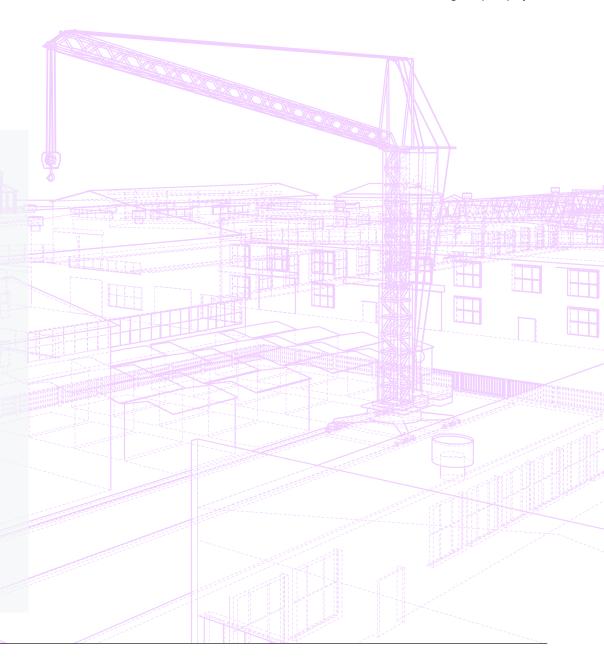




Introduction

Capital project delays are costly and common. Increasingly, EPCs and owner-operators are using digital twin technology to de-risk and optimize their capital projects at every phase of the project life cycle – from conceptual design into operations and maintenance.

In this ebook, we'll look across industries to discover how digital twin technology is helping leading industrial organizations improve the project design, build, and handover processes. Read on and learn how you can power seamless collaboration in a shared cloud experience, accelerate innovation, and turn sustainability into a competitive advantage.









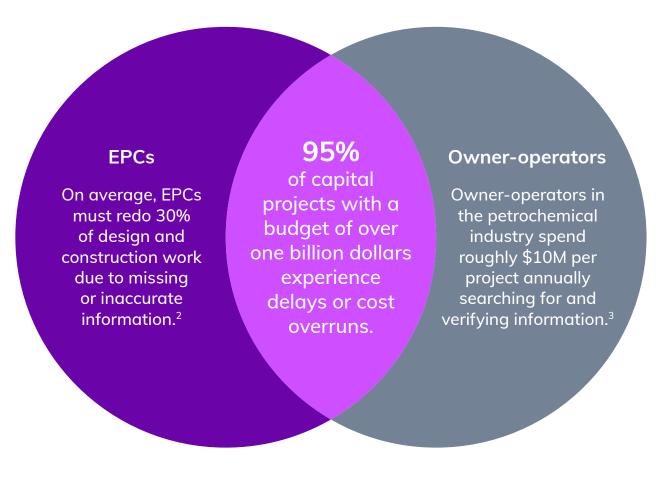
Challenges for owner-operators and EPCs

From mounting environmental, social, and governance (ESG) regulations, to supply-chain disruptions and labor shortages, a growing list of obstacles stand between industrial organizations and efficient project execution.

References

- Capital projects services. Accenture. (n.d.). www.accenture.com/gb-en/services/industry-x-0/capital-projects
- Miri, Mohammad, and Mahsa Khaksefidi. "Cost Management in Construction Projects: Rework and Its Effects." Mediterranean Journal of Social Sciences, 2015.
- 3. AVEVA presales industry research

Challenges by the numbers









Digital twin benefits for EPCs

One common data-centric environment

With a single, trusted hub of engineering information, stakeholders across the organization can collaborate seamlessly to reduce errors and re-work.



Contexualized data

With context-rich data, it's
easy to understand
relationships between
different pieces of information,
which, in turn, helps to
improve decision-making and
avoid errors.

Risk reduction

With remote access to data and information, you can reduce the need for on-site activities, minimizing risks associated with on-site work and improving safety.



Fast access to information

Empower your teams with the data they need to make faster, better-informed decisions and reduce project delays.



3D visualization

Help your teams understand complex designs and identify potential issues before they become problems with intuitive 3D visualization capabilities.



Enhanced change management

Track and manage changes throughout the project life cycle to reduce re-work and ensure that everyone is working with the most up-to-date information.

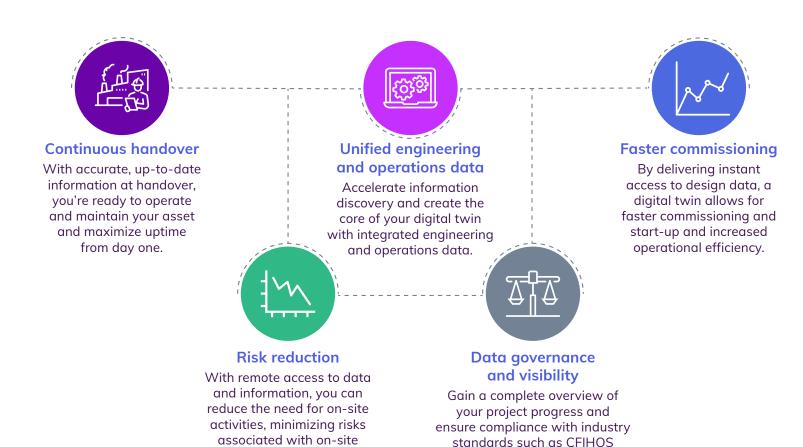








Digital twin benefits for owner-operators









work and improving safety.

(Capital Facility Information Handover Specification), ISO 15926, ISO 14224, etc.

Create a digital twin with AVEVA's help

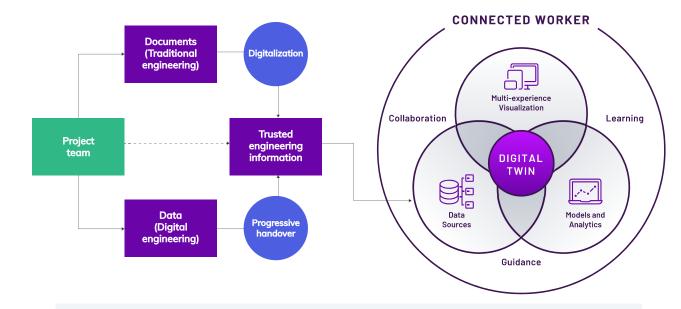
AVEVA tools enable you to create a digital twin, own it, and ensure that your data is always accessible, up-to-date, and appreciating in value.

AVEVA™ Unified Engineering integrates all 1D, 2D, and 3D design and engineering authoring tools into a single, data-centric environment and provides the framework for the digital twin.

At handover, AVEVA[™] Asset Information

Management enables a faster start-up and
more efficient transition to operations and
maintenance.

Together, AVEVA Unified Engineering and AVEVA Asset Information Management create a consistent, "living" digital thread that spans the entire asset life cycle. This empowers users with one reliable version of the truth and ensures the digital twin remains in perfect alignment with the physical plant.



AVEVA Unified Engineering integrates cloud-based engineering tools for multidiscipline 1D, 2D and 3D project data.

AVEVA Asset Information Management manages information from engineering documents, 2D and 3D models, and other sources.







Proven results

Across industries, our data-centric engineering solutions are helping leading EPCs and owner-operators achieve better design and execution processes and more sustainable capital projects.



KBR/bp ACE Project

With a suite of digital twin engineering solutions, KBR developed a single, connected environment to help bp achieve its remoteoperations vision.



Wood

Wood relied on AVEVA's extensive portfolio of engineering solutions to develop a digital twin strategy for greenfield and brownfield capital projects.



Eastman Chemicals

Eastman Chemicals used AVEVA's engineering solutions to cut engineering and design costs by 30%, and total installed costs by 3%.



SCG Chemicals

With industrial software solutions from AVEVA, **Shanghai Laogang Project** enhanced collaboration, reduced project costs, and avoided more than 200 construction clashes.







What our customers say:

It's going to help the operations team plan offshore maintenance activities onshore, so we'll be more sustainable and much safer.

Jonathan Montgomery Engineering Manager, **bp** AVEVA's engineering solutions enable our teams all around the world to work remotely, yet together, on one platform that spans all of our engineering data.

Thomas Cheylan
Projects Performance Director,
Veolia Water Technologies

Every process moves faster, more simply and more productively.

Siddartha Nassif
System Engineer Coordinator, **Promon Engenharia**



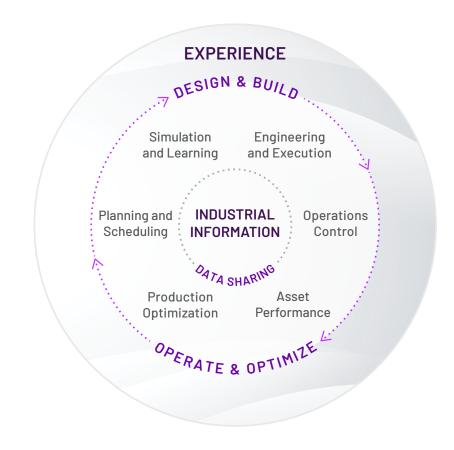




Why AVEVA?

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. With a data-centric approach to engineering, we help organizations power seamless collaboration across the industrial life cycle, simplify innovation, and deliver capital projects on time and on budget.

Over 20,000 enterprises in over 100 countries rely on AVEVA software solutions to design and build a better future for their business and for the world. By connecting people with trusted information and AI-enriched insights, AVEVA enables teams to engineer efficiently, optimize operations, accelerate growth, and turn sustainability into a competitive advantage. Named one of the world's most innovative companies, AVEVA supports customers with open, agnostic 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.



Talk to a digital twin expert









For more information, please visit:

aveva.com





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

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