



## CUSTOMER CASE STUDY

# Saipem: Building a digitally integrated EPC environment

Company Name - [saipem.com](https://www.saipem.com)

Industry - EPC

## Challenges

- Each project generates millions of data points to be managed
- Numerous toolsets and disparate teams led to manual data-sharing and reporting information bottlenecks, inefficiencies, and errors
- Manually calculating bills of quality was a time-consuming, error-prone process
- Needed to facilitate data collection, sharing, and analysis across individual projects and multiple projects

## Solution

- Deployed AVEVA™ Enterprise Resource Management to transform data management, expedite work, and integrate activities across disciplines and projects

## Results

- Integrated disciplines and automated processes to ensure all data is accurate and easily traceable
- Achieved full end-to-end material visibility by integrating ERM with procurement and construction software
- Minimized manual errors and repetitive tasks
- Gained real-time insights into material readiness, engineering progress, and construction activities
- Made historical data available within and across projects at the enterprise level

“To manage complexity, it is key to master three factors,” says Andrea Bertini. “Communication, communication, and guess what? Communication.” Bertini is a project manager at Saipem, where complexity is an everyday, every-minute reality. With sprawling operations in over 60 countries, Saipem is one of the world’s largest engineering, procurement, and construction companies, specializing in high-stakes, large-scale energy infrastructure projects.

Before industrial organizations can master communication, they first have to master data management, which is why Saipem partnered with AVEVA. With AVEVA’s expertise, and a suite of AVEVA software solutions, Saipem launched its EPC digital platform project and aligned its disciplines behind a centralized, consistent, and reliable data management system.

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—  
**Andrea Bertini**

Project Manager, Saipem

## Unified teams in a digitally integrated environment

At any given time, on any given project, there are a great many Saipem teams of different disciplines at work. And each discipline—engineering, procurement, and construction—has its own specific objectives and its own software tools. Unfortunately, in dynamic and sprawling project environments, more tools lead to more complexity. Before its new digital EPC platform project, Saipem teams had to share and report data manually, a time-consuming, laborious process that inevitably led to information bottlenecks and avoidable errors.

The goal of Saipem’s EPC digital platform was to avoid these inefficiencies and guarantee performance by establishing a shared, digitally integrated environment, uniting its operations across teams, disciplines, and locations. Today, this environment serves as a globally accessible data repository, streamlining data collection, analysis, and sharing across a single project as well as between projects for comparative analysis.

The parameters of Saipem’s new EPC platform are expansive, containing all the business processes and software tools related to engineering, procurement, and construction, as well as other functions like project management and cost control. At the center, stitching this digitally integrated environment together, is AVEVA Enterprise Resource Management.



Saipem specializes in sprawling and highly complex infrastructure projects.

## End-to-end materials management

Using AVEVA Enterprise Resource Management, the team at Saipem integrated its workflow processes to streamline materials management. The solution connects every stage of the process—from defining material catalogs to distribution, release, and warehouse management—ensuring efficiency, visibility, and traceability across Saipem’s supply chain.

Saipem’s deployment of AVEVA Enterprise Resource Management enables more accurate, real-time feasibility assessment, allowing its teams to plan construction workloads according to material availability and the readiness of engineering and design teams. The dynamic material tracking capabilities of the new platform allow Saipem teams to easily and accurately track and allocate materials based on project priorities.

And, with the visualization tools in AVEVA Enterprise Resource Management, along with AVEVA™ E3D Design, Saipem users can easily see project feasibility in 2D and 3D. These insights help teams anticipate challenges and keep materials and resources aligned with project needs.

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“Implementing everything inside a single solution allowed us to improve data traceability, reliability, and increase the efficiency of the end-to-end materials management process.”

- **Giuseppe Trefiletti**

Head of Instrumentation, Control and Telecommunication Engineering, Saipem

## Automated bills of quantities

Before deploying AVEVA Enterprise Resource Management, calculating bills of quantities was another time-consuming, manual process prone to inefficiencies. Converting engineering data into a construction-ready format is complicated work; engineering and construction activities rarely align in a simple one-to-one relationship. Many materials undergo multiple processing stages. A pipe, for instance, may be just a single line item on a bill of materials, but it entails multiple construction activities on the bill of quantities; the pipe must be cut, welded, spooled, erected, painted, hydrotested and so on.

With AVEVA Enterprise Resource Management, Saipem created a fully integrated environment that connects engineering and construction activities, enabling the team to automatically generate bills of quantities from bills of materials. The new platform also standardizes the construction items list, ensuring that all engineering disciplines work from the same data set. By integrating with Saipem's project management information system, AVEVA Enterprise Resource Management eliminates bottlenecks and enables real-time data sharing and cross-discipline collaboration.

### Citation:

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“The ongoing digital transformation program in Saipem is aimed exactly at this: to avoid being doomed by the incredible amount of data to be produced and managed, and instead, to be blessed by it.”

- **Andrea Bertini**

Project Manager, Saipem

## Conclusion

By ensuring consistent, accurate data is easily accessible to all disciplines, Saipem's new digital EPC platform empowers its teams to collaborate more seamlessly, reduce execution times, and minimize bottlenecks on any given project. And, beyond individual project outcomes, the platform also enhances efficiency at the enterprise level. The platform makes historical data accessible across projects, allowing Saipem to compare project results, analyze trends, refine best practices, and improve decision-making across its global operations.

[Watch the presentation](#)