

DZ Engineering completes digital integration between its TeamSystem management platforms

As part of the Emilia-Romagna Digital Transition Call for Proposals, DZ Engineering has completed a major integration project between its TeamSystem management platforms: Alyante, the company's ERP for Administration and Control, and CPM – Construction Project Management, the platform for project planning and operational control.

Although developed by the same software provider, the two systems are built on independent logics and do not offer native, out-of-the-box integration. Before the project, this resulted in data fragmentation across different software for the company, requiring manual and redundant data entry. Bringing the two platforms together therefore required careful engineering and custom development work.

Project objectives

The initiative addresses five priority objectives, fully aligned with the call's priorities. The first concerns the digitalization of business processes, through the automation of critical workflows such as project import, WBS management, and activity reporting. Next is resource optimization, made possible by real-time monitoring of planned versus actual hours. The third objective is strengthening supply chain competitiveness, through a data-driven approach that improves the accuracy of quotes, while the fourth focuses on environmental and operational sustainability, achieved through process dematerialization. Rounding out the picture is the strengthening of collaboration with subcontractors and clients, enabled by an interoperable digital ecosystem.

What changes in business processes

At the heart of the project is a centralized database that unifies design, project management, and accounting, eliminating duplication and manual errors. Key features introduced include automatic import of projects and WBS structures, real-time synchronization between planned and actual hours, smart alerts on budget-to-actual deviations, and centralized tracking of subcontracts, expenses, and materials.

The project also laid the groundwork for a shared cloud platform for clients and suppliers, designed for controlled access to documents, schedules, and certificates, as well as for future integration with BIM, enabling dialogue between management data and 3D models within a Construction 4.0 framework. Security and external interoperability were also addressed: API connections with third-party systems were implemented, such as SOA platforms for participating in public tenders, alongside measures based on end-to-end encryption and backups on certified regional servers.

Results achieved

Thanks to this interoperability, DZ Engineering has moved from partially digital processes to an integrated, predictive ecosystem, with measurable impacts across multiple areas: -30% in administrative processing times, -20% in costs related to errors and delays, -70% in paper consumption, -15% in emissions thanks to optimized subcontracting logistics, and -25% in approval times, made possible by auditable reports and real-time dashboards for monitoring productivity, cost, and deadline KPIs.

A model for the regional supply chain

The project positions DZ Engineering as a digital benchmark in its sector, demonstrating how integration, automation, and data-driven management are key drivers of competitiveness. Beyond modernizing internal processes, the initiative stands as a scalable, replicable model for regional SMEs, helping to strengthen the entire Emilia-Romagna production ecosystem on its path toward Industry 4.0.