Equans Data Centers: Navigating the digital transformation of data center construction

In the evolving landscape of data center construction, where speed, precision, and scalability are essential, Equans Data Centers has embraced digitalisation to meet the unique demands of hyperscalers and colocation clients. By focusing on collaboration, innovation, and sustainability, Equans Data Centers is reimagining how these critical facilities are designed, built and commissioned, setting the stage for a more efficient and future-ready industry.

Rethinking complexity in construction

Designing and constructing modern data centers comes with inherent challenges. These digital facilities require seamless coordination among numerous stakeholders, intricate workflows, and precise execution to meet clients' tight deadlines and high expectations while aligning with industry standards. Recognising these complexities, Equans Data Centers has taken a proactive approach to address four key areas:

Improved visualisation of multidisciplinary activities

With multiple trades working simultaneously, clear and accessible data is essential. Digital models provide real-time insights, allowing teams to anticipate and resolve potential clashes while supporting informed decision-making. This advanced planning ensures efficient construction and better risk management.

Streamlined work in confined space

The dense infrastructure typical of data centers often poses logistical and safety challenges. Equans Data Centers has adopted prefabrication as a solution, reducing the need for on-site adjustments in constrained environments. This approach has enhanced efficiency and improved build quality.

Enhanced progress monitoring

Transparency is a cornerstone of Equans Data Centers' methodology. Integrated collaboration platforms give all stakeholders—including clients—clear visibility into project milestones, supply chain management, and overall progress fostering trust and accountability.

Collaboration in the digital age

Digitalisation plays a vital role in Equans Data Centers' ability to foster collaboration across teams. Tools such as Building Information Modeling (BIM), augmented reality, and 3D scanning are integrated into workflows, helping teams align on shared objectives.

The influence of digitalisation encompasses more than technological advancements. At Equans Data Centers, collaboration is a culture. Creating a shared digital ecosystem, the company ensures that all contributions are valued and decisions are informed by a wealth of collective expertise.

"Access to accurate, up-to-date information is at the heart of successful projects," explains Simon Giraud, Head of BIM Management & Coordination. "By making BIM tools accessible to all stakeholders, we've created a more inclusive and efficient process that addresses coordination and safety challenges early on. It's about working smarter together."

A Measured Approach to Innovation

The results of the digital transformation are evident in every project the company undertake:

 Optimised processes: Prefabrication and data integration streamline workflows, reducing onsite risks and improving cost efficiency.

- **Enhanced safety:** Proactive design reviews minimise high potential risk, improving on-site safety.
- **Consistent Quality:** Automated quality checks ensure the highest standards across all trades and phases of construction.

The company approach has been tested on smaller-scale projects, such as live refurbishment data centers refining its practices. These learnings are now applied to larger-scale new-built and fit-out projects, ensuring the approach is robust and adaptable.

Looking Ahead

At its core, Equans Data Centers' digital transformation reflects a commitment to progress. By aligning its practices with the needs of hyperscalers and colocation clients, the company has positioned itself as a strategic partner for the future of data center design and construction.

The journey continues, with sustainability and innovation remaining central to their strategy. Whether working on greenfield projects or fit-outs, the company is focused on creating infrastructure that meets today's demands while preparing for tomorrow's challenges.

Equans Data Centers isn't just building facilities—it's building solutions, relationships, and a future where digitalisation enhances every aspect of design and construction. Through careful planning, collaboration, and a dedication to excellence, the company is helping to shape a resilient and sustainable data center industry.