

# DBA Group adopts Autodesk's collaborative cloud solution and increases design time and cost optimisation

**COMPANY**  
DBA Group SpA

**LOCATION**  
Villorba (Treviso)

**SOFTWARE**  
Autodesk Revit  
Autodesk Navisworks Manage,  
Autodesk Construction Cloud,  
Autodesk Bim360



"Since 2014, we have been paving the way for the digital transformation of processes and BIM implementation... over time it became a driver of our company's progress, particularly within our ICT investment sphere."

Daniele De Bettin  
Founding partner

The Treviso-based group designs the most powerful digital infrastructure in southern Italy, combining Autodesk's Common Data Environment with Revit and Navisworks through the Autodesk Construction Cloud collaborative platform (formerly BIM 360).

## Company

Founded in 1991, the company is based in the Dolomites, in Santo Stefano di Cadore. The four De Bettin brothers established an engineering and architecture firm - "De Bettin Associati." A few years later DBA Group SpA was established. It is currently listed on the stock exchange with 15 offices in Italy and 10 abroad. The company initially handled Engineering and Project & Construction Management services in the civil, infrastructural and plant engineering fields. Since 2005 it has added Asset & Lifecycle Management services, related to the automation of life-cycle management processes for mission-critical works and infrastructures, and ICT solutions.

BIM DBA PRO Head Simone Di Biase said: "Developing software applications and platforms responds to the need to optimise internal design flows which are provided to our customers. as value-added services. This is document management, site safety, and asset maintenance software."

## Dedication to innovation and digital transition

Our approach to work embraces innovation, which is further enhanced by our commitment to employee training and the active participation of our staff in reaching our objectives. Founding partner Daniele De Bettin said: "Since 2014, we have been paving the way for the digital transformation of processes and BIM implementation. At first, adopting BIM seemed to be a natural evolution in the engineering development typical of a company focused on innovation. Over time it became a driver of our company's progress, particularly within our ICT investment sphere."



Image courtesy of DBA Group

As management, we believe in BIM methodology, we think it is a crucial tool. We could define it as a “revolution”, because it has been an upheaval to previous working procedures. The transition from the two-dimensional to the three-dimensional world took place gradually and focused on staff training. DBA Group boasts comprehensive BIM expertise. The Group’s specialists are versatile designers whose extensive training is essential for project execution. Our goal is to extend this approach to the post-construction phases, i.e. management and maintenance, delivering the model’s Digital Twin to the customer. We are already in the testing phase with some customers. The Caserta project is one of them.”

### **The Caserta project**

DBA Group Project Manager Stefano Russo, introduces the Caserta Hyperscale Data Centre project commissioned by DATA for MED (Mediterranean Digital HUB).

“In recent years, Italy has become a central hub for connectivity investments linking Europe, Africa, and the Middle East. Our customer, a powerhouse in the real estate industry, invested in a strategic asset for the country’s digital transformation - a Data Centre.” The project includes a three-building campus covering 60,000 square metres in Caserta. It will be the most powerful digital infrastructure in southern Italy - a Hyperscale of 7.5 MW of IT capacity. It will provide edge for operators, companies and, because of the central location in Caserta, it will be the perfect location for disaster recovery services for large organisations.”

With its long-standing experience, the customer relied on DBA Group to design the campus. Di Biase said: “Given the work complexity, it was imperative for us to use a methodological approach other than BIM. The customer coming from a different professional field and lacking detailed knowledge of the tool, presented a challenge that DBA Group successfully turned into an opportunity.”

Within few sessions, the customer was shown the tool’s basic functions, to independently monitor the work progress and enter notes. Gradually, the customer’s engagement intensified, leading to its active participation in the model’s development and the coordination meetings with the BIM Department and other stakeholders.

We initiated what we refer to internally as a “social experiment,” where we engaged the customer directly on the Autodesk Construction Cloud platform. This allowed for collaborative project sharing by providing a dedicated area for the models developed during different work phases. It’s rare for a customer to be this deeply engaged in the design process. It was exceptional teamwork, with a group of around 30 experts, each specialising in their respective fields, contributing to the project’s success.

Integrated design is a DBA hallmark - the Group oversees the disciplines to execute sophisticated projects, including architecture, structural, and plant engineering. This multidisciplinary approach within the technical domain is mirrored by specialised roles in the BIM department, such as BIM Manager, Coordinator, and Specialist.

The Autodesk AEC Collection suite (particularly the Revit and Navisworks tools) was used as a BIM Authoring tool for information modelling development.



Image courtesy of DBA Group

Alongside this, the Autodesk Construction Cloud platform formed the common data environment to which designers, consultants, technicians and the external customer had customised access.

DBA Group BIM Coordinator Rosa Sodano said: “The tool’s versatility and flexibility enables us to bring a customer unfamiliar with 3D modelling tools and engineering software closer to the problems associated with a construction as complex as a data centre.

Autodesk BIM Collaborate Pro was crucial in showing the different work phases during coordination meetings.”

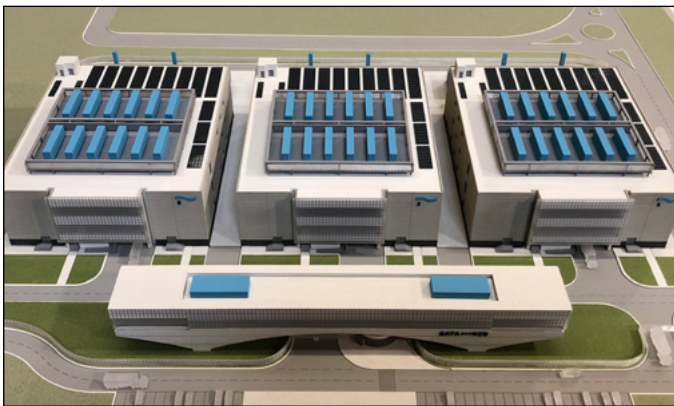


Image courtesy of DBA Group

### “Less mail is more”

“The tool played a key role in internal technical meetings. The “Issues” feature enabled us to highlight details at a certain point within the document and model. These could be assigned to a team member from the relevant disciplines, allowing us to monitor the resolution process.” Sodano said “Everything was tracked, including questions, answers, notes, and exchanges of documentation and technical support sheets taking place directly on the platform.

Our aim was to reduce the volume of emails and prevent the redundancy of messages and documents. By enhancing coordination with these collaborative tools, we could keep track of all actions. We used the full suite of the cloud platform’s functions successfully, including document management, cloud collaboration and model coordination. This approach ensured data remained at the core of our operations, fostering an efficient organisation and workflow optimisation.

### Two-dimensional vs. BIM world

The Caserta project could have been executed within a two-dimensional framework, yet the constraints of such a design approach would become evident, particularly in terms of plant engineering, which is a critical element in a data centre workflow. BIM integrates useful information in a single model at every design stage, including architectural, executive, (structures, installations, safety, maintenance, energy performance) and management.

Without this component in the BIM model, complications could arise during the construction phase, leading to familiar issues for those involved. These include work interruptions, postponements, design modification requests, disagreements with contractors, and more.

BIM enables us to optimise and solve anomalies, issues, interferences at the design stage, making the designer a key player. The control of information is thorough, double-checks are carried out before solving an issue.”

BIM DBA PRO Head Simone Di Biase said: “The BIM methodology allows design optimisation by about 30 per cent. However, its true value is obtained across the work’s life cycle. Similar projects that do not use BIM have an error margin of approximately 10 per cent, while BIM has almost zero. Any interferences and anomalies that emerge are resolved directly on the model.”

DBA PRO BIM Coordinator Samuele Morellato stated that DBA has long had a design standard that it applied to the Caserta project. “Our workflow is streamlined by predefined parameter sets within our discipline templates. The parameter list, integrated with a Work Breakdown Structure (WBS) level, enables us to assign a code to each element we model. This helps manage the project’s digital timeline (4D) and financial aspects related to time (5D), all the way to creating the work schedule and performing the estimated metric calculations.

“We are slowly adopting the LOIN—Level of Information Need—as outlined by ISO 19650-1 - which involves incorporating essential information into the model. Enhanced management of information significantly boosts efficiency across all levels.

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Simone Di Biase  
Head of BIM DBA PRO

## Digital twin

At the end of the design phase, DBA Group will produce a simulation video with Navisworks on the different implementation phases and deliver it to the customer. Then construction work on the campus will begin. DBA is already looking forward to the construction and maintenance phase - DBA PRO BU-DC Business Unit Manager Datacentre Mission Critical Infrastructure IT Marco Paccagnan.

“Our BIM model will be used as a geometric and informative basis by the Innovation Team for developing the Digital Twin, which exploits the IOT potential to enable optimised asset management.”

“DBA has embraced a comprehensive strategy—an information model that assists the customer predictively. This enables simulations of the impact of changes, whether intentional or accidental, evaluates the viability of innovations, and forecasts likely outcomes.

The idea that drives DBA Group is to better model assets in the virtual world to improve decisions in the real world.

This is a process that requires dedicated effort. We are engaged in this journey” – says De Bettini at the end. “It is crucial that supply chain stakeholders join us in embracing and understanding BIM. It is essential to elevate everyone to a uniform level of knowledge, enabling us to communicate effectively and fully exploit the benefits of this technology.”