



Project partners

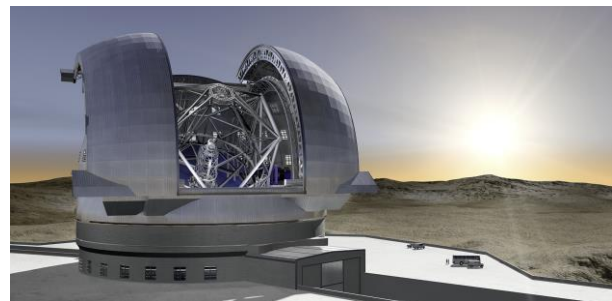
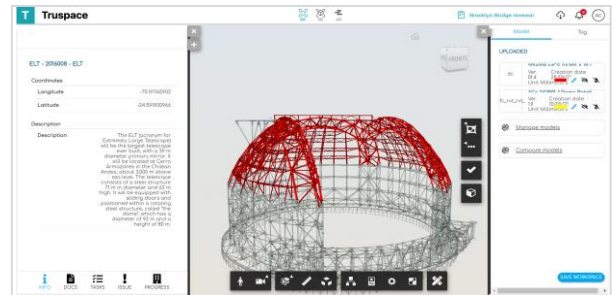
4Days



Overview

Starting from 2018, the **Cimolai Group**, a world leader in the realization of large complex works, has decided to undertake a partnership with **4Days** for the adoption of **Truspace as a platform for the integration and management of all internal and external processes** of collaboration with BIM methodology, from design to implementation. The project involved a **complex change management process**, based on the progressive analysis and re-engineering of processes and their digitalization within Truspace.

To date, all of Cimolai Group's orders are managed through Truspace, with over 500 active users among internal collaborators, suppliers and customers who collaborate via web on the platform, with hundreds of thousands of documents and models managed. But also, the integration of the phases of Design, SteelDesign, Production, Quality Control, Planning, Construction Site, with important efficiency and quality improvements.



Cimolai Group

Protagonist for over 70 years in the design and realization of complex steel structures, Cimolai S.p.A., owned by **Luigi Cimolai**, currently has a turnover of **about 500 million euros** and employs over **3000 workers** of which 1500 are directly employed in **iconic projects around the world** (Europe, United States, Canada, USA, Canada, Latin America, Middle East and Africa).

These include **the largest telescope on the planet**, the ELT (Extremely Large Telescope), with a primary mirror with a diameter of 39 meters, which will be located in the Atacama Desert in Chile.

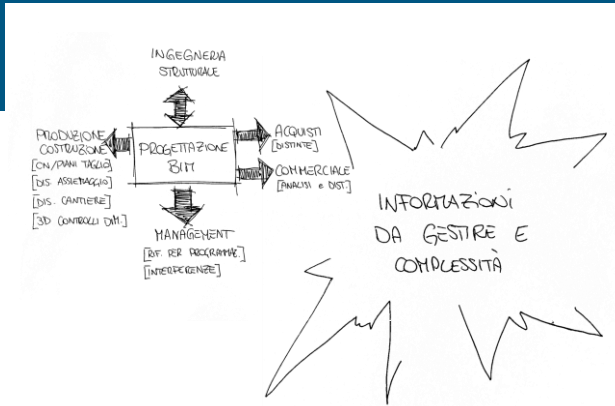
Other projects with great international recognition are: **the Al Wasl dome** for the EXPO 2020 in Dubai, **the Al Bayt stadium** in Qatar for the next World Cup, the floodgates for the new Panama Canal, **the "Oculus" subway station** by Calatrava at Ground Zero in New York, the complex honeycomb structure "Vessel" and **the cultural center "The Shed"**, both in Manhattan. In Italy, among the other works, Cimolai has built **the new Terminal of Fiumicino Airport** in Rome and the **AV railway station** in Reggio Emilia.

Finally, the company has cultivated a solid relationship with the shipbuilding market, building the carpentry of ships such as such as **Seabourn Odyssey**, **Sojourn** and **Quest** completed between 2008 and 2010.

Company

In the last two years the **barge Arcalupa** with a loading capacity of 14000 tons, the **RO-RO ferry Iginia** and the extra-luxury cruise ship **Seabourn Venture**, twin of the Pursuit, which was recently completed at the Cimolai plant in San Giorgio di Nogaro and launched last April.





Project 1/2

The decision to start the Truspace project with 4Days was made in **2018**, within an **R&D** project that aimed to deeply innovate the process of **managing complex projects** (www.cimolai.com/it/ricerca-e-sviluppo/).

Project milestone: **The adoption of a single solution** that integrates all of Cimolai's asset management sub-processes: design, production, and installation.

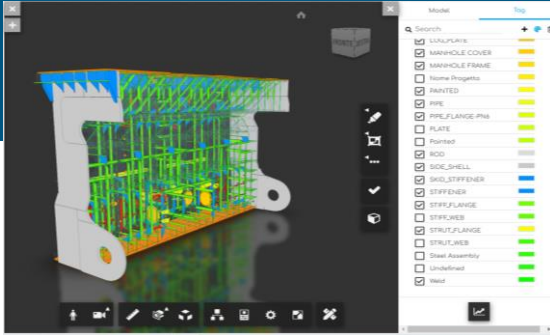
- The full **consistency** of the solution with the methodological guidelines of international **Building Information Modeling**
- A purely **WEB and Cloud technology**, flexible in the System Integration processes and able to manage the collaboration in a single platform of internal departments, suppliers and customers.
- **Compliance** with Cimolai specifications in terms of **data security**
- Measuring efficiency and **quality KPIs to support the process** of profound change

Project Team

Ennio Picco, Denis Durante (Cimolai),
Emilio Ziraldo, Gabriele Cossu,
Alessandra Commisso (Truspace),
Stefano Motta, Massimo La Rosa (WebRatio)

The **selection** of the partner(s) for this innovation challenge was led by the Group's Technical Director, **Ennio Picco**, and his team. The process was conducted at an **international level** and lasted more than a year as there were no solutions or projects on the market that could fully satisfy the requirements set by Cimolai.

The choice fell on **4Days** as a **partner** and on **Truspace** as a **technological solution**. The main reasons that led to the development of the collaboration were the potential of Truspace solution and the ability of 4Days to accompany projects of deep process reengineering and change management along paths of innovation.



Project 2/2

The project involved the creation of a **mixed team** coordinated by **Denis Durante** (BIM Coordinator and CDE Manager Cimolai) and **Emilio Ziraldo** (Co-Founder and Senior Consultant of 4Days).

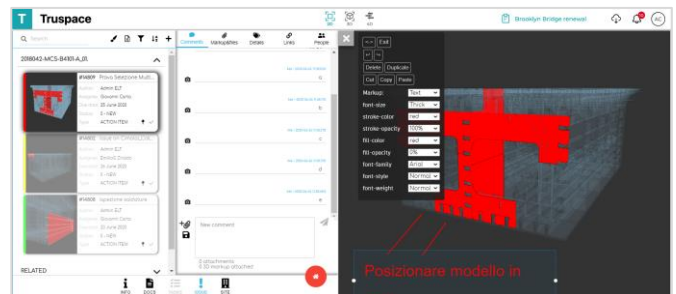
The design framework was built on a **two-year roadmap**, featuring **21 goal points** and an approach inspired by Agile methodologies given the complexity.

The commitment of the project team has been weekly, with alternating phases of **analysis and re-engineering of processes, experimentation of Truspace** for their digitization, prototyping of ad-hoc solutions, testing and release of performance-optimized solutions, extension of approved solutions to staff involved in technical processes.

The project has been **constantly tested and formally evaluated by internal and external stakeholders** (design partners, end customers such as the European Aerospace Agency) and assessed by a steering committee with Cimolai's main departments.

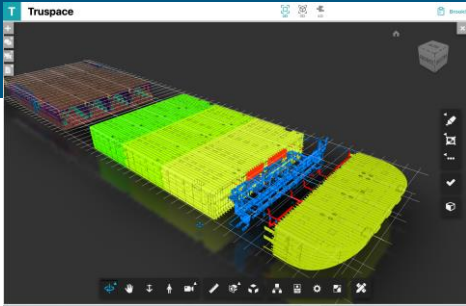
Over time, the functional coverage, throughout the life cycle of assets managed by Cimolai, has been completed:

collaborative design and the Common Data Environment model, Steel Detailing and Production activities, Quality Control, Logistics and Site management, Time and Progress Planning, integration with the Cimolai management software ecosystem, definition of Integrated Data Analysis models.



At the end of the two years **90% of the project objectives were achieved and Truspace** management was extended to all Cimolai orders (over 500 users, hundreds of thousands of documents, models and data managed).

In 2020, planning and collaboration was renewed with the aim of anticipating business and technology evolutions, with a focus on roll-out to all subsidiaries, site and maintenance processes.



Outcome



Project objectives achieved in the first two years: 90%.



Reliability of forecasts and actual costs over the four-year period: 100%.



Efficiencies and savings achieved through customer measurements:

- Design process, estimated 15 people/year, approx. 15%, approx. ... €.
- Quality process, estimated 7 people per year, approx. 20%.
- Site process, estimated 30 people, approx. 18%.



Application coverage of asset lifecycle subprocesses: 80 percent



External user satisfaction index: 100%



Internal User Satisfaction Index:

- Relief 2019: 70%
- Relief 2021: 77%
- "we are in the future ..>, "we are now a cutting-edge company .."
"never again a construction project without Truspace .."
- effectiveness of Agile methodology: 100%



People



"As it has often happened to me over the course of my career, four years ago we closed our eyes and made the decision to undertake this very complex yet strategic innovation project, very complex to support the strong growth drive of the group through the digitization of processes in a BIM perspective.

Not without difficulty, but years later I can only express my full satisfaction for what we have built, aspiring to a leading role in technical and methodological innovation leader."

Ennio Picco

Technical Director
Cimolai



"I'm very proud of what we've been able to achieve with the Truspace project, both from a BIM process engineering perspective and from an internal staff participation perspective. It wasn't easy, it still isn't, but together with 4Days we built a strong, collaborative, very results-oriented and very transparent team."

Denis Durante

CDE Manager, PM
Truspace Cimolai



"I can't hide my pride and satisfaction for what we have built in these years with the Cimolai Group and I believe that this is a very high level experience given the international standing of the customer and the sharing of values and work ethics.

I believe that we can look back on the past by concretely measuring the results obtained and look forward to the future with clear ideas on the next steps that can be taken with the customer and with Truspace technology."

Emilio Ziraldo

Co-Founder 4Days

Truspace

Integrating possibilities

