

# New Competences Move up a Gear with iTWO



Headquartered in Copenhagen, MTH Højgaard Group is known as one of the leading construction and civil engineering companies in the Nordic countries who works with clients throughout Denmark and in multiple countries overseas. The company solves all needs within construction and civil engineering from designing to building bridges, housing and business property.

Driven by the intention to be the most productivity-enhancing building and civil engineering group in the construction and civil works industry, MTH implemented iTWO 5D BIM technology in 2014 and started working with VDC (Virtual Design & Construction) to go beyond geometry and explore alternatives, enhancing the company's competences and gaining tremendous business opportunities.

**Headquarter**  
Copenhagen, Denmark

**Founded**  
1918

**Industry**  
Construction

**Products & Services**  
Civil works & Commercial Construction & Public Sector Construction

**Employees**  
4,200

**Revenue**  
914 Million Euro (2016)

**Website**  
<http://mth.com>

## Target

MTH lunched a new business plan with changing productivity being the top priority. In order to enhance productivity, the company had to be very good with virtual design and construction – going through the visualization and simulations of projects before building it in real life.

## Solution

iTWO is a 5D BIM solution that enables 5D simulation of the project before physical construction. With iTWO, the MTH team can run different simulations and various scenarios of a project until they find the ones that have lower risk, lower cost, and higher value which lead to higher productivity.

## Implementation

- MTH set up a process that suits the way they want to work with iTWO, namely, Strategy Research - Urban VDC – VDC 5D – BIM – FM TCO.
- With iTWO, MTH integrates design, time and cost both in the system and in their work process.
- The company can include its value chain early for project optimization. MTH gets all stakeholders into the VDC lab at the very early stages to get their insights on the optimization of the project.
- The team strive for early collaboration with clients. MTH had about 200 Client workshops over the last 2 years. 2 to 3 hours' discussions over the projects early in the planning stages enhances the project performance.
- Work with alternatives. With iTWO, the team can put different alternatives in and compare them to get the preferable version easily.

## Outcomes

- iTWO 5D enables MTH to centrally monitor and benchmark the company's enterprise-wide project performance. Productivity is increased and competence moves up a gear.
- The tender win rate has soared up from 17%, 10% in certain segments to 40% and 50% - a huge game changer for the company.
- MTH has achieved effective digital collaboration among all stakeholders of the project, which is the condition for being able to work the context of the building or civil engineering project into the model. Some state-of-the-art projects such as the new headquarter of Nordea Bank, and Frederikskaj luxury apartments, Copenhagen, have been achieved.

■ Centrally Monitor  
Enterprise-wide Projects

■ Tender Win Rate Soar up to 50%

■ Work with Alternatives to Get the Best Solution

■ Effective Collaboration among All Stakeholders