What advantages did Verifi3D bring to Hazenberg Bouw?

a TBI pilot study



CONSISTENT design process



The **Problem**

The AEC landscape faces a myriad of challenges as the complexity of their projects increases. Global trends like population growth, urbanization and the transition towards Smart Cities are just a few examples of the main contributing factors. As a consequence, construction projects require several working phases, ever-growing amount of data and a wide diversity of competencies and skills, often leading to inaccuracies and miscalculations, costly and time-consuming rework. In the last couple of decades, we are witnessing an increase in the digitalization amongst AEC professionals, more specifically, the adoption of BIM (Building Information Modeling). While innovation has simplified a lot of operations, large-size projects still suffer from slow communication and complex collaboration processes. Other difficulties are making large design dataset available and updated along the entire working cycle.

The Importance of **Innovation**

Innovation is key to overcoming these challenges, especially when triggered by the leaders in the industry. TBI is a major holding company in the engineering and construction industry located in the Netherlands, whose goal is to develop, renew and maintain the physical living environment in a sustainable way.

Thanks to its strong group of companies and long experience, TBI is able to perform several types of assignments, from small initiatives to complex, highprofile projects, becoming a reference point for private and public clients. TBI is also one of the corporate partners of YES!Delft, the leading Tech Incubator in Europe, which Xinaps joined in 2016.

Digital enabler

TBI SSC-ICT is one the daughter companies of TBI that support corporate innovation and has been proactively engaged in the in the innovation process of Xinaps. As a front runner of digitization in the building and construction industry, they have seen the potential benefits of Xinaps for several TBI-companies. When Xinaps asked for a pilot, they have been the valuable connector between Xinaps and Hazenberg Bouw. Important for establishing digital transformation within the TBI holding company. Hazenberg Bouw, embraces the innovators mindset, becoming one of Verifi3D's first adopters.

The Solution

Although there are numerous tools out there performing model checks and data validation, designing an 'easy-touse' integrated solution for different VDC professionals is complex. One of the all-rounded tools, launched in September 2019, is <u>Verifi3D</u> by Xinaps. Verifi3D is a cloud-based SaaS (Software-as-a-Service), which allows classifying building design data, conducting automated checks in compliance with regulations and reporting issues realtime. All in one platform. The solution's cloud-based structure facilitates the communication between project members in a Common Data Environment (CDE), while the automated processes unload the operator from the time consuming task of manually validating the design and its consistency. Verifi3D further helps professionals stay compliant with global, local and project-specific requirements, as well as with ISO 19650 standards. Valuable experiences with Verifi3D have been shared by TBI (Techniek, Bouw en Infra).

The **Results**

Hazenberg Bouw is an engineering, construction and infrastructure firm, which benefits of a wide portfolio of competencies: from apartments and houses to roads, bridges and more, Hazenberg is capable of satisfying the most complex customers' request. Verifi3D showed its benefits since the very early stage of use. Thanks to its intuitive user interface and simple menu configuration, the operators managed to comfortably use the tool just after a few clicks.

Verifi3D's main advantage is its user-friendliness: Verifi3D does not require long training hours or extensive previous software knowledge. The Hazenberg team was pleased to see a significant cut of hours that otherwise would have been spent on training. Difficulties in data processing and format integration are a common challenge when importing large datasets into an on-premise design software. Processing design models could become a cumbersome and time costly operation, especially if users don't have considerable computational power available.

The power of the cloud was one of the main advantages for Hazenberg Bouw – when using Verifi3D, there is no need to possess the ultimate hardware because Verifi3D runs the models on cloud. Moreover, the team showed a positive response towards the ability to export their own models directly from Revit and to work directly on the source file. Hazenberg mentioned that Verifi3D's third-party integration with Autodesk BIM 360 and Revit and IFC support facilitated their collaboration with other teams and within the company. Sharing a model has never been so easy! Considering the cloud structure, the Hazenberg Bouw team mentioned that Verifi3D is capable of bringing their workflow to a next level:

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When working in a large company, it is hard to communicate and access the latest version of a model real-time. Often that requires many professionals to be physically present in the same room. The cloud structure of Verifi3D overcomes these obsolete patterns and brings the working flow to a different level.

And we haven't even unlocked its full potential yet.

Edwin van Kleij, BIM Coordinator at Hazenberg Bouw

Surely, this characteristic improves productivity and efficiency with 40-50% even in the early stages of its use and makes the design process more consistent, since every team member can always access the latest version of a model from anywhere and anytime.

Due to the growing project complexity (and related amount of data), the process of manually configuring every object and setting up the checks without automation, surely is neither simple nor time efficient. The Hazenberg team was impressed by the model checking capabilities offered by Verifi3D. The automation allowed them to customize their rule sets and to apply them to every object they want to check.





Accuracy and time efficiency were the designated KPIs through which the team evaluated Verifi3D features. Their satisfaction surely says a lot about the software performance against their expectations.

The unique technological implications provided by Verifi3D have demonstrated promising capabilities to boost Hazenberg Bouw and other business units to reach their goals, while overcoming the industry challenges outlined at the beginning of this article.

About Xinaps

Excellence by technology: we believe in building better.

Xinaps is specialized in innovative software development for the AEC industry. Our company builds product configurators, design automation tools and model checking solutions in the cloud.

Together with you as innovators in the AEC industry, we develop solutions that modernize the industry and help you build smarter, safer and better buildings for everyone.

We believe in building better.

Xinaps website

Verifi3D website





About TBI Hazenberg Bouw

Hazenberg Bouw develops, builds and transforms. We create value both now and in the future. How? We listen to our clients' wishes and questions. Make time to understand their challenges. We invite them to brainstorm with us, make suggestions and surprise them. We think ahead with them: proactively, practically, innovatively, sustainably and 'out of the box'. And we solve problems. Everything to make their dreams and plans come true.