

Navigant Consulting, Inc.

Customer Success Story

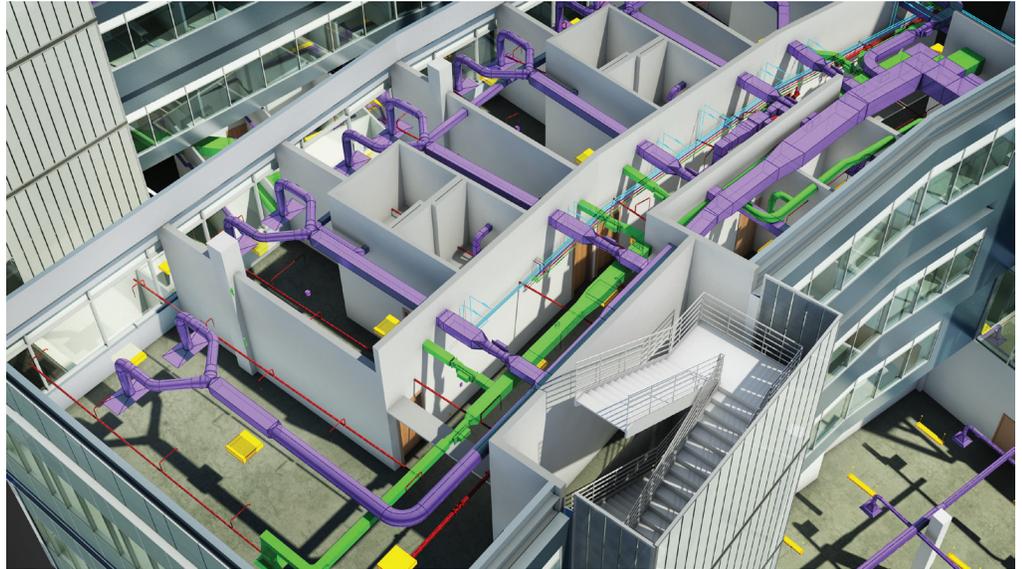
Autodesk® BIM 360™ Glue  
Autodesk® Revit® Architecture  
Autodesk® Revit® MEP  
Autodesk® Revit® Structure

Autodesk BIM 360 Glue is a key tool in our overall solution for advisory services. We highly recommend it to our owners as a way for them to maximize value throughout the entire project lifecycle.

—Jay Dougherty  
Associate Director  
Navigant Consulting

# No risky business.

Navigant uses Autodesk BIM 360 Glue to improve stakeholder collaboration on a multi-million dollar medical office building.



## Project Summary

Headquartered in Chicago, Navigant Consulting, Inc. is an international consulting firm that provides a wide range of professional services, including dispute, investigative, financial, and regulatory advisory solutions. Its Global Construction Practice is comprised of 120 specialists in real estate planning, design, construction, and operations. The consultants work with owners of capital to proactively manage large capital investments throughout world. As Jay Dougherty, associate director at Navigant, explains, “Risk management is our mantra. With our technical expertise, we serve as the owner’s representative, working closely with them to keep construction projects moving forward, while controlling the schedule and the budget.”

In 2010 Navigant Consulting was hired to oversee the planning and construction of a large, multi-million dollar medical office building in the Midwest. As a state-of-the-art medical facility, the project involved a multi-faceted planning and design process to accommodate medical gas, pneumatic tube systems, sterile and non-sterile floors, and other structural elements. Says Dougherty, “When you’re dealing with a medical office building that has a lot of systems, it’s important to be able to quickly identify and prevent any design issues that would cause delays.”

## The Challenge

The medical building was being constructed under a Guaranteed Maximum Contract (G-Max), which meant that maintaining a tight control over budget and schedule was absolutely critical. Explains Dougherty, “Typically, there’s a wide gap between what you estimate at the end of a schematic design versus what you actually get when those construction documents are almost done. Our gap was very, very tight.”

It was clear from the start that efficient collaboration between the many project stakeholders was essential to keep the project moving on track and on budget. To help accelerate the process and improve project coordination, Navigant used cloud-based Building Information Modeling (BIM) with Autodesk® BIM 360™ Glue, one of the services included with Autodesk® BIM 360®, to enable the team to access project data whenever and wherever they needed it.

# Collaborative BIM in the cloud.

## The Solution

Previously, Navigant's client used a legacy project documentation tool to manage submittals and RFIs during construction, a second tool for maintenance work orders, and a third for maintaining as-builts post-occupancy. None of these systems were integrated with the others. For example, the software program used for viewing as-builts only housed 2D drawings, not 3D models. Nor was it integrated with the project documentation tool. To get a complete view of project data, team members had to go back and forth between multiple software programs.

To help streamline the cumbersome process, Navigant used Autodesk BIM 360 Glue as a starting point for a collaboration platform. Autodesk BIM 360 Glue was integrated into the owner's existing project documentation system, enabling all project team members to access a real-time virtual BIM model through the cloud by simply clicking on a link.

Says Dougherty, "It's a tremendous step that helps increase transparency. Now the model is not separated from these other processes. By connecting BIM with tools that everyone was already comfortable using on a day-to-day basis, we're better able to communicate and collaborate about different aspects of the project. Autodesk BIM 360 Glue has contributed to our being able to maintain very tight budget controls on this project."

## Better Collaboration Leads to Improved Clash Detection

Starting at the schematic design phase, Navigant launched a new approach to the clash detection process using cloud-based Autodesk BIM 360 Glue. Project stakeholders were given access to the clash reports through Autodesk BIM 360 Glue prior to the bi-monthly clash sessions. During the meetings, more people were able to view clashes and work together to develop solutions. According

to Dougherty, providing this access before the meetings helped to improve productivity, "By giving more people access to the BIM design through Autodesk BIM 360 Glue, we could tell our client, 'we are finding clashes, but those clashes are going to go away in a week because the design is evolving.' We've tracked how many clashes we found during this process; there were in excess of 1,200 meaningful clashes prevented prior to the issuance of full construction documents. That's over 1,200 opportunities where our client no longer has to worry about spending money to fix something in the construction phase. We've helped the client achieve significant time and money savings with help from Autodesk BIM 360 Glue."

## Bringing the Players Together

For Dougherty, bringing more players into the design collaboration process with cloud-based BIM ultimately helps the client minimize any potential costly delays and disruptions. For example, he recalls that during the design phase of the building's complicated parking garage system it was particularly helpful for all project stakeholders to view a live BIM model at the same time. In this way, all stakeholders were able to more quickly and effectively collaborate on the design of the building's shaft ways to accommodate the electrical and mechanical systems within.

"Autodesk BIM 360 Glue helps give us an opportunity to increase transparency, and lower the threshold for who is going to engage in BIM," he explains. "We want to give more people the ability to access the BIM model without frustration. The more people you have involved, the better chance you have of quickly resolving issues before breaking ground."

## Collaborative BIM Anytime, Anywhere

Using a cloud-based BIM design review solution enabled project stakeholders—including

Dougherty—to collaborate remotely, helping to save the client additional costs for travel and time. In fact, Dougherty was able to effectively participate in the coordination process while often working remotely. "As the owner's rep, I certainly got a lot of value out of that," he says. "If I needed to be in an airport while the meeting was going on, I could just open up my laptop and watch what was happening."

"All you need is a simple web browser to participate in the BIM process," he adds. "Autodesk BIM 360 Glue doesn't require a powerful computer. The learning curve is very short. You can easily bring more people to the table. There are more conversations. That's really valuable."

## The Result

Currently, the medical office building is in the construction phase—on schedule and within budget. During the next phase, over 100 professionals, including subcontractors, will access Autodesk BIM 360 Glue to help automate workflows, such as RFI tracking and submittals. Based on the efficiencies gained during this project, Navigant's client has mandated that Autodesk BIM 360 Glue be used on all future construction projects.

"Autodesk BIM 360 Glue is a key tool in our overall solution for advisory services," sums up Dougherty. "We highly recommend it to our owners as a way for them to maximize value throughout the entire project lifecycle."

## Learn More

Learn more about Autodesk BIM solutions at [www.autodesk.com/bim360](http://www.autodesk.com/bim360).



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