How Boldt Uses OpenSpace to Keep Healthcare Projects on Schedule

OpenSpace Facilitated Collaboration Among Trade Partners in a Complex Remodel for a New Outpatient Clinic

Goal: Improve Coordination on Complex Healthcare Projects

The Boldt Company, a Wisconsin-based general contractor founded in 1889, has been building hospitals, clinics, wellness centers and other healthcare facilities for more than 50 years. Like any construction company working in this sector, they've had to contend with its unique challenges, such as strict protocols that need to be followed to ensure patient safety and the difficulty of installing expensive equipment in tight spaces.

Boldt wanted to explore if more robust photo documentation would make certain workflows and processes more efficient. Field teams typically took manual photos and uploaded them to PlanGrid, but context on when and where they were taken was often limited. Boldt had tried a different provider for photo documentation, but it was time-consuming to use.

Strategy: Use OpenSpace to Increase Transparency Across Stakeholder Groups

Boldt piloted OpenSpace on a project for Advocate Aurora Health, where they were tasked with remodeling a 10,000-square-foot grocery store to create an outpatient clinic in Naperville, Ill. The space had to be completely gutted and built back new—with underground trenching put in and supplemental steel added to the roof for a new air handler unit.

"The biggest challenge of remodeling is that a building's true condition is unclear until you start tearing things down," said Dean Campbell, a Superintendent at Boldt.

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> Superintendent, Boldt

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Since 360 photos captured by OpenSpace are automatically mapped to project plans, it's easy for any stakeholder to find the most recent captures for any area. This was especially useful for Campbell when on the phone with Karl Lust, the project's architect, to discuss design issues, such as when the team discovered that a door opened into furniture panels.

"It's a fantastic tool to relay information and get information back by ensuring that we're looking at the same thing," he said. "It helps keep the schedule and the flow of the job going."

OpenSpace was equally useful for communicating with trades. For example, Campbell was recently on the phone with Steve Koehler from the framing contractor to discuss the bathrooms in modular exam rooms they had built. They couldn't recall if the sinks and toilets were mounted on carriers; by pulling up OpenSpace captures from the period when the rough framing was put in, they confirmed the fixtures both were.

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> Aaron Frederick
> Senior Project Manager, Martin Petersen Co.

"In our world, a picture can be worth a thousand words, since some things are very difficult to explain," said Koehler, a Project Manager with The Rockwell Group. "For example, I was able to virtually drop in on the Naperville project and see where drywall had been removed when we hadn't expected it to be. It helps me to stay ahead of the curve instead of getting a call from my foreman and having to tell him I had no clue this was happening."

20% FEWER SCHEDULING DELAYS HUNDREDS OF HOURS SAVED ON COORDINATION

100X MORE COMPLETE DOCUMENTATION

Results: Fewer Scheduling Delays and Time Savings

Based on the strong results so far, Boldt plans to implement OpenSpace on multiple upcoming projects. The technology has had impact in the following areas:

- **Fewer scheduling delays:** Campbell notes that OpenSpace is extremely effective for keeping work on schedule and ensuring that simple RFIs don't cause delays. "We had visual confirmation of issues, and Karl (the architect) could log in to OpenSpace to see them," he said. "I'd get a directive from him on how to proceed so we could keep rocking and rolling while the paperwork caught up."

- **More effective resource allocation:** By facilitating progress tracking, it's easier for trade contractors to determine when to add manpower. Aaron Frederick, a Senior Project Manager with Martin Petersen Co. (which handled mechanical and plumbing) used OpenSpace to watch the progress of underground plumbing and ductwork to determine if he needed to bring in more workers to stay on schedule. "It's gotten to the point where it feels like our hands are tied on

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projects that we don't have OpenSpace on because we're so used to it," he said. Conversely, PMs can drop in on particular areas and determine that they're not yet ready for trades to begin work.

- **Enhanced remote collaboration and reduced travel time:** OpenSpace helps Project Managers keep close tabs on multiple job sites when they can't be physically present every day (which has been exacerbated by COVID-19). "There are times when I have 10 different projects, and there's no way I can get to every site once a week," said Scot Lauwasser, a Project Manager and BIM/VDC Manager at Boldt. "I can use OpenSpace to stay on top of things." Frederick also noted that OpenSpace was useful for his engineers and BIM team when working on issues that arose after installation, since they couldn't be on-site.

- **Better planning for future projects:** Architect Karl Lust noted that he and his construction partners tend to rely on photos from past projects to make decisions on current ones. "Having OpenSpace for the Naperville project could be a helpful reference to understand progress through the stages of construction and apply that to future projects with similar features or rooms, such as point-of-care testing with similar equipment, where power outlets have to be located very precisely."

- **More accuracy in the field:** Rich Bergslien, a Project Manager at Huen Electric, noted that his company invariably spends hundreds of hours coordinating drawings for every project only to need to make changes in the field. He found OpenSpace to be a valuable coordination tool. "If there were changes we had to make for pricing, I could get together with my foreman and look at each area instead of just guesstimating," he said.

- **Time savings in the field:** OpenSpace also helped Boldt and its trade partners answer questions quickly. For instance, Frederick was wondering about whether there were maintenance latches in the rooftop unit one day. Instead of having to send someone up to investigate, he found the answer by navigating to the right OpenSpace capture in a minute and a half.

- **Savings on rework:** There were cases where OpenSpace helped Boldt avoid rework. For example, one prefab structure had the wrong backing, which the team discovered prior to installation and switched out after reviewing OpenSpace captures, according to Field Foreman, Dave Mabon with Boldt.