COMPANY **Fieldwire**

LOCATION San Francisco

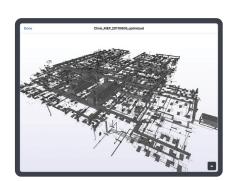
SOFTWARE Fieldwire: BIM Viewer

SOFTWARE DEVELOPMENT KITS **HOOPS Platform**

COMPANY WEBSITE www.fieldwire.com

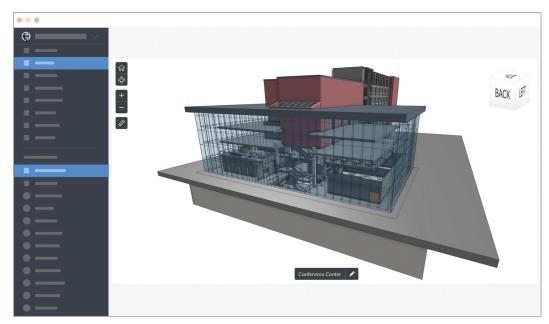
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- Looly Lee, Product Manager, **Fieldwire**



Tech Soft 3D partner success story: Fieldwire

HOOPS Helps Fieldwire Rapidly Bring BIM Viewing to Its Construction Management Platform



The Challenge

Fieldwire is changing the future of construction with its productivity tools for the construction field. The company's field management platform - which is accessible via browser, tablet, or smartphone – gives customers access to critical project-related information while they're on the job.

"We're basically a one-stop shop for the field," explained Looly Lee, product manager at Fieldwire. "Fieldwire is the place where the entire project team - from the foreman, to the project manager – comes together to collaborate and share information in real-time. Customers can view and markup construction plans, access important contextual documents like RFIs or submittals, assign tasks, view progress reports, and more."

Fieldwire had always offered robust 2D plan viewing capabilities, but sought to evolve the product with new features around 3D model viewing, to better support its customer base.

"More and more projects are starting to use BIM, and we wanted to meet our customers' growing need for that 3D information," said Lee. "First and foremost, it was crucial for our BIM viewer to provide a high-quality user experience. It needed to be something that somebody in the field could effortlessly use without running into any hassles – because once you lose the user's confidence in a particular feature, it's really hard to gain it back."





Additionally, it was important for Fieldwire to support BIM viewing on both web and mobile, while providing offline capabilities for those mobile users. "A lot of construction project sites that are just getting started up don't have a Wi-Fi connection, and there might not even be LTE or 3G in those areas," said Lee. "That made offline support a need-to-have."

As Fieldwire evaluated how to move forward with developing a BIM viewer, a final crucial requirement was support for classic BIM formats. "Some of the 3D SDKs out there are really more targeted at supporting manufacturing workflows, or 3D printing, or 3D graphics for movies," said Lee. "We needed specific support for BIM formats like RVT and IFC. That was going to work best for the customers we serve."

Easy 3D Viewing, with Ready Access to Metadata

Fieldwire found Tech Soft 3D to be the ideal partner to help them venture into 3D and incorporate a BIM viewer into their platform.

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Currently, Fieldwire users are able to upload IFC files which are processed behind the scenes by HOOPS Exchange, the leading CAD data translation toolkit. All the metadata from those files are retained as they are converted into two new file formats that are specific to the platform where they're going to be used.

"One output of HOOPS Exchange is a PRC file that gets pushed to HOOPS Visualize, which we're using to power our mobile applications," said Lee. "The PRC format is ideal for giving our mobile users offline access to the model, as well as all the rich metadata coming from Exchange. The second output is an SCS file that gets pushed to HOOPS Communicator, which we're using to power our web platform. The benefit there is that it's a little bit more lightweight but, again, still retains all that valuable metadata."

For customers, Fieldwire's BIM viewer gives them the ability to easily view and navigate a BIM model, allowing them to gain high-level, contextual understanding that 2D plans might not deliver. At the same time, users can click on any model element to access all the original metadata and properties – including information that isn't specifically called out in the 2D plan, like surface area and volume, manufacturers information, or the type of material involved.

Early customer response to Fieldwire's BIM viewer has been very positive, with considerable praise for how polished the viewer already is in its initial version. Fieldwire looks forward to continuing to enhance the BIM viewer for its customers, even as the company reflects on what it has already accomplished.

"In the construction world, 3D models have largely been relegated to the trailer or the offices – they weren't really accessible in the field," said Lee. "Now, thanks to our partnership with Tech Soft 3D, our customers have this information in their back pocket, alongside their other important project information. That allows them to make more informed decisions while they're out in the field, and helps us better fulfill our mission of being the world's most trusted field management solution for construction teams."

Industry:

- Construction

Challenge:

- Address construction market's growing use of BIM by adding 3D BIM viewer to platform
- Provide support for mobile and web viewing, while ensuring a smooth user experience
- Offer offline viewing capabilities to users at construction job sites without connectivity
- Meet aggressive go-to-market timelines

Solution:

 HOOPS Exchange, the leading CAD data translation toolkit, works with HOOPS Visualize and HOOPS Communicator to power 3D visualization of BIM models on Fieldwire's mobile applications and web platform

Results:

- Rapidly develop BIM viewer in a matter of months, meeting customers' needs for access to BIM models
- Provide smooth, seamless visualization of BIM models combined with access to rich metadata, giving users whatever level of detail is required
- Enable BIM viewing online via web, or offline via mobile applications
- Ensure platform continues to add value in new ways to customer base, establishing competitive advantage in the market

