Cosapi Case Study

360° virtual site visits support weekly updates for 2019 Pan-American and Parapan American Games infrastructure project

Background

As one of the largest engineering and construction companies in Peru, COSAPI has successfully completed some of the most important and iconic public and private sector projects in the country. They were awarded the 2019 Pan-American and Parapan American Games infrastructure project which includes renovations and new construction of a stadium, aquatic center, 24-lane bowling alley, a new multi-sport center, additions to the cycling track, office, and administrative spaces, and surrounding areas. The expected costs for the project exceed $130M over the year and a half schedule. Once complete, these games, which are considered the second most important sporting event in the Olympic circuit, are expected to accommodate one billion visitors.
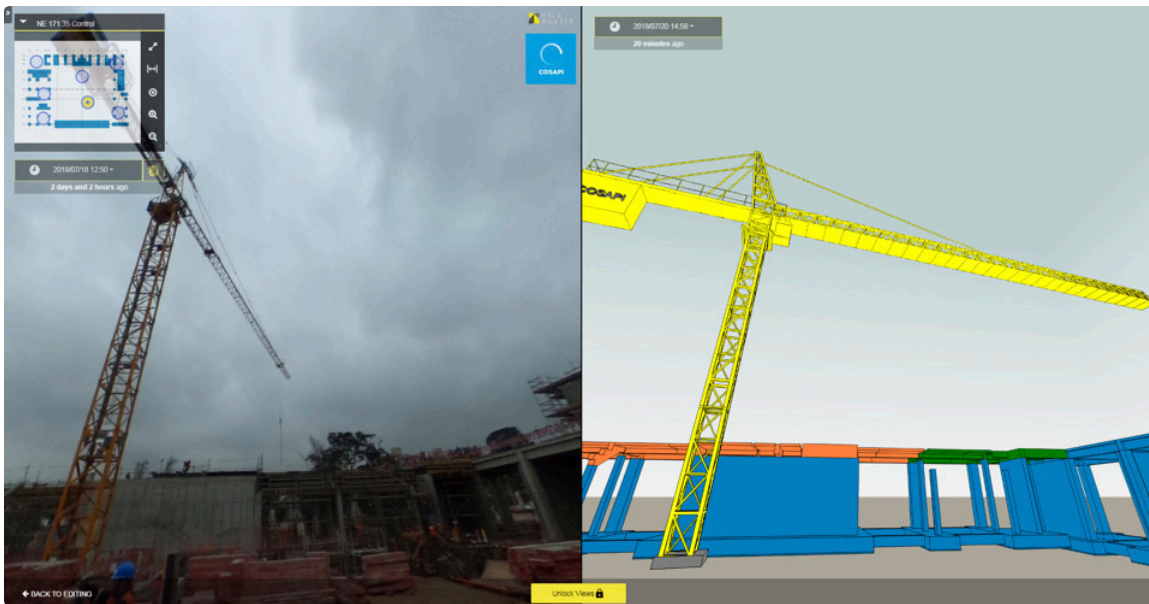

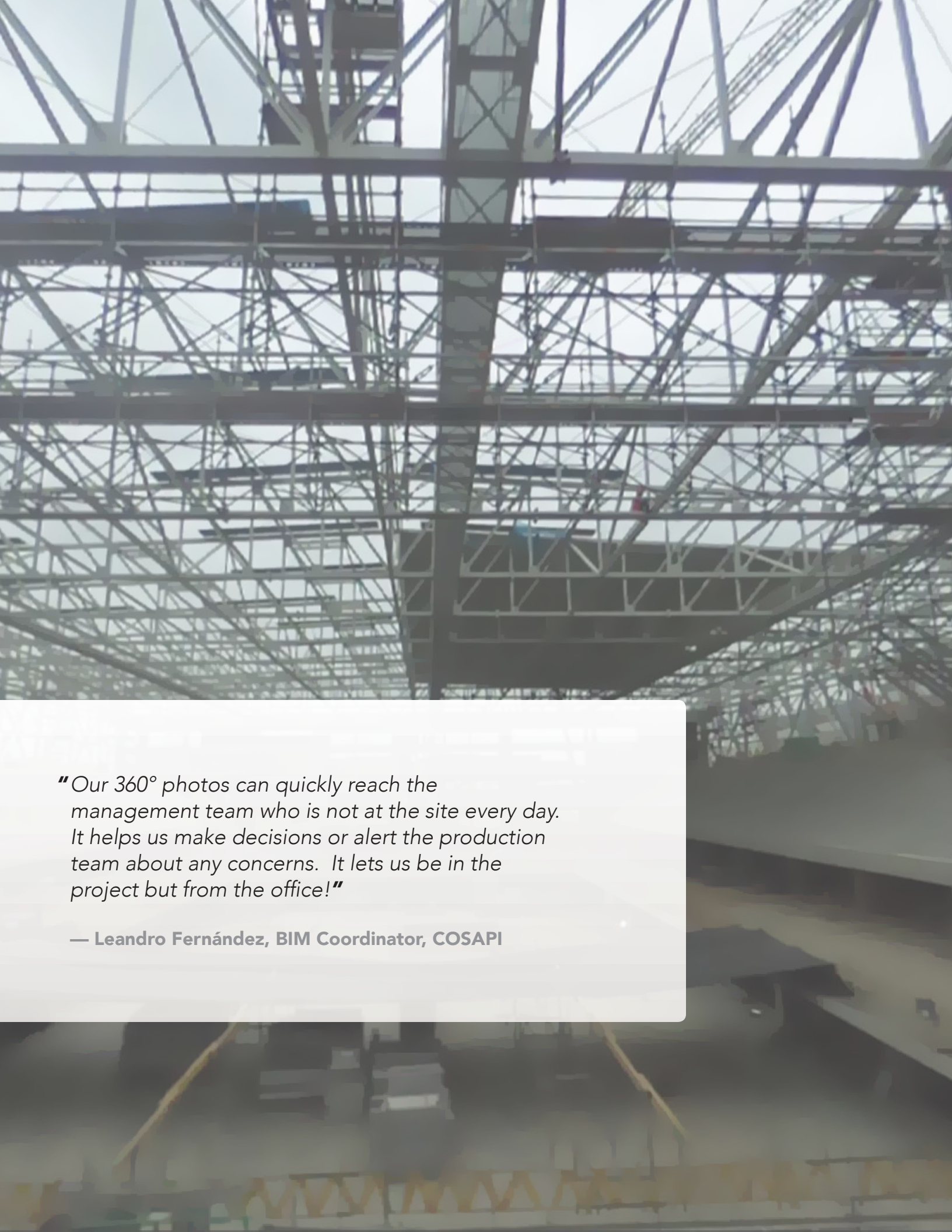*Figure 1: Comparison of reality capture and BIM model import*

Challenge

The project size and tight schedule mean there are challenges keeping a large team informed and on the same page. The team includes more than 100 professionals, multiple stakeholders, suppliers, subcontractors, and over 50 managers and assistants.

Figure 2: Comparison of the same area captured at different times.

Traditional methods of weekly reporting were not effective at keeping everyone informed about work progress. Many of the stakeholders were not able to visit the site on a routine basis but needed to be aware of construction progress in order to make key decisions. COSAPI was looking for a solution that could keep the team informed at all times.

"Our 360° photos can quickly reach the management team who is not at the site every day. It helps us make decisions or alert the production team about any concerns. It lets us be in the project but from the office!"

— **Leandro Fernández, BIM Coordinator, COSAPI**

Solution

Figure 3: Construction progress of the Velodrome

COSAPI integrated HoloBuilder with Card - their internal project management system. They use Card for daily reporting of planned work, work completed, and work not completed with BIM models. This reporting was enhanced with 360° images displayed in HoloBuilder. The addition of the 360° images supported management decisions and allowed them to visit the site virtually for progress updates.
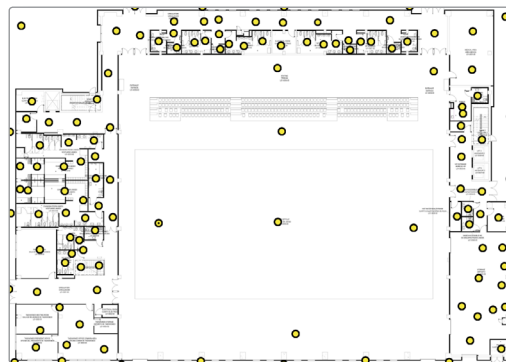

Figure 4: Sheet view showing captured locations