

Case Study - Takenaka Corporation

AEC Titan Takenaka Corporation Drives Innovation with 360° Construction Site Visits

How Takenaka, a leader in AEC, uses virtual tours to drive efficiency and innovation across their organization.



OVERVIEW

The Challenge:

- Takenaka conducts many construction projects, with multiple site visits of stakeholders, architects and engineers etc
- Frequent travel to site visits involves a routine loss of productivity and travel costs
- Standard videoconferencing has a limited performance, because of limited field of view

The Solution:

- Avatour 360° remote, real-time, collaboration platform
- Successfully piloted Avatour at several test locations with internet connection environments
- Avatour's ability to work on 5G or LTE networks helped the Takenaka team conduct remote meetings on construction sites as experimental trial

The Result:

- Successfully brings project stakeholders on site without the need to travel
- Helps Takenaka increase efficiency with site visits
- Bringing stakeholders on site throughout the project timeline results in reducing obstacles and making faster to understand site situation
- Utilizing remote collaboration to overcome COVID restrictions and train employees on site remotely

ABOUT TAKENAKA CORPORATION

Takenaka Corporation is a well-known leader in the architecture, engineering, and construction space. Founded in 1610 and headquartered in Osaka, Japan, Takenaka is one of the leading general contractors in Japan, with several other offices around the world.

With over 2,400 licenses first-class architects and 1,230 billion yen in annual revenue, Takenaka and its more than 7,000 employees have grown consistently to service both the public and private sectors' general contracting needs.





THE PROBLEM: HOW TO RELIABLY CONDUCT CONSTRUCTION SITE VISITS

Construction site visits are crucial to preserving project timelines, receiving swift input from key stakeholders, and eliminating barriers to construction progress.

For a construction giant such as Takenaka, some members travel for regular site meetings during various phases of the project timeline (meetings, tours, project updates). For a domestic project, there are often upwards of 50 site meetings per year. With varying distances, this means a routine loss of productivity due to commuting. Not to mention, travel costs, logistical challenges, and a surplus of carbon emissions.

As an industry leader quick to adopt new strategies for innovation, Takenaka was no stranger to remote meetings. Due to the COVID shutdowns, Takenaka was quite familiar with using standard videoconferencing to conduct stakeholders meetings on a construction site. However, when it came to actually touring and inspecting construction sites, Takenaka and their project stakeholders did not find remote meetings to be a suitable substitute due to a limited field of view. Furthermore, due to COVID limitations on the number of people allowed on site, Takenaka encountered challenges in training their staff.

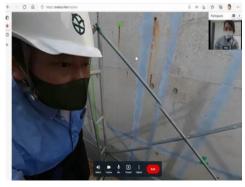
THE SOLUTION: LEVERAGING 360° REMOTE COLLABORATION TO BOOST EFFICIENCY

Takenaka's Global Research and Innovation Team (GRIT) is in charge of finding and integrating cutting-edge technology which can improve processes in construction and smart cities and reduce carbon emissions.

After being introduced to Avatour during a Plug and Play event, the GRIT team saw an opportunity to use Avatour's 360° remote collaboration platform for construction site visits. Unlike standard videoconferencing, Avatour works on both WiFi and local LTE/5G networks, making it a suitable solution for field use with sparse connectivity.

Avatour's 360° view helps give stakeholders complete visibility into the construction site. With viewing autonomy, stakeholders, experts, and other visitors can explore the site on their own terms, choosing their viewpoint and interacting with people on site. Without sacrificing quality, the Avatour platform helped the Takenaka team not to travel frequently to construction sites.

After receiving the Avatour host kit, several technical members of Takenaka used Avatour for test purposes. They introduced the platform across several construction sites which had a need to reduce travel time from an office to a place of the construction sites. After receiving good feedback from several branches, Takenaka is considering 360° view tour as a more standard tour, providing travel time reduction and meeting productivity.



Source: Takenaka/Avatour Virtual Tour



The Takenaka team also leveraged the Avatour platform to conduct remote training sessions. While COVID had limited the number of people allowed on site for training, Avatour helped provide remote training sessions throughout the pandemic.

"If a network is sufficient, Avatour is very useful as communication tool because it's easy to setup. This is suitable especially for a remote customer tour to the construction site/facilities."

- Takahiro Machinaga Director, TAK-GRIT Inc.

THE RESULT: STAYING ON TIME, ON BUDGET, WHILE REDUCING TRAVEL COSTS

Avatour platform can reduce the number of in-person visits throughout a construction project lifecycle.

The 360° view combined with the ability to work on local LTE/5G networks gives project stakeholders the transparency and visibility they need to understand scope, obstacles, and make any decisions quickly.

When it comes to construction projects of varying size and complexity, even one small challenge or obstacle can create major threats to a project's timeline and budget. With the ability to be on site anytime, anywhere, Takenaka stakeholders can make decisions faster all while saving money and valuable time on travel.

Takenaka is a company that has adhered to the toryo (master builder) spirit for centuries. Now, as remote meetings become the norm, Takenaka has leveraged a solution that will help them strengthen their remote meeting protocol without compromising on quality.



Source: Takenaka/Avatour Virtual Meeting

ABOUT AVATOUR

The Avatour platform gives users the freedom to choose their point of view when it comes to inspections, tours, and training.

With the Avatour platform, remote participants can interact in real time with people who are there in person. The innovative 360° technology saves time by allowing for meetings to occur between sites without requiring travel.

