Naylor Love

Case Study:

Naylor Love: Leveraging reality capture for enhanced project tracking and as-built verification

Introduction

Naylor Love are New Zealand's largest privately owned construction company, operating since 1910. With over 900 staff across six regional divisions, they deliver a full range of commercial construction services. Naylor Love combines comprehensive construction management capabilities with a strong technical culture, where both office and site-based management teams bring hands-on expertise and a thorough understanding of every stage of the project process.

The Challenge

Naylor Love faced several challenges related to traditional forms of communication via email and text, document storage and project tracking; particularly when managing complex and specialist projects with multiple stakeholders.

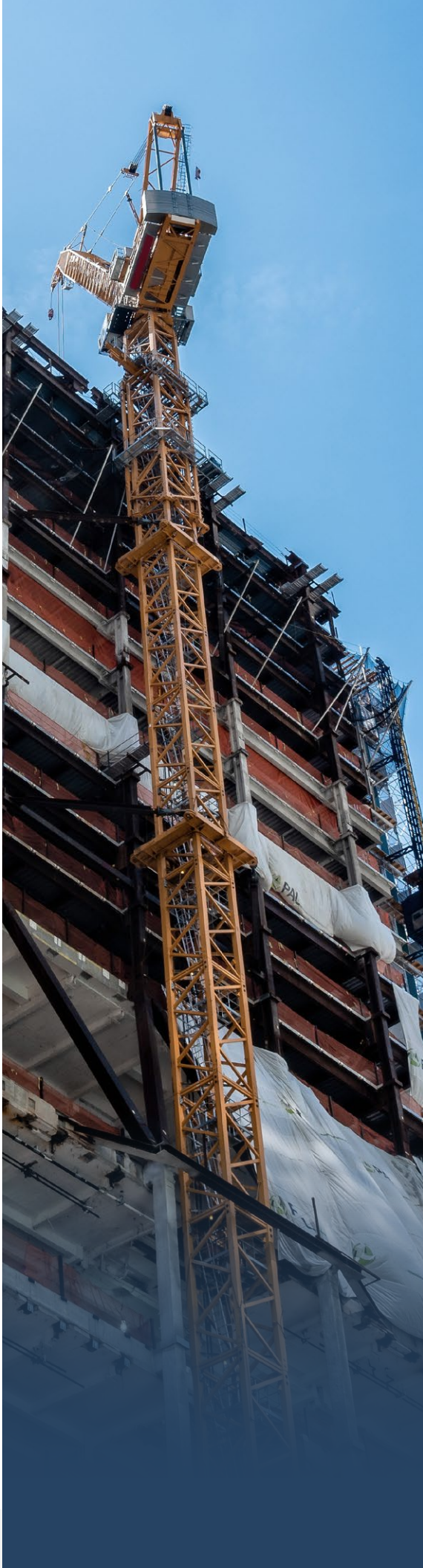
- **Project Tracking & Monitoring**
  Keeping track of site project progress and remote monitoring for team members that are offsite. Compiling progress reports traditionally with multiple photos and lengthy presentations was a time consuming process.

- **Communication & Collaboration**
  Coordination among various stakeholders (architects, contractors, sub-contractors and clients) was complex, especially when working on specialist projects.It also often lacked the most updated site information and a clear visual record of progress on site.

- **Documentation & Record Keeping**
  Maintaining accurate and comprehensive documentation for compliance, future reference, and as-built records was a cumbersome and non-visual process involving multiple spreadsheets, presentations, out-dated drawings etc.

- **As-Built Verification**
  Ensuring ongoing construction work aligned with design intent and the coordinated BIM model design specifications, from conception to completion.

To address these challenges, Naylor Love identified they needed an integrated advanced project tracking and monitoring software, which was simple to use and implement, that used reality capture feeds for multiple construction sites. In addition they required tools that enabled the project management team to track the progress of various tasks, materials, and resources, and compare against BIM Models, to identify discrepancies early, improve communication and allow corrective action to be taken before issues escalated.



Implementation

To address the major challenge of manually capturing images, then saving in multiple files and communicating progress via email, Naylor Love investigated CupixWorks, a leading reality capture platform from Cupix to address their various challenges.

Naylor Love discovered that CupixWorks Spatial digital twin software facilitated improved communication by providing a shared, interactive 3D replica of sites that all parties can access and review, reducing misunderstandings and improving collaboration.

In addition, the simple process of walking around with a 360 camera simplified the record keeping process significantly. The 360 cameras capturing every aspect of the site, served as an accurate, date stamped and location tagged record of the site's condition across various stages of the projects. This also ensured documented visual evidence should any dispute occur.

> "Manual photo documentation and storing files in a server, has become more efficient with CupixWorks from Cupix. It also provides an accessible platform for off-site staffs to visit the site virtually."

Patrick Gallego
BIM Coordinator, Naylor Love

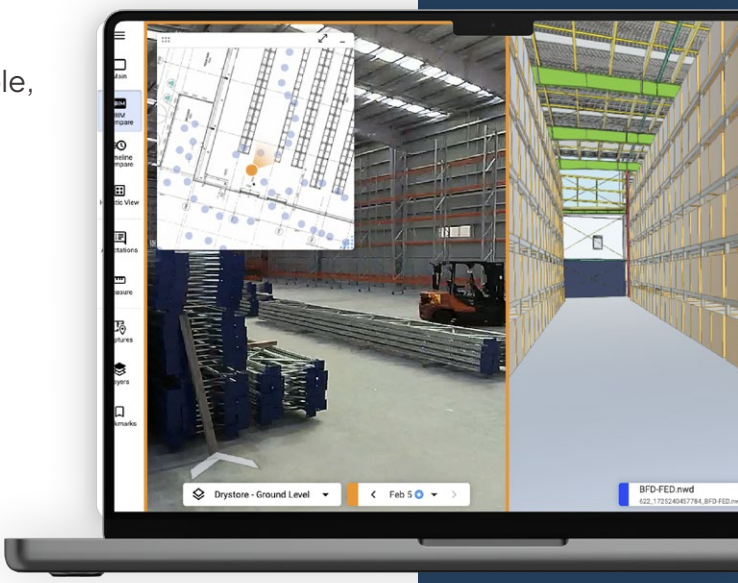
To address the progress reporting process requirement, CupixWorks streamlined this process by allowing users to automatically create progress reports and compare multiple captures, asynchronously. Progress reports were delivered with spatial context without the requirement and management of large amounts of photographs which traditionally lacked 3D spatial context. And with accurate measurements, construction teams could verify that as-built conditions were accurate and conformed to designs and BIM Models.

CupixWorks is a connected platform that seamlessly integrates with other Project Management digital tools in the organisation which allow for defects to be managed either through integration with Procore or through the platform itself using customisable forms to document defects in real space, facilitating effective communication with stakeholders that required fixes.

Results

By embracing Cupixworks and leveraging real-time data, Naylor Love transformed their project tracking and monitoring processes, leading to more efficient, profitable, and project delivery. As a result they achieved:

- **As-Built Verification**
- **26% of users have used captures as evidence for dispute resolutions**
- **73% of users are utilising Cupix for Dilapidation Assessments**



By optimising visual project progress through interactive dashboards and reports, Naylor Love also delivered improved deadlines, better resource allocation and identified potential issues and risks enabling proactive intervention. Cupix is now filling the gap of collaborating the BIM coordinated model into the Naylor Love site progress.