

Digital engineering and data-driven mindset improves productivity in the delivery of infrastructure projects

By Farzam Farzadi

A critical infrastructure project needed to be planned, designed, and constructed in parallel and within a very compact time frame. Design of upgrading a complex water project needed to be developed virtually during the COVID-related national lockdown.

To achieve these objectives, a data-driven process was innovated to virtually coordinate design information daily. A digital ecosystem was created for projects, enabling daily digital collaboration between different data sets developed via a diverse range of tools and platforms.

This presentation will cover our approach to virtual collaboration, supported by automation and underpinned by digital verification, which enabled digital construction and digital asset handover. This presentation will also cover lessons learned, and how we carried these over and are utilising Autodesk Tandem technology as a practical Digital Twin platform for infrastructure projects.

Bio - Farzam Farzadi

Farzam has more than 16 years of experience working in the construction industry. He drives the development, collaboration, and coordination of Digital Engineering processes which can have positive impacts during life cycle assets.

Farzam was declared the winner of the Innovation and the Supreme Awards at the New Zealand Institute of Building (NZIOB) awards 2020. He became a history maker by being the first Innovation Award winner in New Zealand who won the Supreme Award as well. He was also recognised as the winner of the best paper and presentation award at the Water New Zealand Conference 2021.