

COMPANY

SUNeVision Holdings Limited

PROJECT

MEGA Plus

LOCATION

299 Wan Po Road, (Tseung Kwan O Town Lot No. 122, Area 85), Tseung Kwan O, New Territories

TYPE

High-tier Data Centre Development

SCHEDULED TIME OF COMPLETION

Mid – 2017

BIM-centric Project Enables Smarter Design for Intelligent Building



BIM PARTNERS INVOLVED

Sun Hung Kai Real Estate Agency Limited

Sun Hung Kai Architects & Engineers Limited

Sanfield Engineering Construction Limited

Forida Limited

About SUNeVision Holdings Limited

SUNeVision (SEHK: 8008) harnesses the strengths of Sun Hung Kai Properties' principal technology assets including iAdvantage, Super e-Technology, Super e-Network and venture capital investments. SUNeVision has a strong financial position, and its portfolio of data infrastructure and service businesses positions it well for sustained profitability and growth.

iAdvantage is one of the major operators of carrier-neutral data centre services in Hong Kong, iAdvantage offers quality services to meet stringent requirements of its customers.

Super e-Technology engages in the installation and maintenance of its satellite distribution network, state-of-the-art fibre-optic cable, networking and security surveillance systems; and is one of the major players in the industry in Hong Kong.

Super e-Network provides professional design-and-build consultancy service for wireless and broadband network projects, it is a pioneer in intelligent-building networks.

The Project

MEGA Plus is a Tier 4 ready greenfield data centre in Tsuen Kwan O. With the characteristics of low-latency and high availability, MEGA Plus is equipped with fully configurable infrastructure with world-class facilities, and is ideal for multinational enterprises, cloud and IT service providers, telecommunications carriers and financial institutions.

The Challenges

A sophisticated data centre of this kind requires a large scale MEP network which is carefully designed, coordinated and constructed in order to provide fast broadband access, high fault-tolerance and minimal down-time as well as precise indoor environmental control. Also, to meet the market demand for high-tier data centres as swiftly as possible, MEGA Plus is to be constructed within around 24 months, by mid-2017. To achieve the aims, vast amounts of design and construction information must be rapidly retrievable and efficiently coordinated among the Project Team anytime and anywhere.

The Solution

Together with BIM data, on-site construction and inspection information are centralised on the web, to provide a one-stop platform enabling the Project Team to be promptly updated of the latest site progress and facilitate decision making regarding future works planning. On-site information such as site photos and inspection details can be recorded in real-time into the centralised database, and associated with BIM model geometries that can be viewed simultaneously through a web-based BIM model viewer.

The Benefits

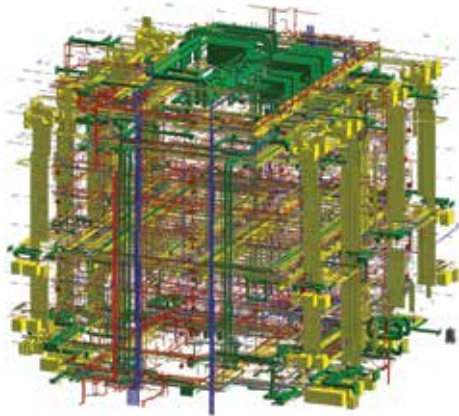
BIM-centric submissions and inspections enable better and efficient coordination in the Project Team. The team is better informed regarding the site progress, and therefore can make quicker response to amendments to the construction programme. Also, less manpower was used to process huge amounts of inspection details and reports, freeing resources for even better coordination of designs and ideas. Inspection details are inputted at the inspection scene, which minimises time-lags for information and progress sharing between parties.

Better with BIM

The project has become greener with a lower carbon footprint, since all inspections are coordinated and recorded on a centralised platform, and all relevant documents can be attached electronically. This reduces the amount of printed materials. BIM also makes the project more organised and manageable, with less paperwork and physical folders. All information is organised on Day 1 when input into the BIM platform. This allows easy retrieval of information, and limits wrong decisions arising from incorrect or insufficient information due to errors in document handling.



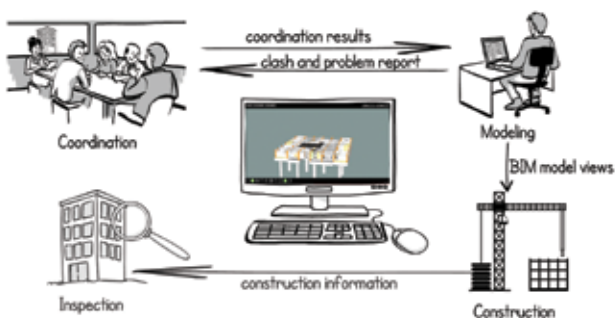
MEGA Plus
Image courtesy of SUNeVision Holdings Limited



Vast and extensive MEP network to serve MEGA Plus
Image courtesy of SUNeVision Holdings Limited



Make use of BIM data for post-construction inspection
Image courtesy of SUNeVision Holdings Limited



Outline of BIM Involvement in Design and Construction stages
Image courtesy of SUNeVision Holdings Limited



Inspection with BIM data and Model Viewer on mobile device
Image courtesy of SUNeVision Holdings Limited