



TRANSFORMING INDUSTRY
WITH DIGITAL DELIVERY



Integrated Digital Delivery (IDD)

To implement an effective IDD framework process, the digital model is used throughout the whole building life cycle as a single source of truth.

CONSTRUCTION

BUILT QUALITY
RESOURCE MANAGEMENT
SITE SAFETY
DIGITAL PROJECT
MANAGEMENT



DESIGN

USER EXPERIENCE
DESIGN QUALITY



FABRICATION

DIGITAL FABRICATION



FACILITIES & ASSET MANAGEMENT



Project Implementation

In every success project



PAPERLESS

EXCHANGE OF DESIGN DIGITALLY



DIGITAL MODELS

DIGITAL DESIGN MODEL

COLLABORATE

INTENSIVE COLLABORATION



MIXED REALITY
DIGITAL APPROVAL



DIGITAL PROJECT MANAGEMENT
LEAN CONSTRUCTION



CLOUD
DATA EXCHANGE THROUGH CLOUD



A.I VERIFICATION & DRONES
INSPECTIONS & PROGRESS IMAGES
AS-BUILT VERIFICATION

DIGITAL INSPECTION
DIGITAL FORMS & DATA ANALYTICS



**DIGITAL FABRICATION**
DIGITAL MODEL WITH LEVEL OF DETAIL

**DIGITAL TRACKING**
DIGITAL MODEL & TRACKING STATUS



FACILITIES MANAGEMENT

ASSET INFORMATION REQUIREMENT
HANDOVER DIGITAL OMM



DIGITAL MODELS



Use of Digital **BIM Model** for conceptual design, detailed design & analysis

DIGITAL MODEL USE CASE



Identifying critical phases



Productivity



Make Improvements

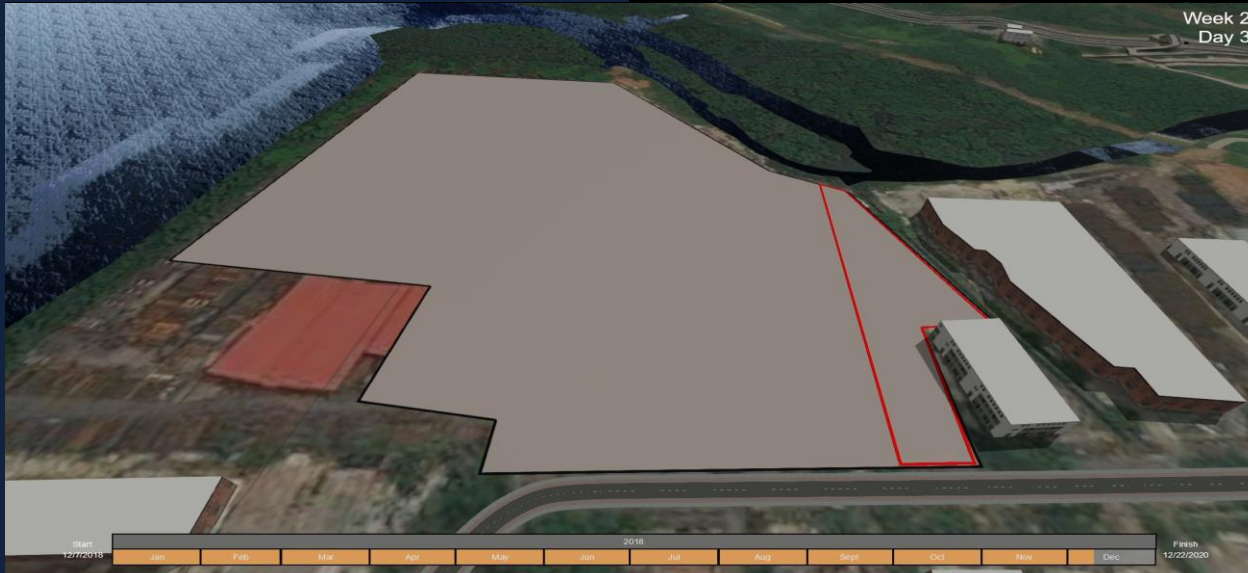


Coordination

Digital Simulation



Installation
Sequencing



4D Sequencing



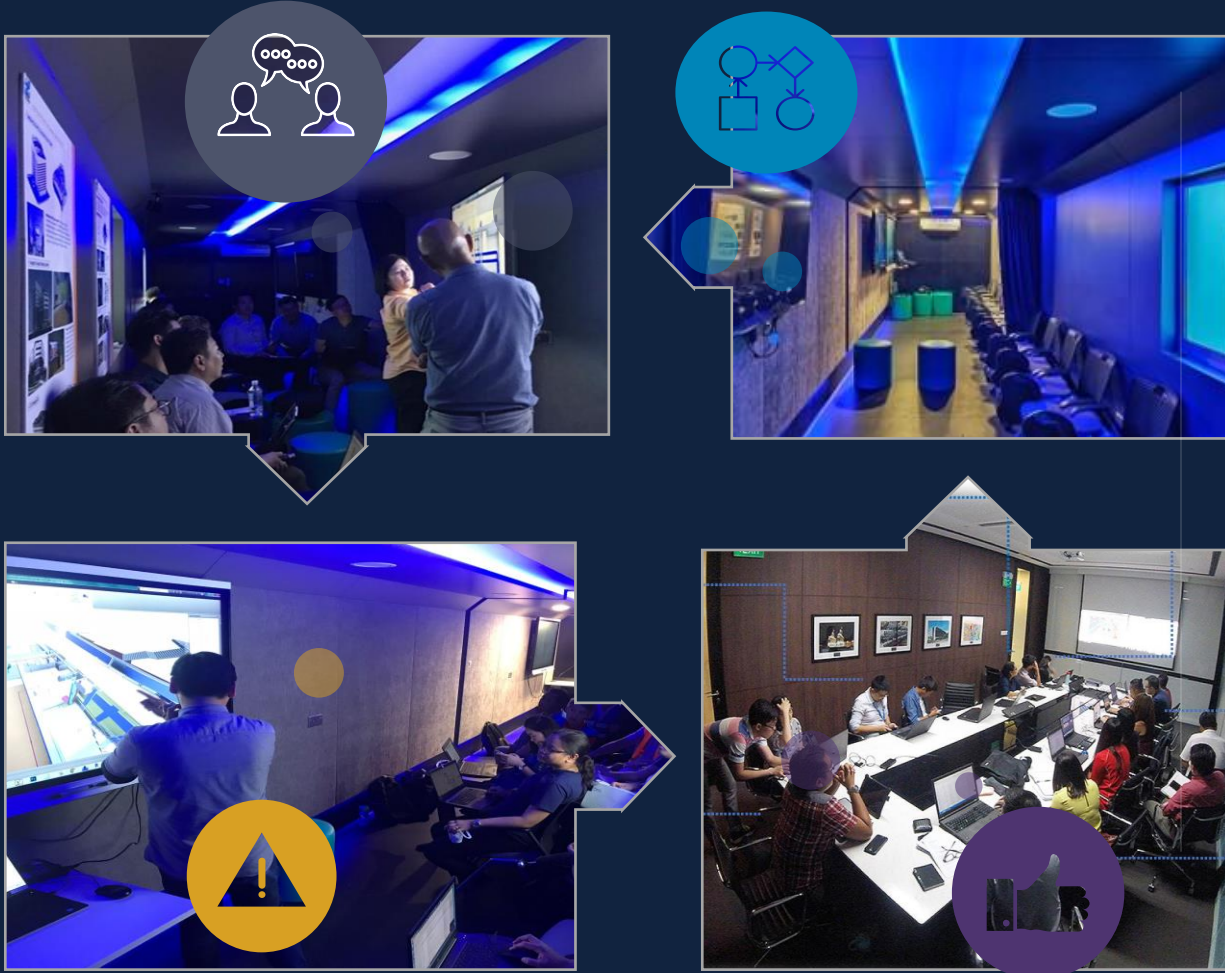
COLLABORATE



Digital model for Intensive Collaboration Period & Integrated Concurrent Engineering

INTENSIVE COLLABORATION PERIOD

To facilitate the design intent of the BIM Model during Design stage



1. Sharing of Visualization

Of different trades and disciplines

2. Validation of Design Intent

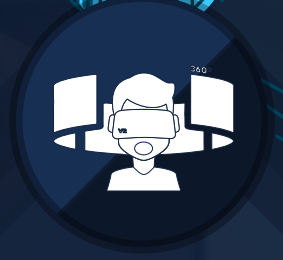
From BIM & Design Consistency

3. Identify Issues

Early such as Design & Co-ordination

4. Involvement

All Stakeholders



Building smarter through virtual design and construction

AR / VR



READ MORE

Visualizing in immersive experience of the Digital Content



INTEGRATED CONCURRENT ENGINEERING



Technical X I.C.E Meeting

Collaborative

89%

BIM Visual

100%

Construction & Design Co-ordination

91%

Decision Making

80%

Meetings are being discussed in a collaborative environment with both Digital Model & 2D plan views. Issues are tracked and submitted with progress reports

Meetings are done on a weekly/ bi-weekly basis when the specialists have been awarded to the project

VIRTUAL REMOTE COLLABORATION



BRADDELL PROJECT : VR WALKTHROUGH

VR Co-ordination using virtual collaboration platform to effectively co-ordinate issues remotely. This has resulted in reductions in non-essential physical site visits to reduce exposure during the pandemic and improvements in team productivity.

PRODUCTIVITY

Does not affect coordination during the Pandemic

REMOTELY

Can be access during virtual meeting, anywhere



Search

ACTIVITY



Projects



Support

Welcome to Activity
Select a Project



DIGITAL & VIRTUAL INSPECTION



JTC Multi Storey Recycling Factory



BOUSTEAD

Projects

Catalyzing digitalization during a pandemic



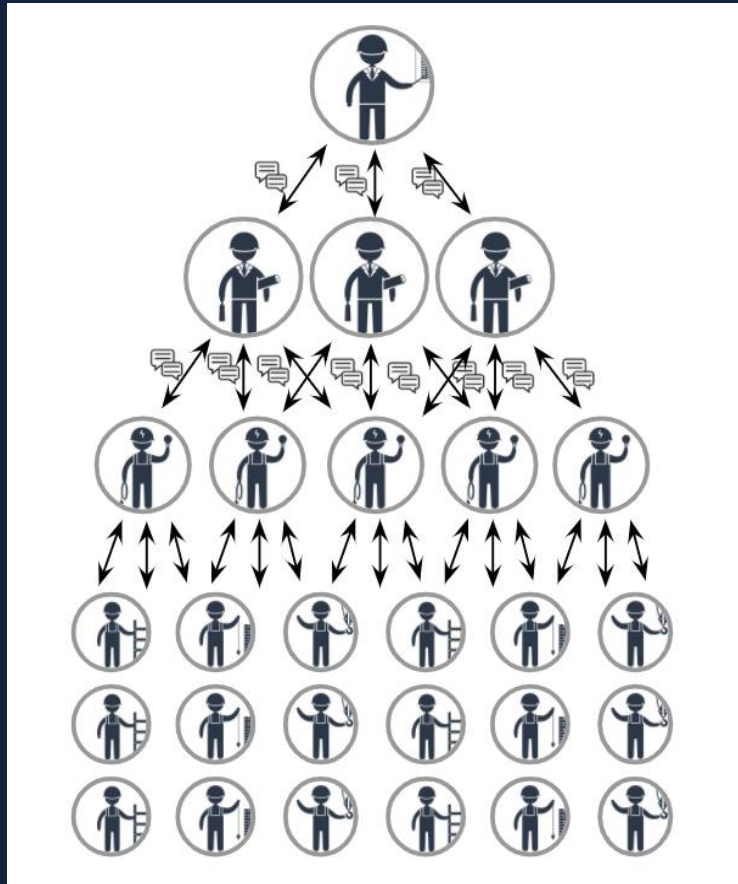
During site lockdowns, non-essential site visits risks spread



Capture once, visualise anytime anywhere



Miscommunication increases project risks



Daily communication about site situation happens frequently

PER FLOOR

frequency of miscommunication



5 times/day



“you said it was done last week?”

time to clarify miscommunication



0.5 hours

whatsapp, call or email again

TOTAL TIME COSTS



500 hours/mth

20 work-days per month

+

Risks of the “unknown unknown”
the situation that is not said or photographed

PER FLOOR

Frequency of capture



1 time/day

capture and share

Time to capture



15 min

capture and share

TOTAL TIME SPENT



5 hours/mth

20 work-days per month

+

- 5X more virtual visits to stay-in-control
- reduce risk of covid site lockdown
- reduce risk to personnel health

Hear it from Wai Hong, Site Engineer, Boustead Projects



VIRTUAL INSPECTION & SITE PROGRESS

360 image capture of Site Progress

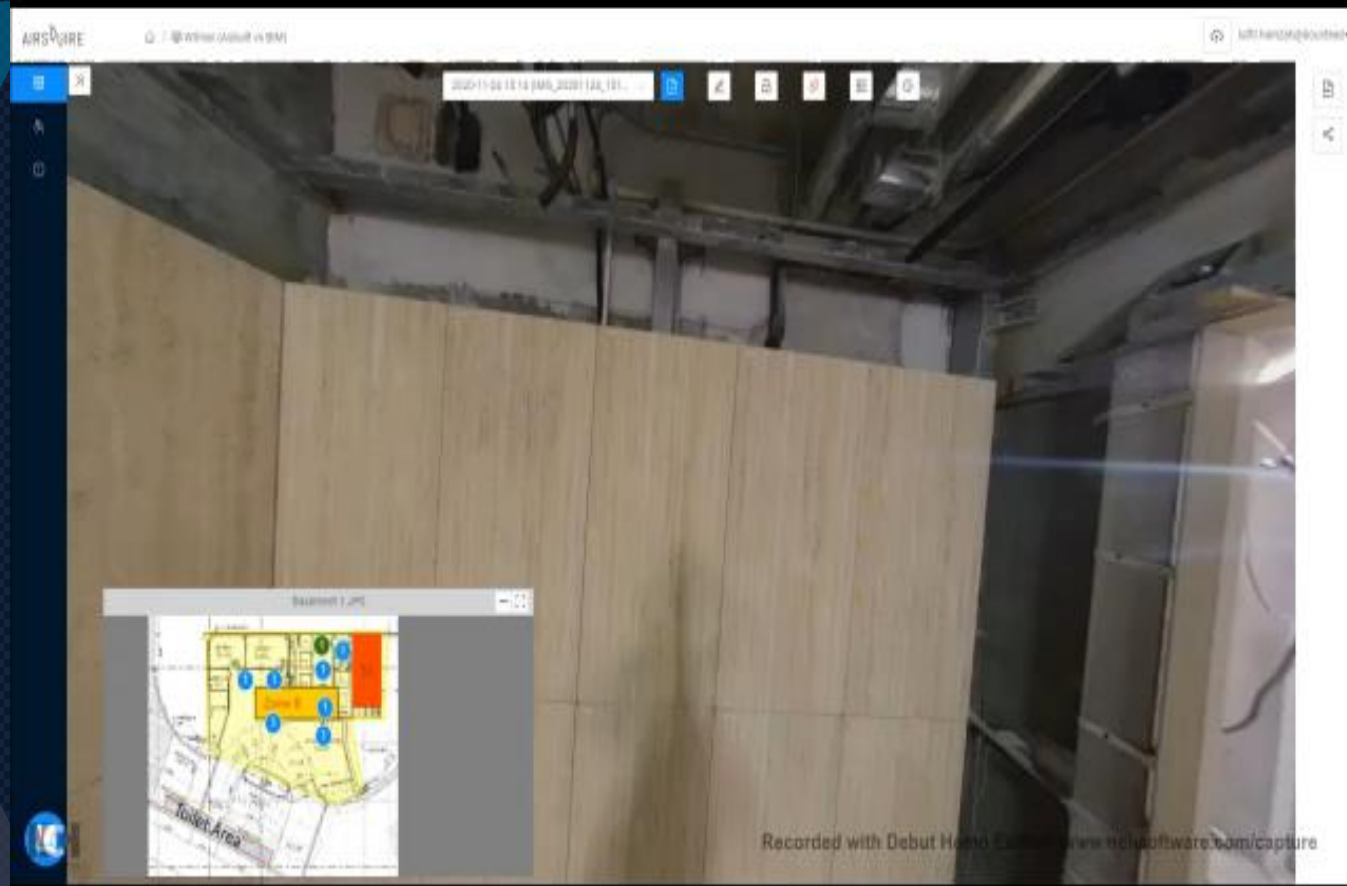
360 View



Time Capsule

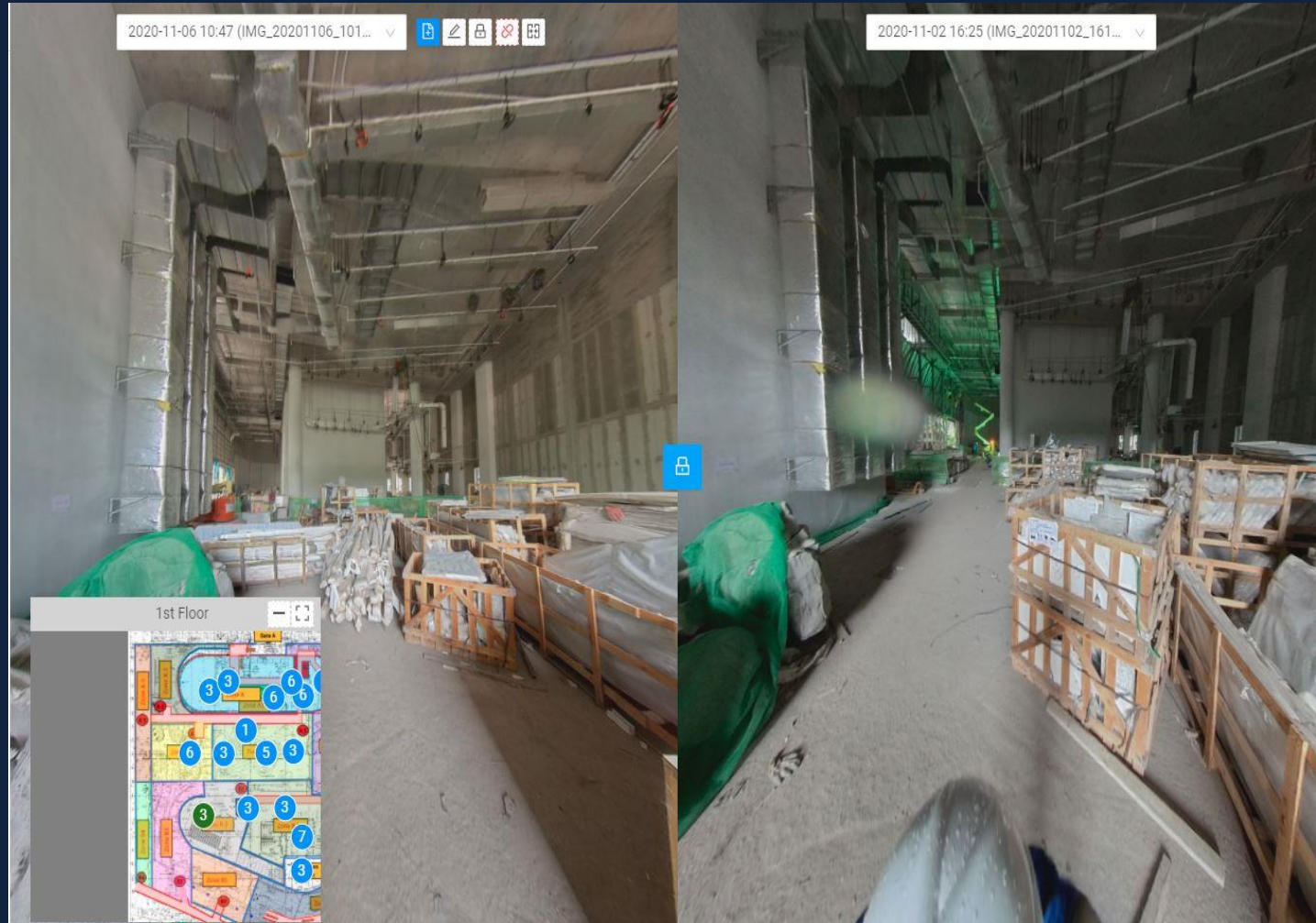


Remote Inspection

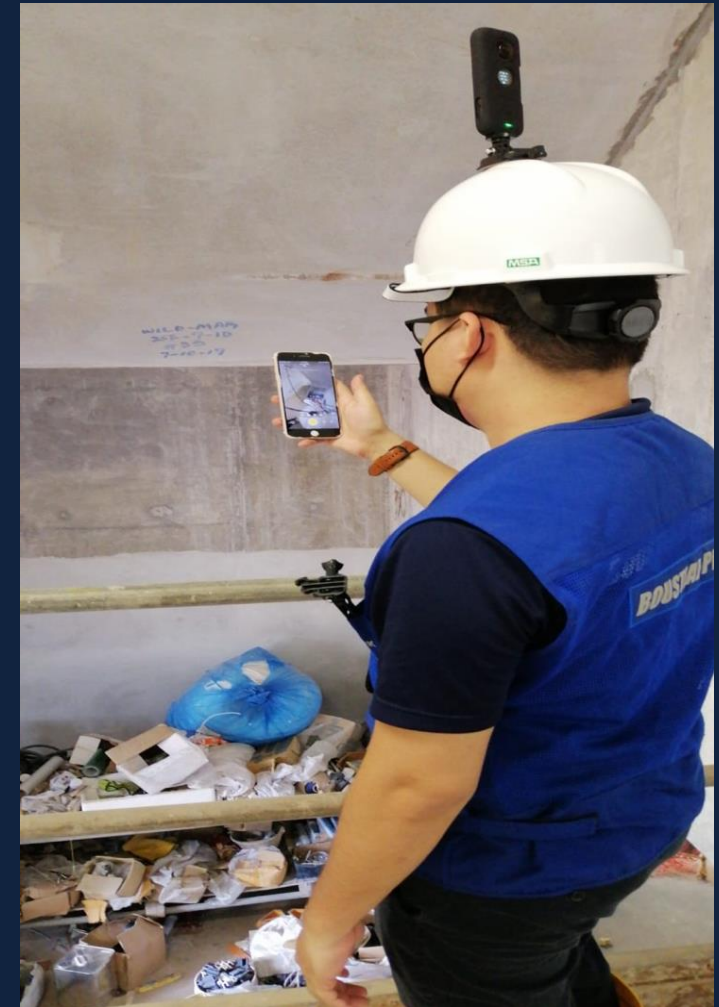


Featuring successful example of industry x tech collaboration between Boustead and start-up to innovate during the pandemic. Sharing on how **360° virtual** "google street view" of construction sites which helped Boustead project teams visualize and manage site progress cost-effectively

Progress and Digital Twin updates



An example of side by side comparison of site progress 360° capture.



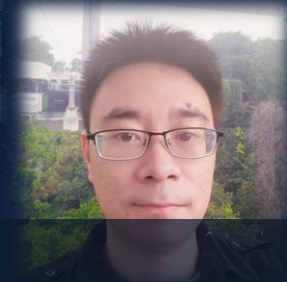
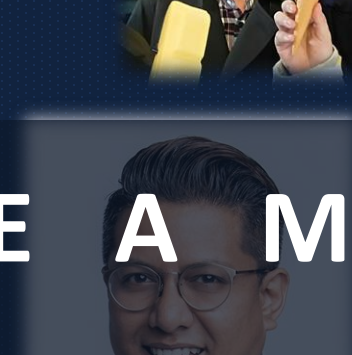
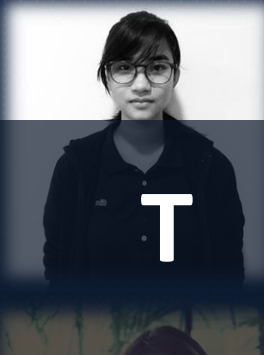
BIM Engineer using AirGo 360° Mobile to capture

V I S I O N

“To be the leading provider of innovative real estate solutions in Asia, offering a full suite of smart eco-sustainable solutions that enhance built environments and ecosystems.”

M I S S I O N

“To provide technology-drive design, engineering and delivery of end-to-end smart eco-sustainable real estate solutions that can be deployed in any industry and market.”



THE TEAM





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