



3D SCANNING AND POINT CLOUDS

WHAT ARE THEY, HOW DO THEY WORK AND HOW TO LEVERAGE THEM TO DELIVER VALUE TO YOU AND YOUR CLIENTS



WHAT IS A 3D SCANNER?

A 3D SCANNER IS A PORTABLE DEVICE CAPABLE OF CAPTURING HIGH-PRECISION 3D DATA OF REAL-WORLD OBJECTS

TENS OF MILLIONS OF LASER BEAMS PER SCAN ARE USED TO DETECT DISTANCE, ANGLES AND SURFACE COLOURS

LIKE A CAMERA, THE 3D SCANNER WORKS ON A LINE OF SITE – IT CAN NOT SCAN WHAT YOU CAN NOT SEE

THE 3D SCANNER COLLECTS AND PROCESSES THESE DATA POINTS INTO A POINT CLOUD.



WHAT ARE POINT CLOUDS ?

A POINT CLOUD IS A SET OF INDIVIDUAL DATA POINTS IN A 3D COORDINATE SYSTEM (X,Y,Z AXIS)

EACH VIRTUAL POINT REPRESENTS A REAL POINT ON THE BUILDING OR STRUCTURE

WHEN POINTS ARE COMBINED, THE POINT CLOUD CREATES A 'DIGITAL TWIN' OF THE BUILDING OR STRUCTURE



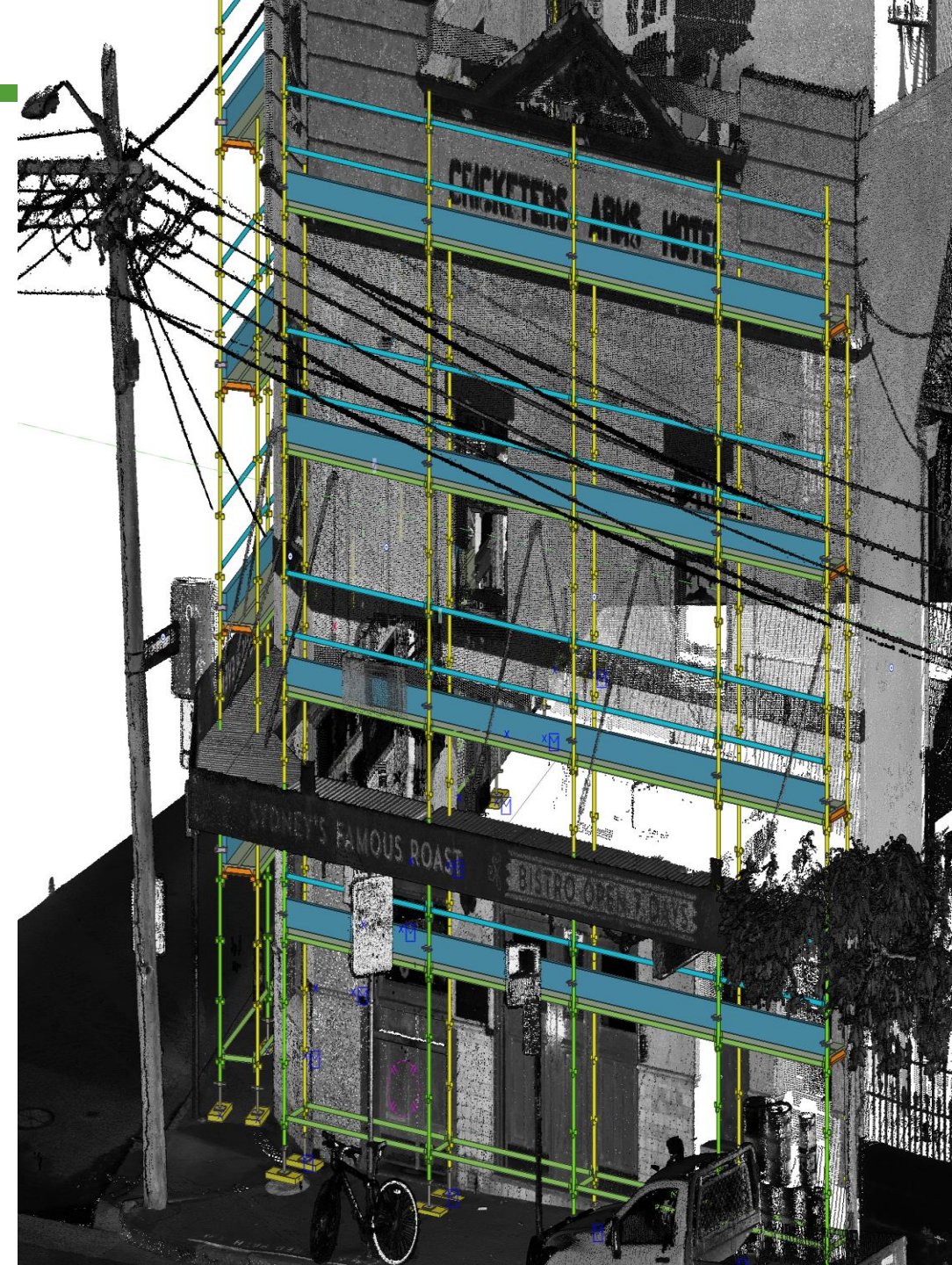
WHAT CAN YOU DO WITH THE POINT CLOUD?

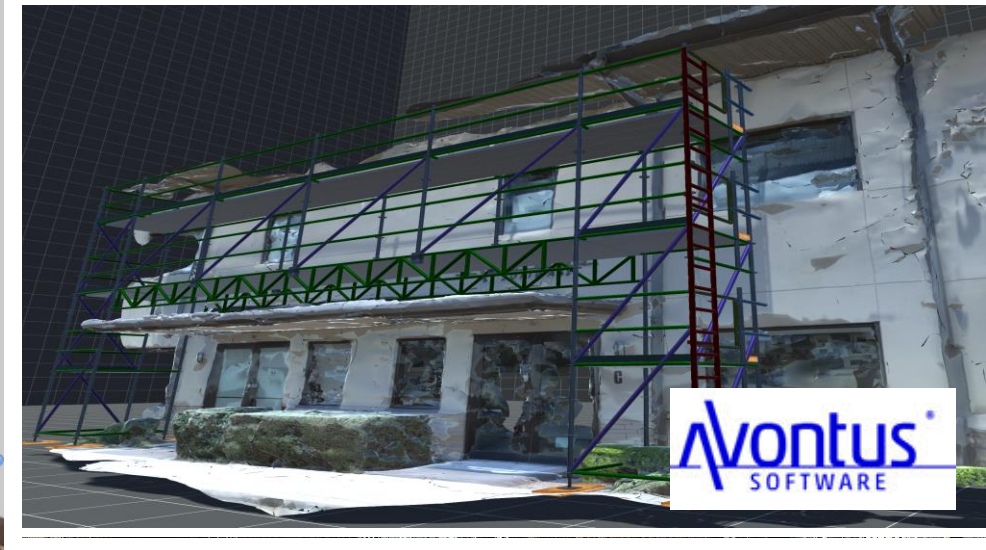
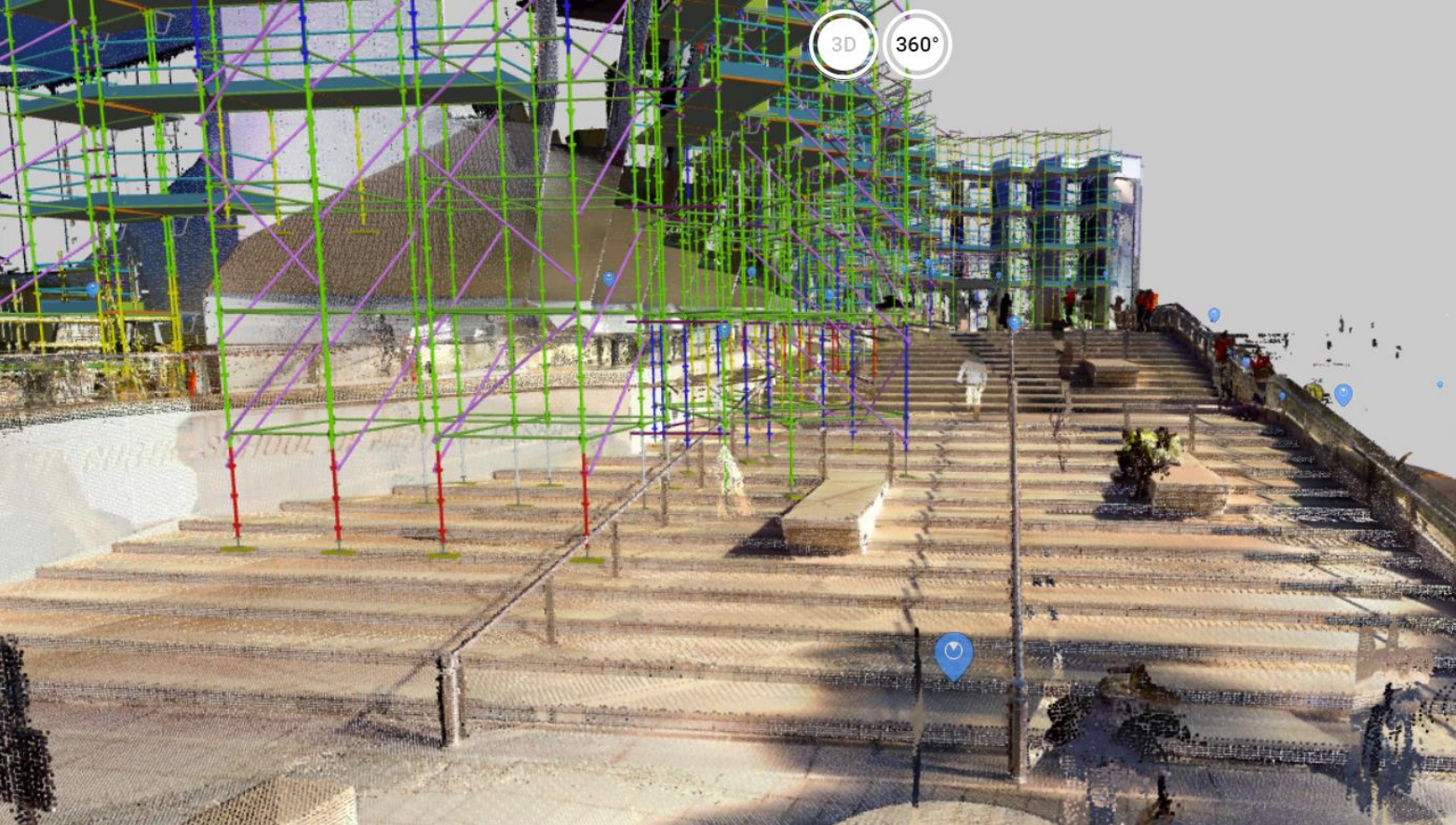
VIEW, CUT, MEASURE, TRACE THE POINTCLOUD TO MAP OUT THE SITE AND THE SCAFFOLDING

IMPORT INTO DESIGN SOFTWARE SUCH AS SKETCH-UP FOR FURTHER MODELLING OF THE BUILDING/STRUCTURE

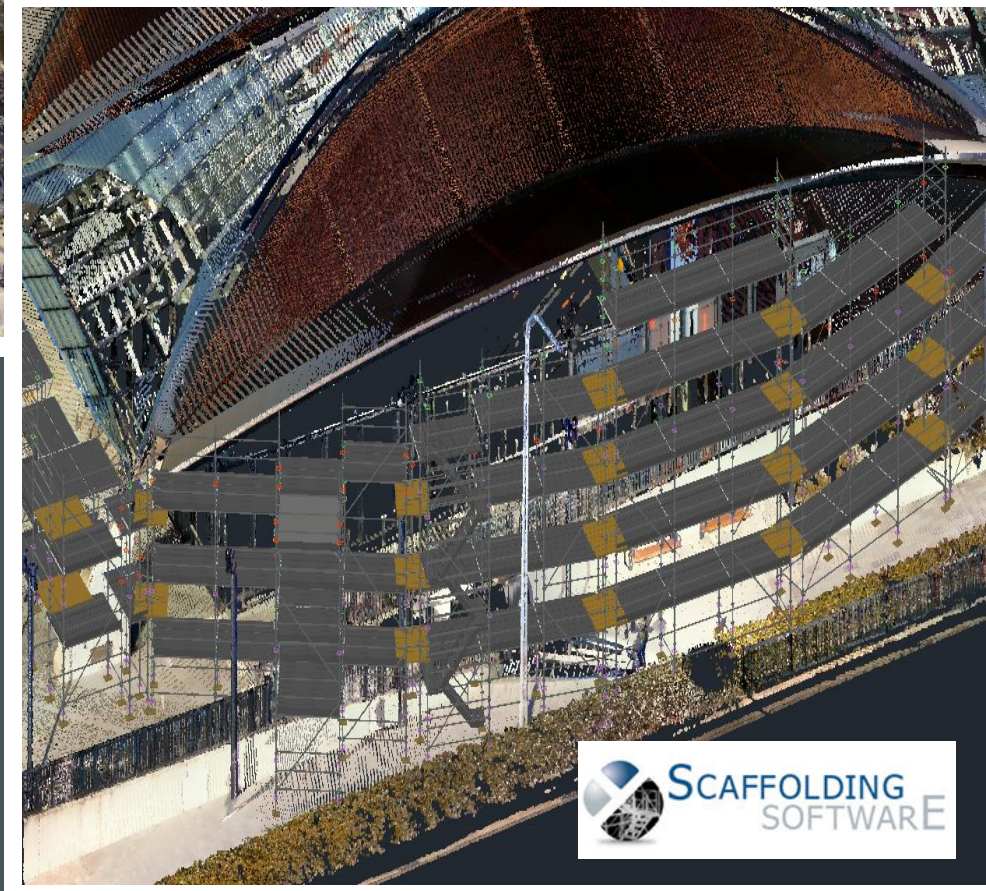
IMPORT DIRECTLY INTO SCAFFOLD DESIGN SOFTWARE SUCH AS SCAFFPLAN AND ISCAF TO PROVIDE REFERENCE WHILST DESIGNING YOUR SCAFFOLD INCLUDING CONDUCTING "CLASH CHECKS"

SHOW AND MEASURE YOUR SCAFFOLD DESIGN AGAINST STRUCTURES AND HIGH-RISK AREAS SUCH AS POWERLINES TO ENSURE COMPLIANCE TO CODES AND REGULATIONS





SCAFFOLDING SOFTWARE AND POINT CLOUDS



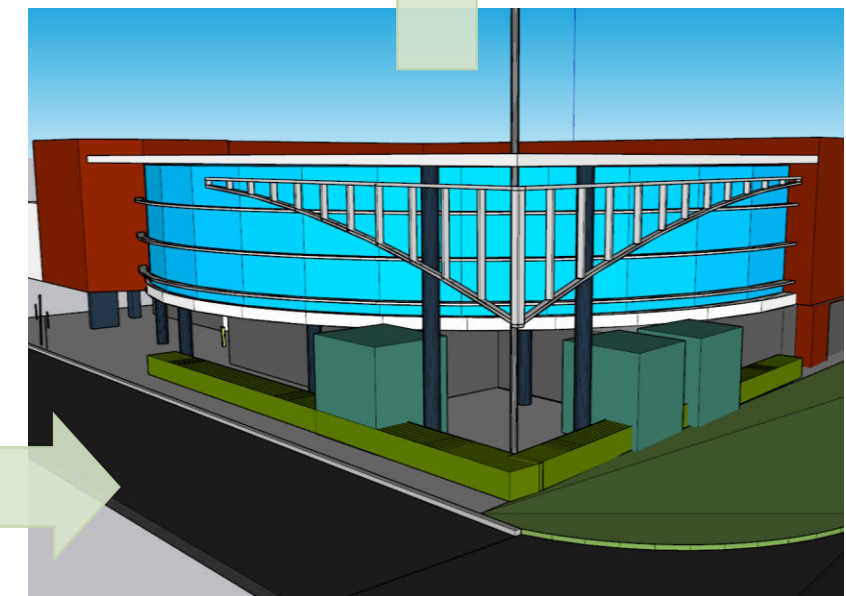
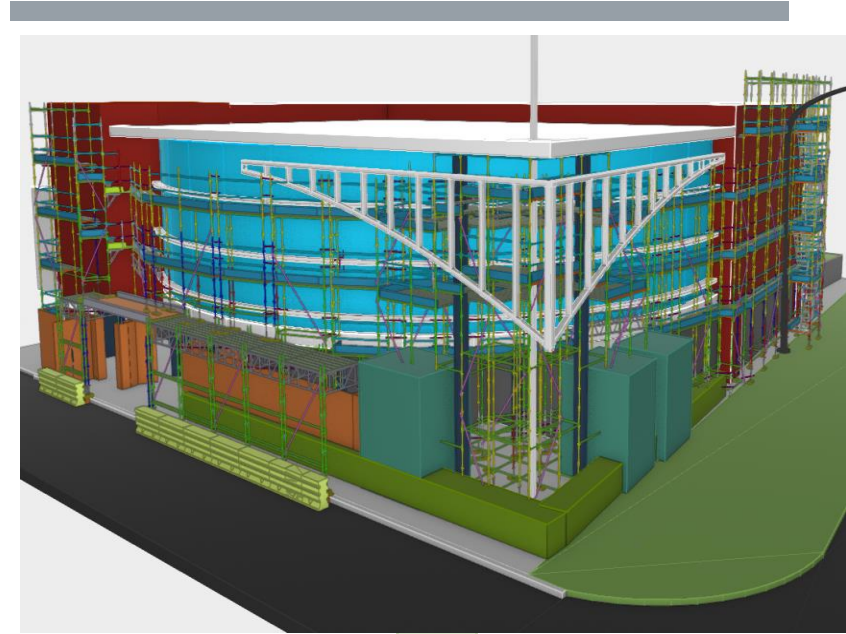
CASE STUDY: FROM 3D SCAN TO DESIGN DELIVERY

ATTEND SITE TO MEET CLIENT AND CONDUCT 3D SCAN

ANALYSE POINT CLOUD DATA AND CREATE MODEL IN SKETCH-UP

IMPORT MODEL INTO SCAFFPLAN AND CREATE THE SCAFFOLD DESIGN

EXPORT DESIGN AND MODEL TO BE VIEWED BY CLIENT FOR APPROVAL AND INSTALLATION



HOW DOES POINT CLOUD DATA ASSIST YOU ON-SITE

ATTEND SITE ONLY ONCE

THE DIGITAL TWIN CAN BE REFERRED TO TAKE ANY MEASUREMENTS, LOCATIONS FOR TIES, GROUND HEIGHTS ETC

BOOST PRODUCTIVITY

EXACT MEASUREMENTS AND 3D MODELLING ENSURE YOUR TEAM UNDERSTANDS THE INSTALLATION METHODS BEFORE THE PROJECT STARTS - NO TEAM MEMBERS STANDING AROUND WHILST THE 2D PLAN ARE WORKED OUT

ELIMINATE UNNECESSARY COSTS

DESIGNING YOUR SCAFFOLD AROUND A POINT CLOUD ALLOWS FOR EXACT MATERIAL LISTS - AVOID GEAR SHORTAGES/EXTRAS AND ADDITIONAL TRANSPORT COSTS

DESIGNS THAT IMPRESS YOUR CLIENTS

POINT CLOUDS ALLOW FOR FULL VISUAL UNDERSTANDING AND SHARING OF THE SCAFFOLD DESIGN BY ALL STAKEHOLDERS - MAXIMISING FEEDBACK AND REDUCING RE-WORK



ANY QUESTIONS?

The logo for Scaffold Studio is a dark blue square. Inside the square, there is a white square outline. The words "SCAFFOLD" and "STUDIO" are written in white, uppercase, sans-serif font, stacked vertically in the lower right portion of the white square.

**SCAFFOLD
STUDIO**