



3D Analytics for Structural Inspection

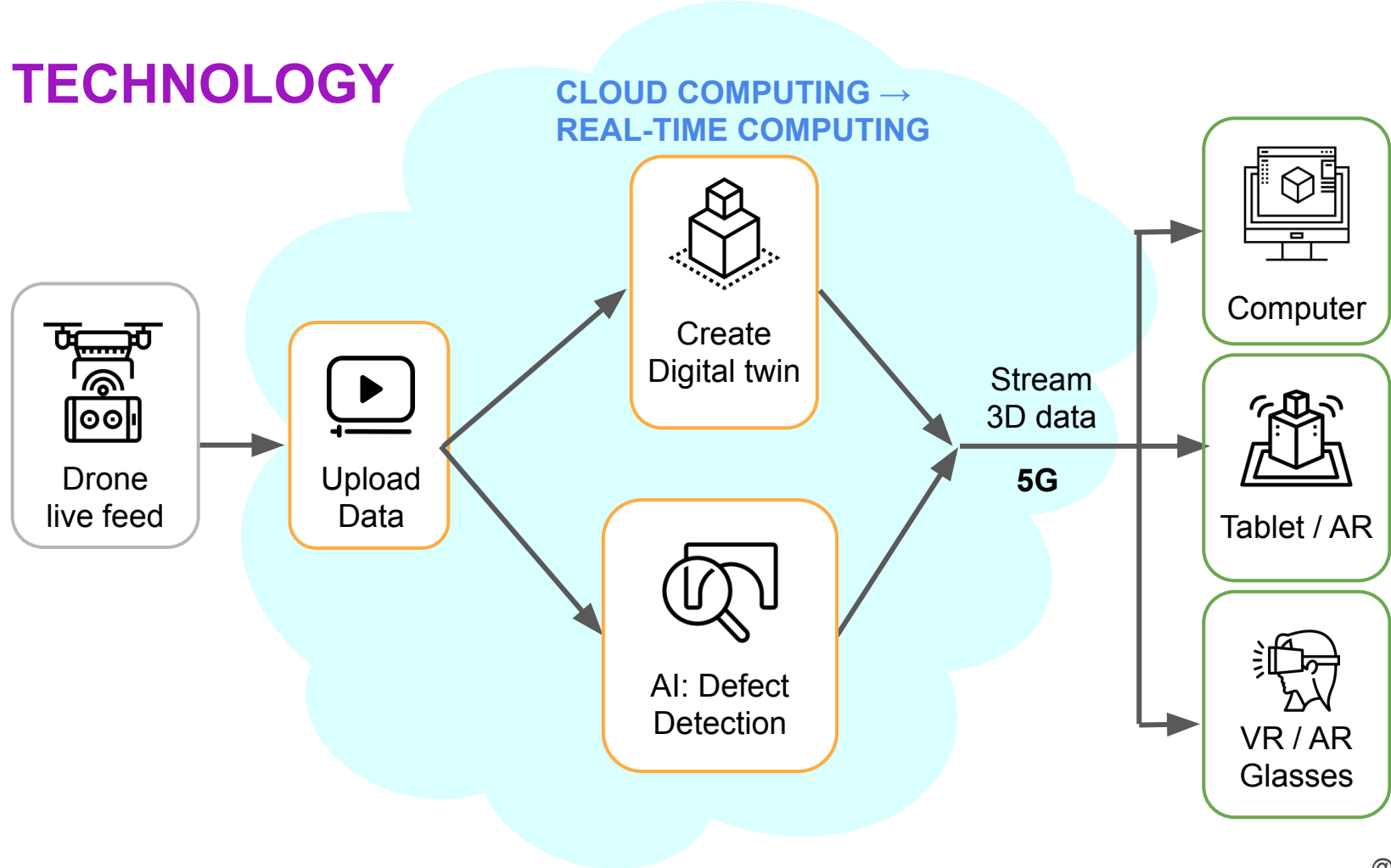
# AR/VR, Drones and Real Time Visual Intelligence Technology

By Pae Natwilai  
CEO

pae@gettrik.com  
+447 449 85 35 95  
www.gettrik.com



# TECHNOLOGY





# WHAT IS TRIK?

# Cloud + Digital Twin + 3D AI for Asset management

Product	Q1	Q2	Q3	Q4
Product 1	100	120	150	180
Product 2	80	100	120	150
Product 3	60	80	100	120

Category	Share
Category A	75%
Category B	25%

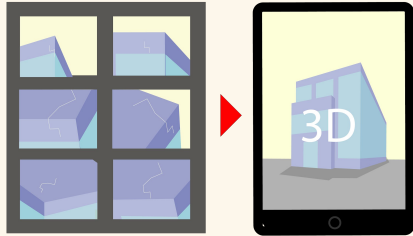
Year	Participation
2017	30%
2018	40%
2019	50%

Player	Share
HIT	12%
TRG	10%
REE	9%



# WHAT IS TRIK?

## 1. CREATE 3D MODELS



## 2.1 COMBINE



Laser scanner



CAD

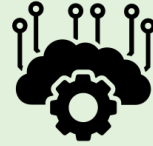


IOT/Sensors

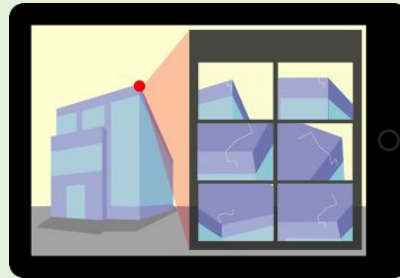


Satellite

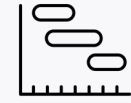
## 2.2 STORE & VISUALISE



3D Database



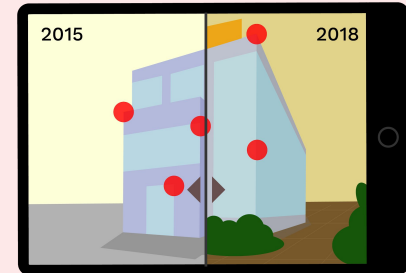
## 3. 3D AI ANALYSIS



Timeline



AI





# TRIK: Cloud-based 3D Analytic Software

1

Upload photos  
or 3D models

2

View assets  
on a google map

3

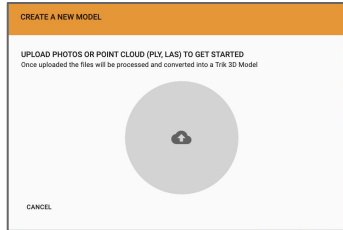
Find images on  
the 3D model

4

Annotate &  
measure in 3D

5

Generate printable  
reports



UPLOAD



INTERACTIVE  
2D/3D MAP



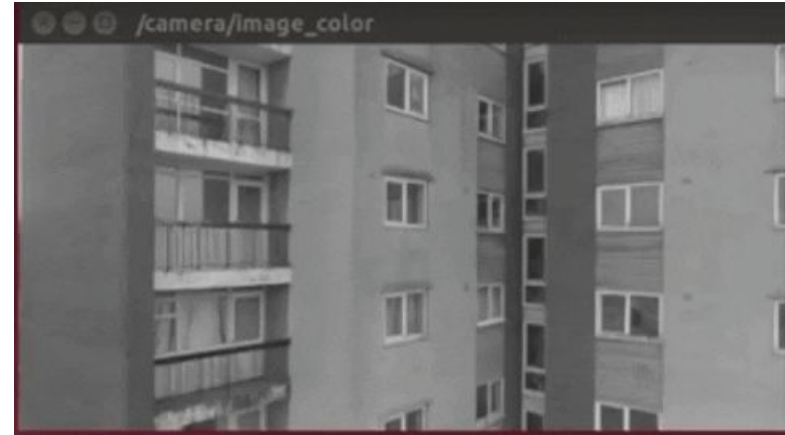
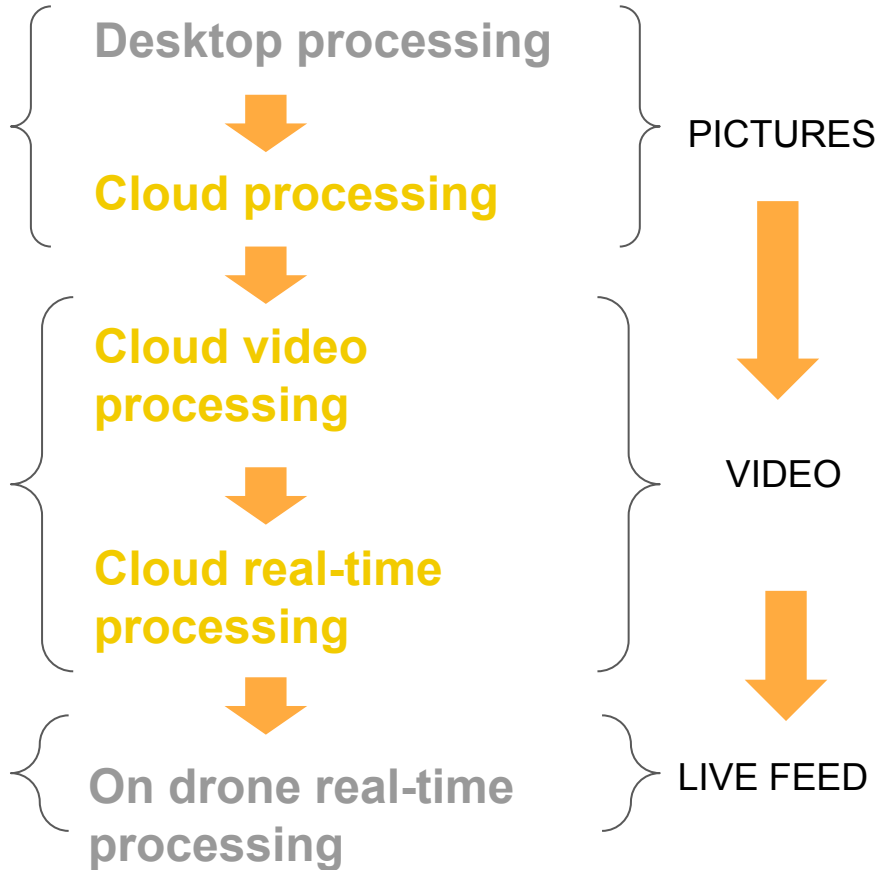
3D DATABASE  
DIGITAL TWIN



PRINT REPORTS



# 1. 3D MAPPING





## 2. DATA VISUALISATION

Drone + Laser scanner + CAD + IOT (future)



**OVERLAY MULTIPLE  
DATA TYPES**



**ONLINE ANNOTATION &  
MEASUREMENT TOOLS**



**EXPORT TO  
PRINTABLE REPORTS**

## 2. DATA VISUALISATION



**OVERLAY MULTIPLE  
DATA TYPES**



**ONLINE ANNOTATION &  
MEASUREMENT TOOLS**



**EXPORT TO  
PRINTABLE REPORTS**





## 2. DATA VISUALISATION



Comment

Note:.....  
Priority:.....

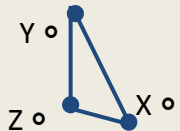
Height



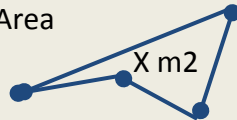
Distance



Angle  $\gamma$



Area



OVERLAY MULTIPLE  
DATA TYPES



ONLINE ANNOTATION &  
MEASUREMENT TOOLS



EXPORT TO  
PRINTABLE REPORTS

## 2. DATA VISUALISATION



OVERLAY MULTIPLE  
DATA TYPES



ONLINE ANNOTATION &  
MEASUREMENT TOOLS



EXPORT TO  
PRINTABLE REPORTS



## 2. DATA VISUALISATION



**STREAM BIG 3D DATA  
(TERABYTES)**



**VIEWABLE ON  
MOBILE DEVICE**



**COMPATIBLE WITH  
VR / AR**





## 2. DATA VISUALISATION



STREAM BIG 3D DATA  
(TERABYTES)



VIEWABLE ON  
MOBILE DEVICE



COMPATIBLE WITH  
VR / AR





## 2. DATA VISUALISATION



STREAM BIG 3D DATA  
(TERABYTES)



VIEWABLE ON  
MOBILE DEVICE

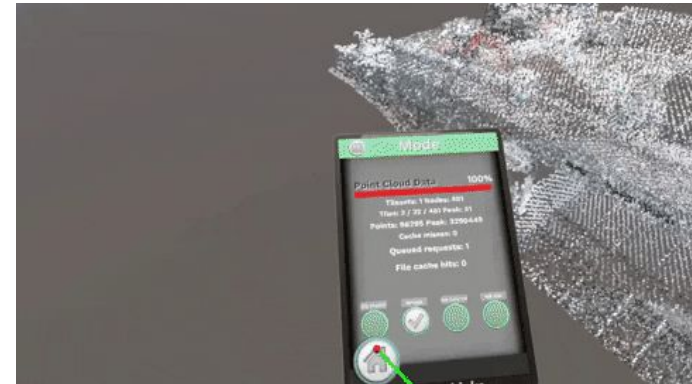


COMPATIBLE WITH  
VR / AR

Web



VR



InnovateUK grant from Department for Transport  
In collaboration with a partner company

@getTRIK\_



# 3. 3D AI ANALYSIS

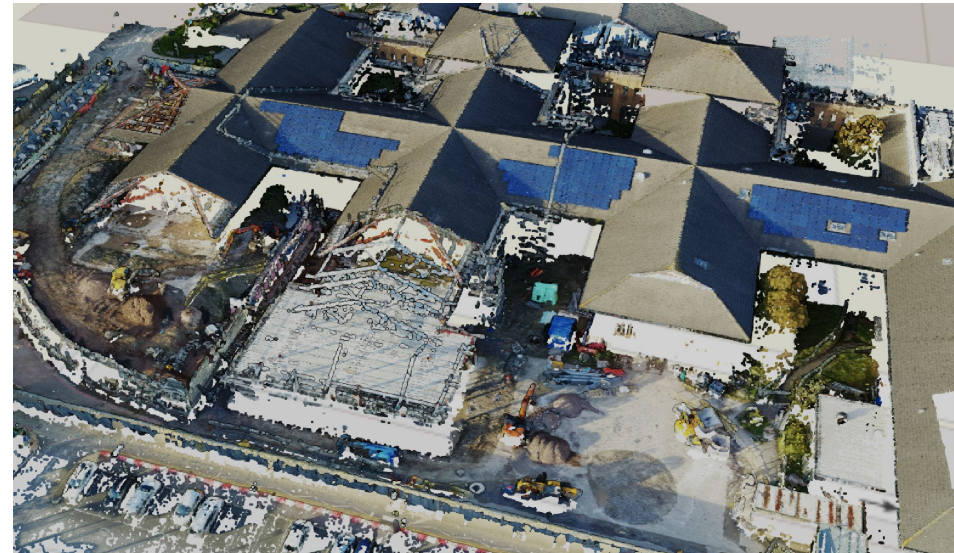
Defect detection / Object recognition





# 3. 3D AI ANALYSIS

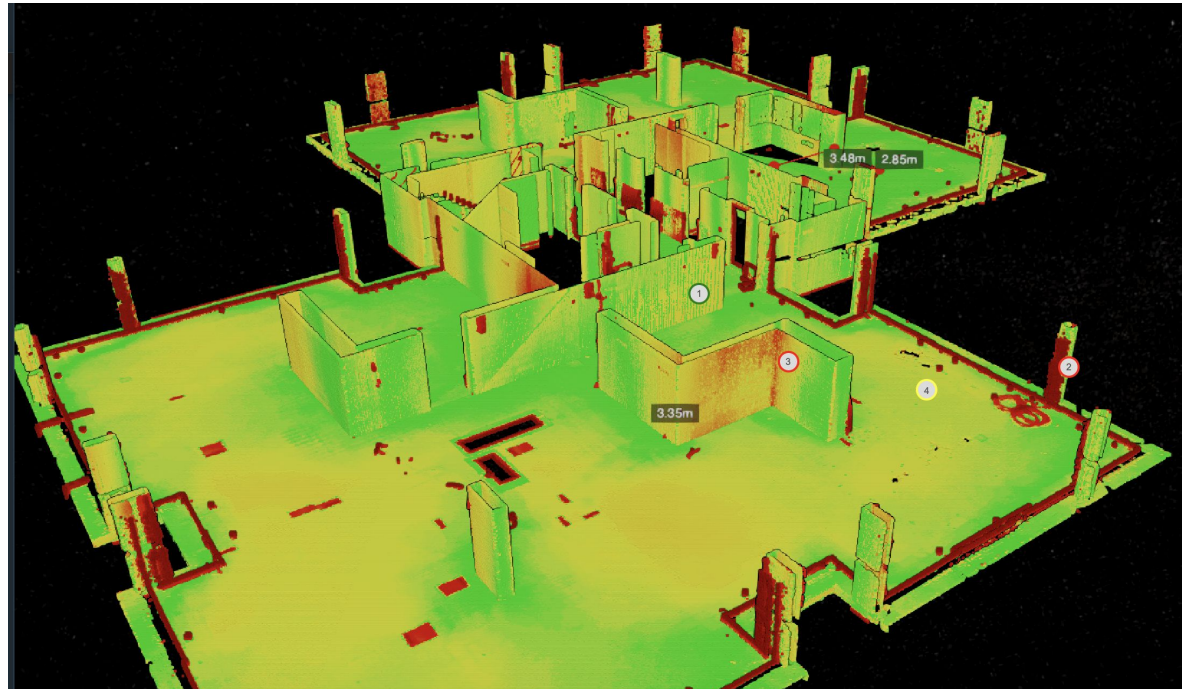
Progress tracking (Drone & Drone)





# 3. 3D AI ANALYSIS

3D Change detection (As built - Drone or Laser scanner VS. CAD)





# CASE STUDY



Building



Rail & Train station



Transmission tower

