

The logo consists of a black-outlined rectangle with the word "ORBICA" inside. From the bottom-left corner of the rectangle, a line extends diagonally downwards and to the left, ending in a small triangle.

ORBICA

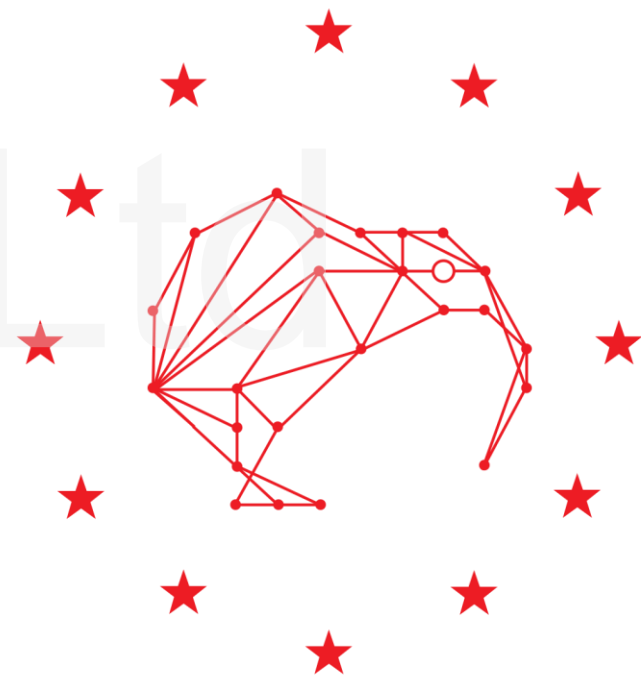
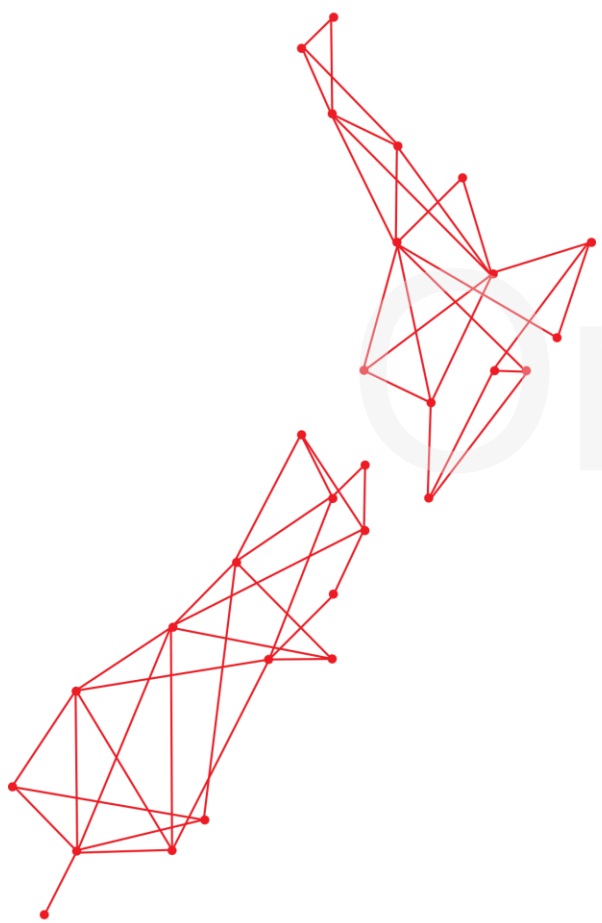
LOCATION.
DATA.
CONNECTIVITY.

GeoAI AND FEATURE EXTRACTION

**Geosmart Asia – Locate 18
Adelaide, South Australia (9 to 11th April 2018)**

ORBICA . WORLD

ORBICA IS A PROGRESSIVE LOCATION DATA SOLUTION PROVIDER



LOCATION
DATA
CONNECTIVITY



KURT JANSSEN
CEO & Founder



NEAL JOHNSTON
Location Data Specialist



ANTONIN CAEN
Geospatial Architect



BANIKA SIROHI
Full-stack Developer



FAISAL ABBAS
Geospatial Craftsman



LOUISA TAYLOR
Chief Operating Officer



SANTOSH SESHADRI
Geospatial Innovator



BRIDGET EDWARDS
Chief Financial Officer



ANDY HOLT
Location Data Specialist



WILL JONES
Location Data Specialist



SAGAR SONI
Data Scientist (AI)



ROB PARSONS
Geospatialist



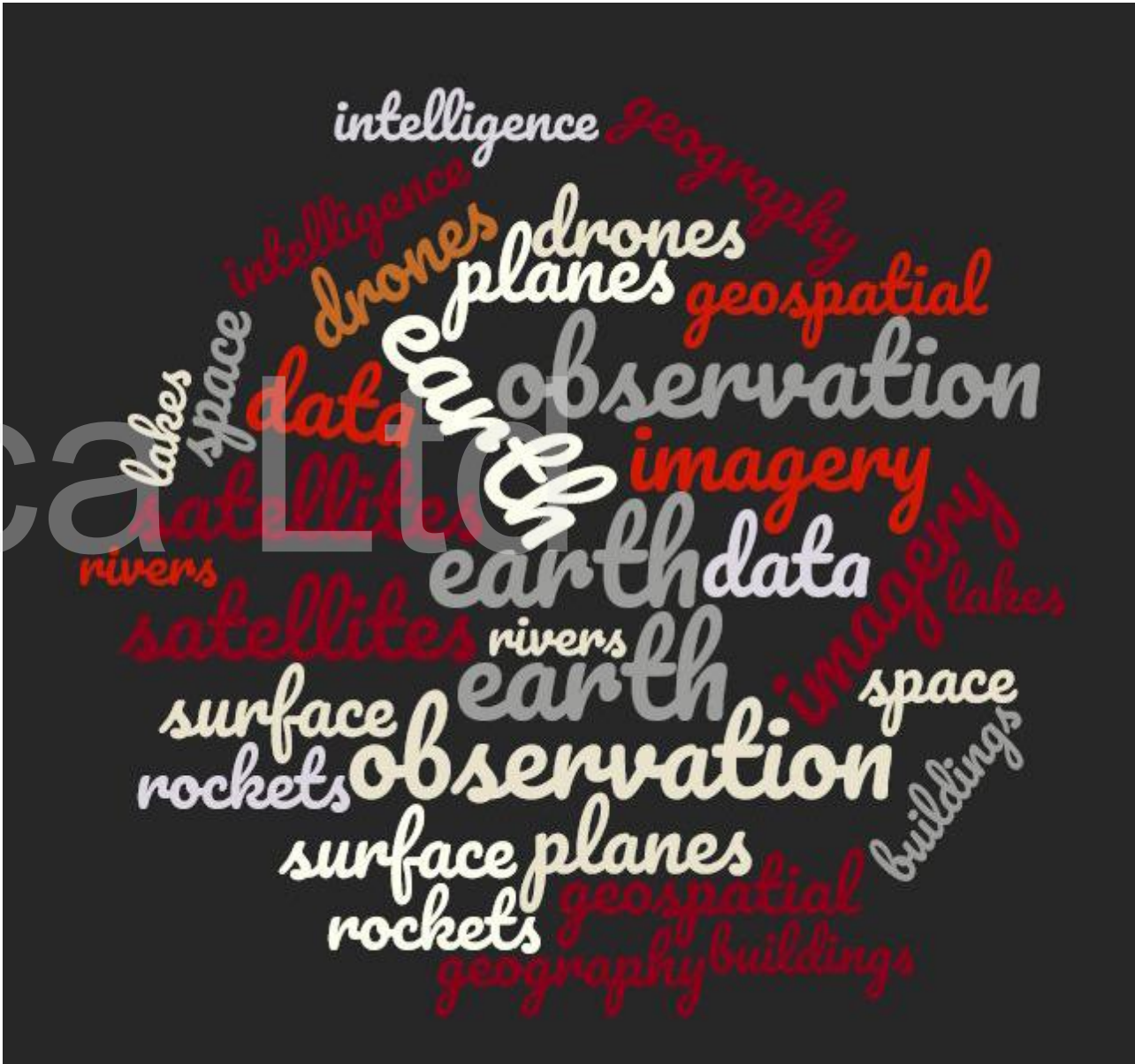
VANESSA O'BRIEN
Communications Manager



PETER ROSE
Director (Europe)



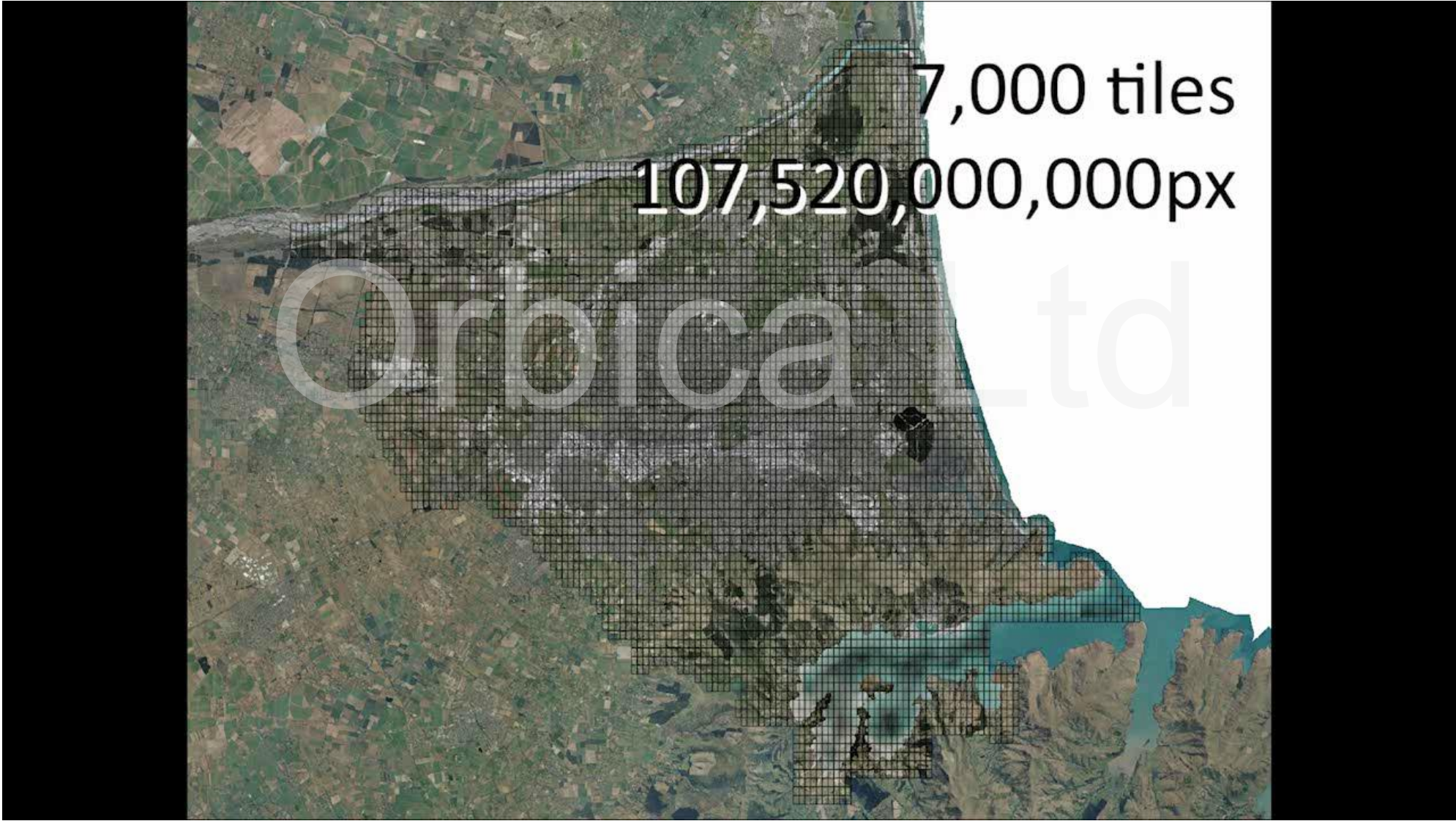
STARTING MAY
Geospatial Consultant



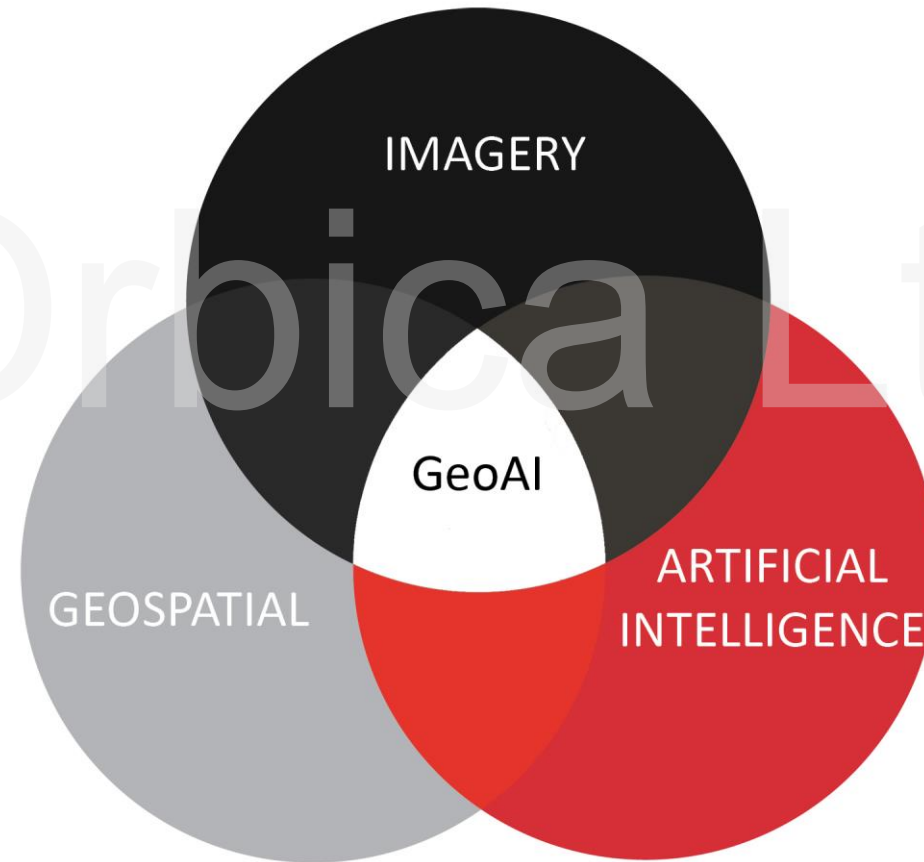
**TO DISRUPT TRADITIONAL METHODOLOGIES OF
DETECTING AND IDENTIFYING FEATURES
FROM AERIAL IMAGERY**

**TO TURN BIG DATA INTO BIG INFORMATION BY
COMBINING ARTIFICIAL INTELLIGENCE AND
GEOSPATIAL PRACTICES**

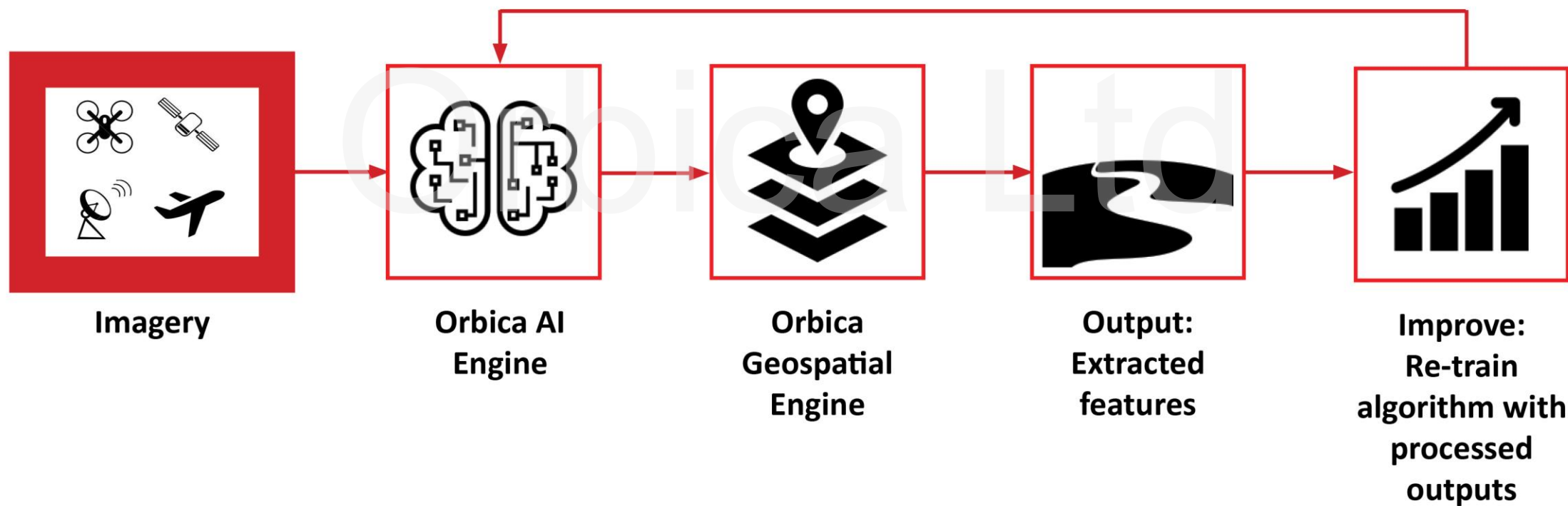
CANTERBURY

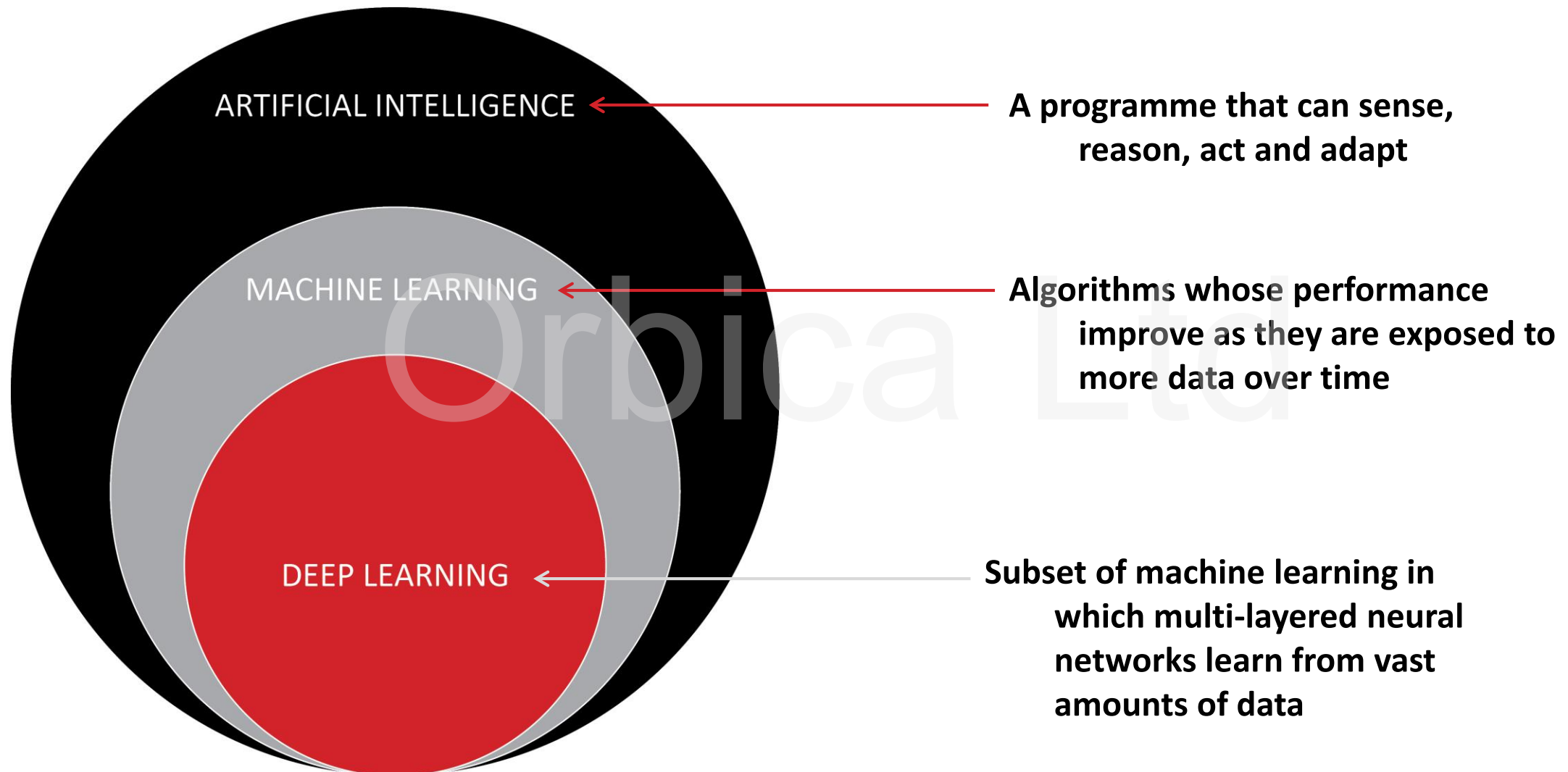


WHAT IS GeoAI?



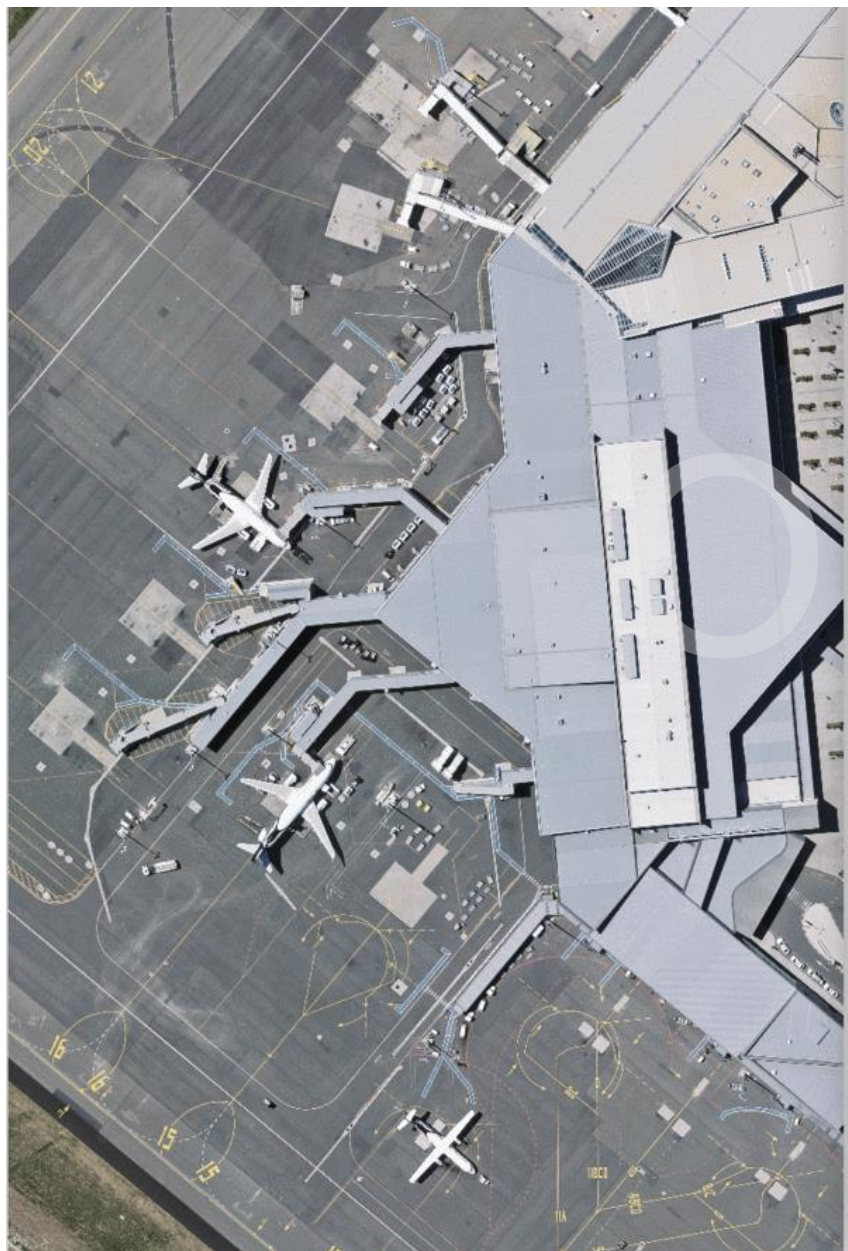
ORBICA'S SOLUTION: AUTOMATION



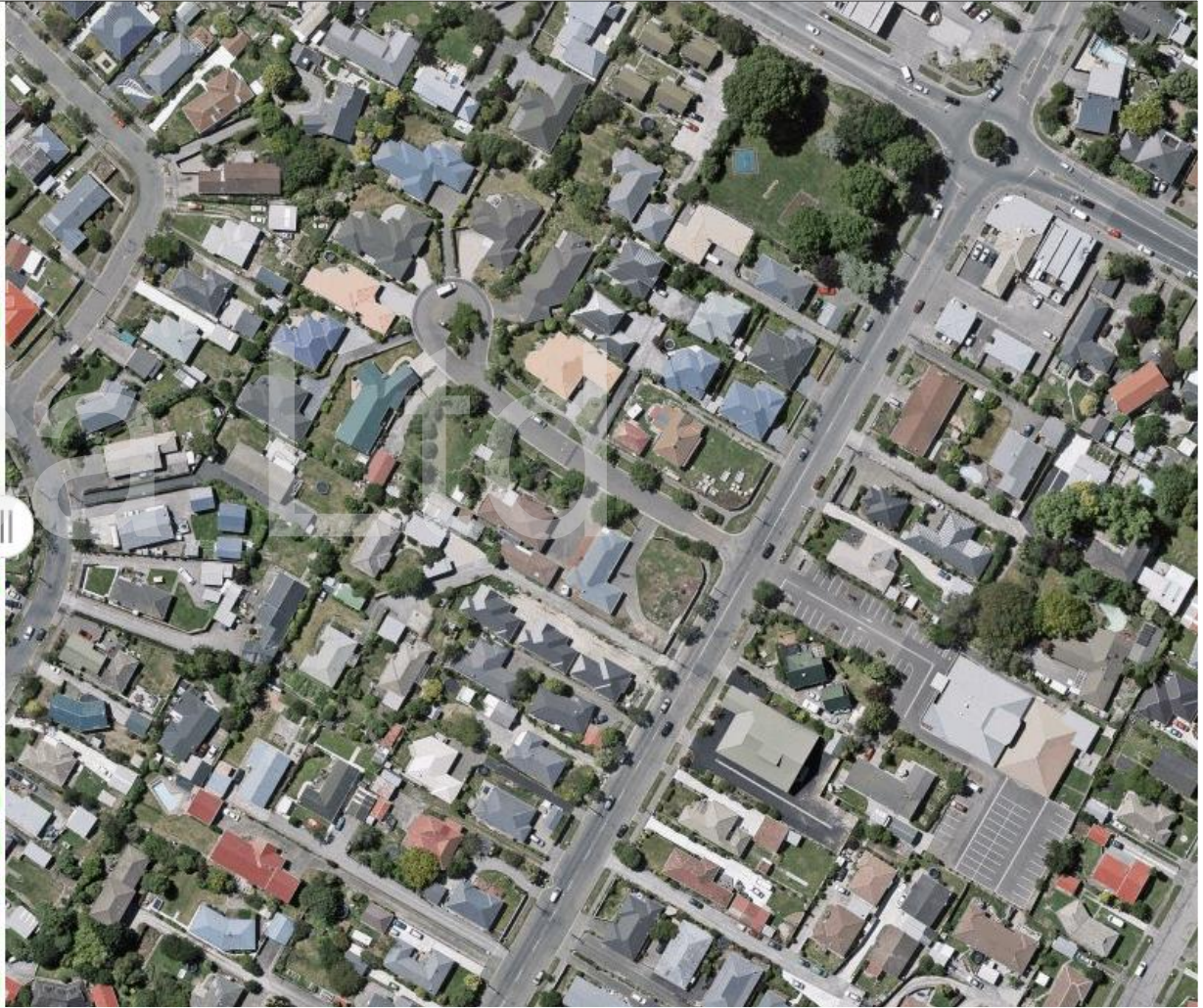




- RGB (3 band ONLY)
- 12,000 by 8,000 pixels.
- 96 million individual pixels per image
- 30cm ground resolution
- Raw results displayed. No clean-up or Passover filters or geoprocessing operations have been applied.



- RGB (3 band ONLY)
- 4,800 by 3,200 pixels
- 15 million individual pixels per image
- 7.5cm ground resolution
- Raw results displayed. No clean-up or Passover filters or geoprocessing operations have been applied.



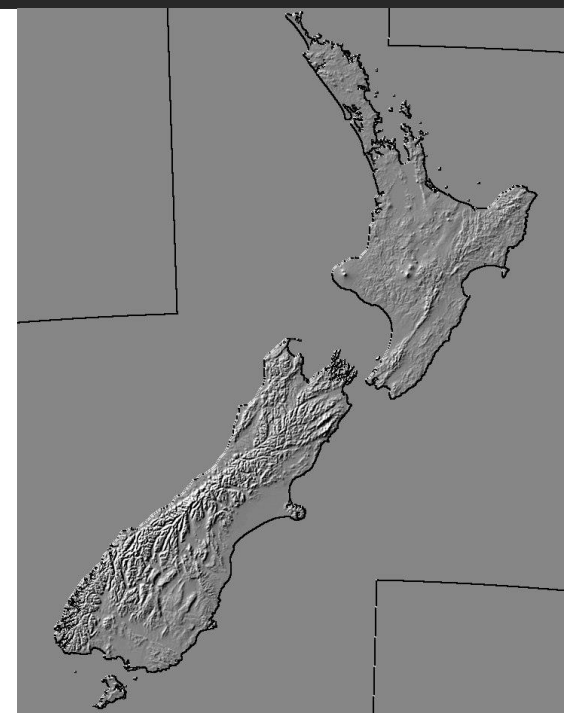




A FEW EXAMPLES...

- **Environmental management**
- **Identifying potential sales**
- **Building site progress**
- **Urban development tracking**

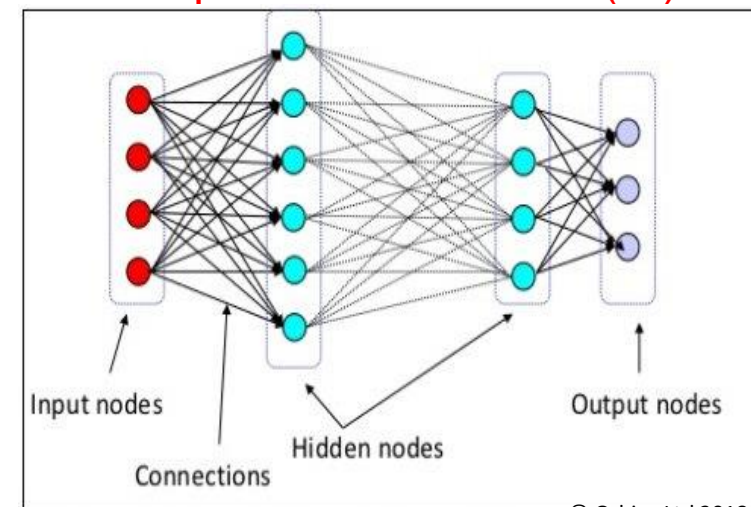
GIS Data and Imagery



Feature Engineering

- Area
- Perimeter
- Elevation (min,max,diff)
- Area to length Ratio
- No of Nodes
- Avg of polygon width

Deep Neural Networks (AI)





WHAT ORBICA DOES

TRANSFORM LOCATION DATA INTO SOLUTIONS



Training Accuracy
(LINZ)
99.00 %
(67742 / 68423)

Testing Accuracy
(Canterbury Maps)
95.82
(5896 / 6153)

+

-

Canterbury Maps Classified

Classified Incorrectly

Classified Correctly

Features

River

Lake

Pond

Canal

Lagoon

Reservoir

Classified Incorrectly

Original Feature: CANAL

Predicted Feature 1: RIVER

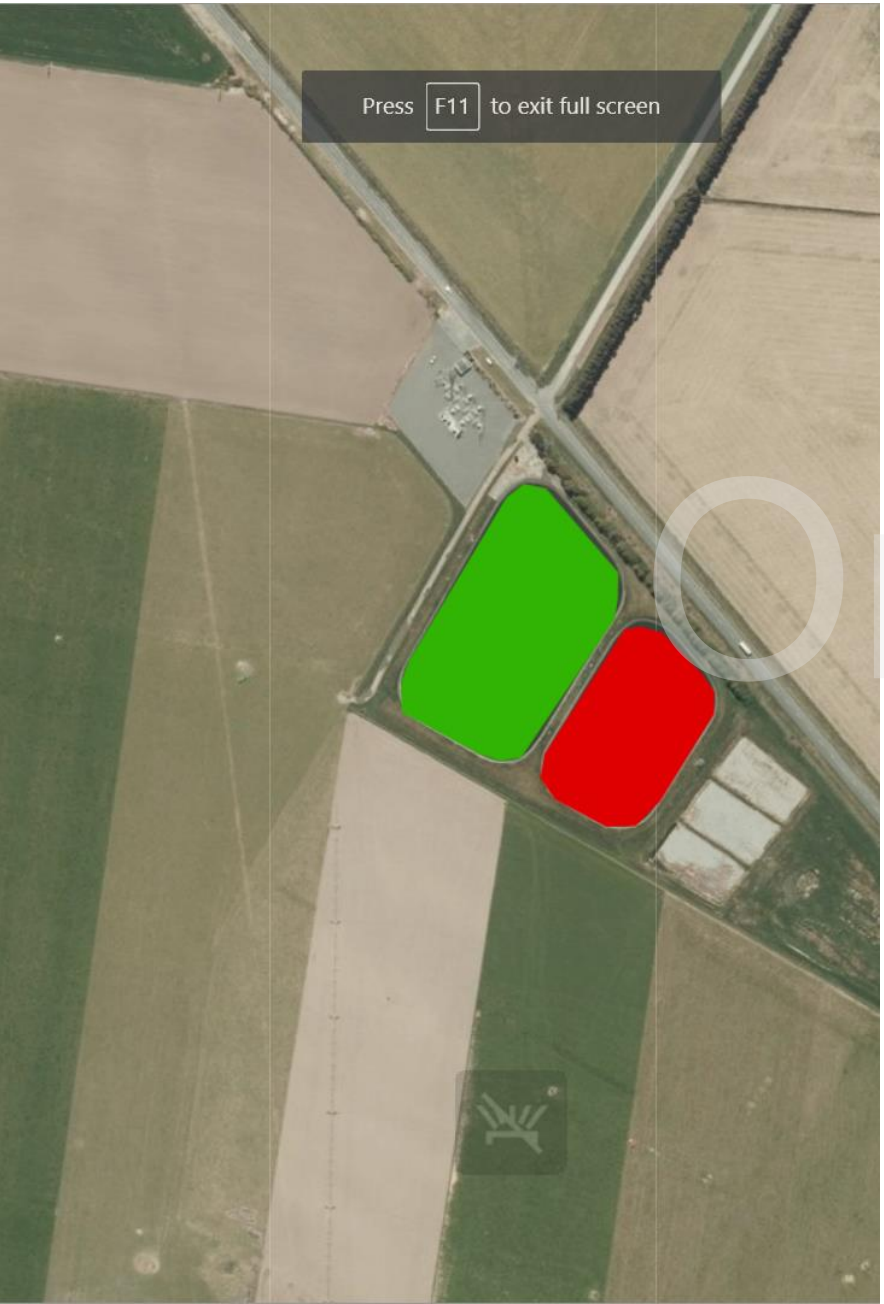
Predicted Feature 1 Probability: 99

Predicted Feature 2: CANAL

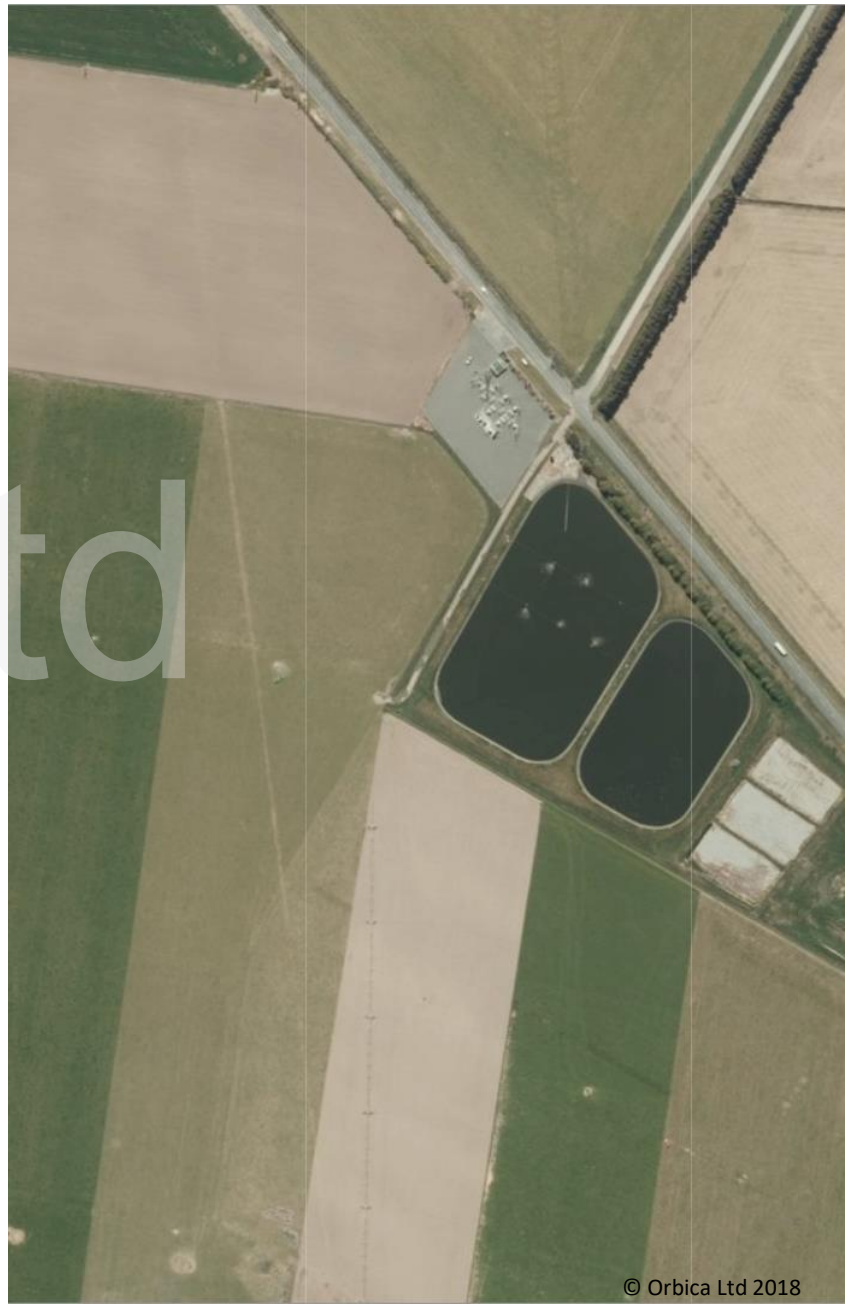
Predicted Feature 2 Probability: 0

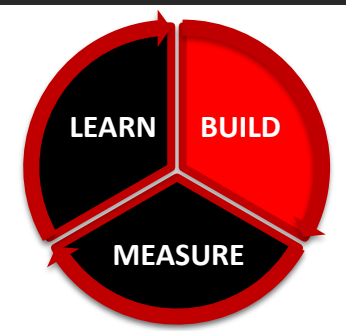
Predicted Feature 3: RESERVOIR

Predicted Feature 3 Probability: 0



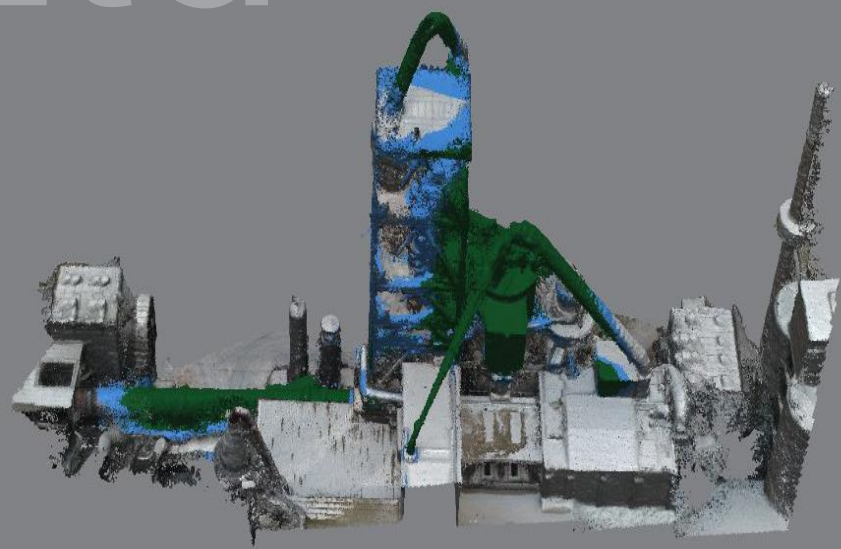
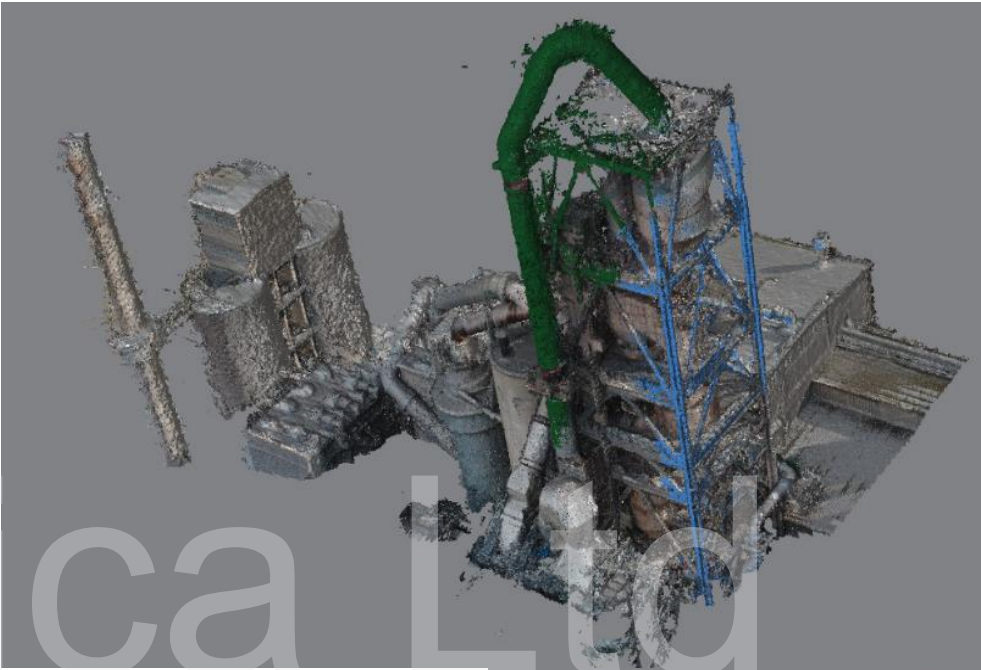
When is a lake a pond and vice versa?













THE FUTURE

ASK US YOUR QUESTIONS



LOCATION.
DATA.
CONNECTIVITY.

Orbica Ltd

A FUTURE OF EXPERIENCE, INNOVATION AND CREATIVITY

KURT JANSSEN

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Let the magic begin...