2018
INSURTECH
IMPACT
25
Oxbow Partners

GEOSPATIAL
INSIGHT

Geospatial Insight uses advanced analytics to draw insight from aerial imagery

Geospatial Insight's platform provided images and image analytics of the aftermath of Hurricanes Harvey, Irma and Maria 5 days before loss adjusting teams arrived

What happens?

Insurers can access Geospatial Insights data in two ways:
- Buy individual reports from Geospatial Insight
- Access Geospatial Insight's web-based proprietary data and analytics portal; users can view specifically requested content (e.g. analysis or imagery) or generic analysis

Key Executives

Dave Fox
CEO & Founder
- CEO at Infoterra, a provider of geospatial products and services

Dan Schnurr
CTO & Founder
- Business Strategy and Technical Director for Blom UK, an aerial imagery business
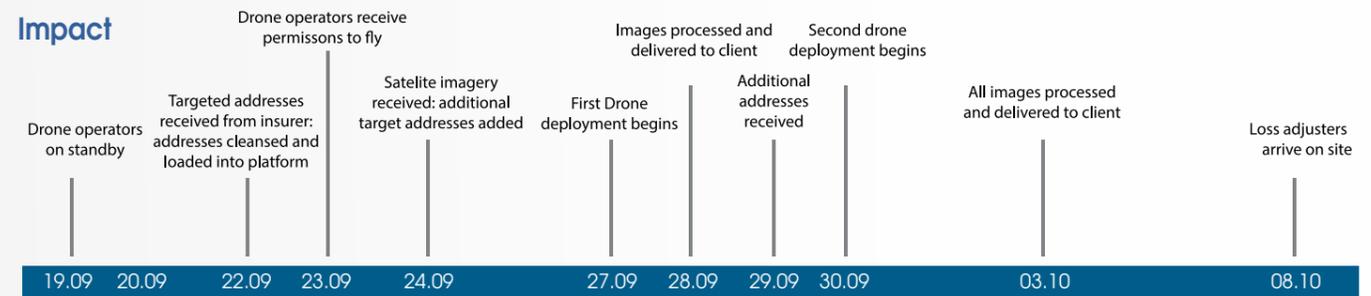
Paul Fearn
COO & Founder
- 20 years experience in geospatial industry

Adrian Watson
CFO & Founder
- CFO at Inforterra
- CFO at Aveillant technology, a holographic radar technology business

What do they offer?

Geospatial Insights uses machine learning and big data analytics to provide insight from satellite, drone and aircraft imagery. There are 3 insurance use cases:

- **Precise risk analysis**: Using satellites to help understand risk location and elevation to millimetre levels of precision

- **Dynamic risk analysis:** Using satellite imagery for dynamic monitoring of insurable assets

- **Rapid response post-loss:** Using aerial footage and analysis of catastrophe events before loss adjusters can make assessments

Year founded: **2012**

FTE: **28**

Investment to date: **£2.3m**

Key investors: **VenturesOne**

Public Insurance customers: **Guy Carpenter, Marsh, Flood Re**

Revenue growth 2016-17: **130%**

2017 revenue band: **£1m - £5m**

Current countries: **US, Europe, South Africa, Malaysia, China, India, Guinea, Middle East**

HQ: **UK**

Tech Trend — AI & Data Insight

Target Insurance Partners — Commercial lines, Reinsurance

The Oxbow Partners view

Traction: Geospatial Insight is working with over 10 (re)insurers including Guy Carpenter, Marsh and Flood Re.

Potential: We believe that there is significant potential to improve the quality of geospatial data in the models insures use. Insurers using this insight will achieve benefits, ranging from selecting risks better to managing their aggregates better. Hiscox has recently taken this further and launched its own US flood product to compete against the National Flood Insurance Program, partly based on better data insight.

The 2018 challenge: The geospatial imagery and analytics space is quickly becoming crowded. It remains to be seen whether the market becomes an oligopoly (similar to catastrophe modelling) or if there will be a range of niche suppliers. Building a meaningful foothold quickly is key to be positioned for either scenario.

Impact

Drone operators on standby — 19.09
20.09 — Hurricane Maria makes landfall
Targeted addresses received from insurer: addresses cleansed and loaded into platform — 22.09
Drone operators receive permissons to fly — 23.09
Satelite imagery received: additional target addresses added — 24.09
First Drone deployment begins — 27.09
Images processed and delivered to client — 28.09
Additional addresses received — 29.09
Second drone deployment begins — 30.09
All images processed and delivered to client — 03.10
Loss adjusters arrive on site — 08.10

During Hurricane Irma, Geospatial Insight was able to provide its client with high resolution drone imagery of the event 5 days before loss adjusters could arrive at the scene, thereby expediting the claims process.

Case Study 1

Client situation: A large insurer wanted to increase the speed of hurricane claims assessments using aerial imagery.

What they did: In the wake of Hurricane Harvey, Geospatial Insight geocoded all relevant policyholder data to develop baseline situation assessments, scheduled flight plans and organised the logistics of collecting and analysing image data of the hurricane aftermath. The business built a flexible response strategy capable of handling changes in access to aircraft and other resources, cloud-cover visibility and the evolving storm path.

Impact: Within a week of Harvey making landfall, Geospatial Insight delivered: Predictive assessments of storm and flood paths (and potential damage), detailed property-level assessments of damage and a bespoke, customer-facing user interface allowing a group of policyholders to access information and damage estimates.

Case Study 2

Client situation: An insurer wanted to map the impact of the Tianjin Port chemical explosion to assist their claims estimation process and to assess any physical barriers to viewing the site.

What they did: Geospatial Insights accessed and analysed satellite imagery from immediately before and after the explosion, highlighting damaged points of interest (e.g. damaged vehicle storage).

Impact: Within 48 hours, the blast and resulting chemical damage had been identified and mapped, enabling accurate loss estimation predictions well before loss adjusters could assess the site.

Future Applications

In 2018 the business plans to use geospatial imagery to monitor risk dynamically, allowing insurers to monitor insured assets and identify change to enable the continual evaluation of risk, adjustments to premiums and rapid response to associated loss events.