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**ROB BUCKLEY EDITOR** 



# THE SLOPE OF ENLIGHTENMENT

UAVS ARE NOW A WELL-ESTABLISHED TECHNOLOGY, PROVIDING INCREASINGLY VARIED REAL-WORLD BENEFITS, IN MANY DIFFERENT SECTORS

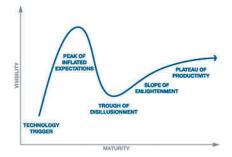
US analysts Gartner Research famously has an adoption model called the Gartner Hype Cycle (http://www.gartner.com/technology/ research/methodologies/hype-cycle.jsp). Designed to help buyers decide whether to invest in a technology, based on how established that technology it is. If it's new, you might get ahead of your competitors by adopting it early; or it might prove to be a risky investment that doesn't work as advertised in the real-world. Should you wait until the technology is more established and a sound cost/benefit analysis can be determined? Or should wait even longer until it's clear the technology is here to stay, even if everyone has already got the jump on you?

Editing GeoConnexion International, I can gauge how far along the Hype Cycle a new piece of technology has progressed in countries all over the world, simply through the articles proposed to us. UAVs have certainly gone from the 'Technology Trigger' and we've even passed through the 'Trough of Disillusionment', when people encountered problems using UAVs and discovered their drawbacks.

Now, we're on the 'Slope of Enlightenment': "More instances of how the technology can benefit the enterprise start to crystallise and become more widely understood. Second- and thirdgeneration products appear from technology providers. More enterprises fund pilots; conservative companies remain cautious."

On page 18, we talk to senseFly's Francois Gervaix, to get a sense of what the company is doing with UAVs with the latest generation of its products, as well as discuss where the industry is headed in different countries around the world as the benefits of UAVs become more widely understood.

Lewis Graham is one person who knows for sure how the market has evolved. A regular contributor to GeoConnexion International, he's written in previous issues about his experiences of choosing and working with UAVs. Even as recently as 2015, it was clear that UAVs weren't yet mature, but they provided clear advantages for those willing to take risks.



Now Lewis is regularly working successfully with UAVs and on page 30, he shares his experiences of using UAVs in practice, as well as looking at what clients in the mining sector want from UAV surveys.

The energy sector has many assets, almost of all of which need maintenance. But sometimes the only way to know if something needs maintenance is to inspect it, which results in many wasted hours of work, often in inhospitable conditions. On page 34, Rasmus Lindeneg Johansen explains how his company developed its own software tool to try to reduce inspection to a minimum. UAVs with high-resolution cameras on board can photograph assets. Then, Johansen's colleagues can map those images to models of the assets to see if there are any d.

Sometimes, inspections can even be impossible. Electricity pylons in forested areas are vulnerable to branches falling from trees, which damage the insulation on cables. But to see the damage, the cables need to be viewed... from above. An obvious opportunity for UAVs for sure, but in a forested area requiring line of sight piloting? Would it work?

On page 36, another of our regular UAV contributors, Jakub Karas, reports on his pilot project along the German-Czech border to find out. His solution is as clear a sign as any that we've passed the 'Trough of Disillusionment' and are now seeing a mature market: he used three different UAVs, each with its own strengths and weaknesses.

The path to the 'Slope of Enlightenment' is within these pages. How far along it are you?