



The use of drones in the construction industry can save time, money and valuable resources, as the team from Microdrones explains.



Making drones work



Hogan assists a surveying customer who is considering integrating UAVs into his business

As a provider of commercial aerial mapping solutions, the Microdrones team invests significant time talking with professionals who are seeking new ways to get work done. These prospective customers have a sense that drones can improve their workflow, but as the old saying goes, “The devil is in the details.” Details make the difference between either procuring a relevant and powerful business tool or getting stuck with regret.

Mike Hogan, sales director for Microdrones in the Americas, comments: “I help customers in the mapping, surveying and infrastructure inspection fields to understand the value of using drones. The biggest mistake I see people make when considering drones is talking too technical too early on.

“That probably seems like the last thing you’d expect to hear from a guy who works for a drone

company. Don’t get me wrong – I will eventually explain why using an advanced unmanned aerial system will produce better results,” explains Hogan.

“But before digging into the specific features and technologies it’s critical to understand: what the customer’s business is, what data they are trying to collect, and how they are going to apply it. Only then I can show the value and fit of using a highly accurate UAV for a prospect’s intended application. That’s a steep challenge if you don’t approach it the right way.”

Hogan and his team start every sales conversation by simply asking the prospect, “What are you trying to do?” By understanding your desired outcome and challenges, a good UAV salesperson becomes consultative, providing solutions that apply directly to your situation.

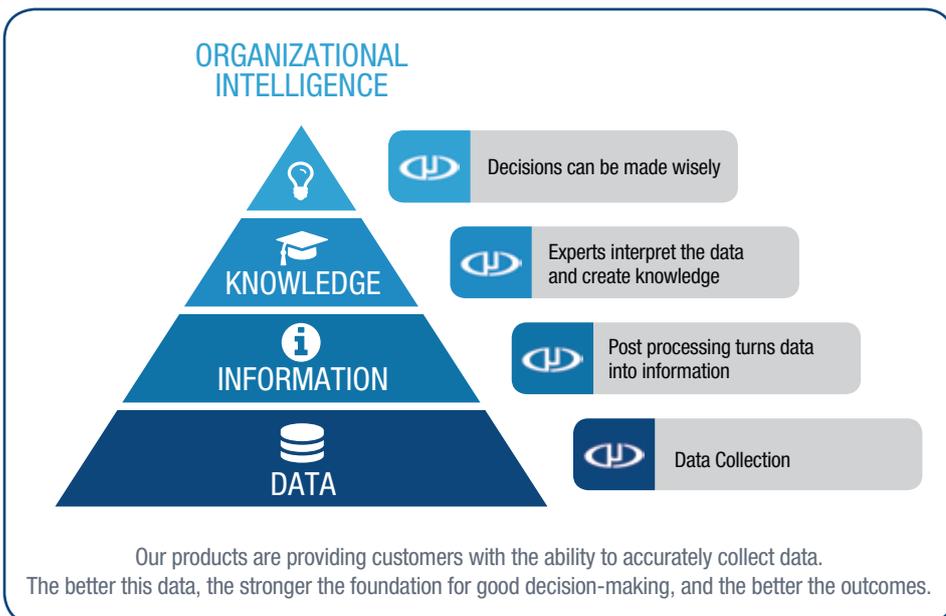
Problem solving

“We’re as much in the solutions business as we are the drone business,” explains Hogan, adding “As a UAV company, prospects come to us with their greatest challenges and loftiest ambitions. Our job is to find solutions to overcome and achieve them, whether that’s through existing or entirely new technology.”

For Hogan, thinking about the value of his products in terms of the DIKO pyramid helps. It shows how Data, Information and Knowledge are the building blocks of Organizational Intelligence.

What does this pyramid have to do with using a drone? It very simply communicates the value and importance of good data collection. Starting at the bottom level of the pyramid, data is the foundation of organizational intelligence. If you’re going to make intelligent decisions as an organization, then you need to base those decisions on good data.

Of course, data is only as good as your methods





Mike Hogan is Microdrones' Sales Director for the Americas, in charge of identifying new customers and helping clients be more successful

If you're ready to further explore whether drones might be a good fit for your business, then the team from Microdrones will be happy to help you. Visit lp.microdrones.com/ic to talk with an expert.

Demand and distribution

Since Microdrones partnered with Trimble last year to become the preferred quadcopter solution for the Trimble network, Trimble dealers worldwide have signed on to provide Microdrones mdMapper packages to their surveying, mapping, inspection, construction, mining and geospatial customers.

According to Mike Attig, Microdrones Sales Director for EMEA, "We are seeing some common need from the field and we're able to answer that with our perfectly integrated mapping solutions. When you can provide greater efficiency, smoother workflow, and better data acquisition to professionals, the systems sell themselves."

for you

of data collection. A top-quality, purpose-built UAV will provide you with the ability to collect data with an extremely high level of accuracy. The better the data, the stronger the foundation for good decision-making, and the better the outcome.

Some of the benefits these systems offer for GIS pros:

WORKER SAFETY

Easily tackle projects in areas that are difficult, dirty or dangerous to access – such as challenging terrain, crumbling structures, high elevations, and areas impacted by natural disasters. Microdrones most popular system, the mdMapper1000DG employs direct georeferencing technology from Applanix. Using this system, a surveyor can reduce or skip installing Ground Control Points, which can be dangerous, depending on the terrain or structure being surveyed.

SAVE TIME

Collecting data previously required extensive groundwork or very expensive manned aircraft. Using a drone allows quick and affordable data collection; that's one of the most important benefits for geospatial professionals. mdMapper packages allow users to spend less time in the field collecting data, and because the drone is perfectly integrated with its mapping payload, workflow and data is easier to manage and post process. Our DG systems enable you to post-process data in a fraction of the time by reducing the image front and sidelap.

INTERRUPTION-FREE DATA COLLECTION

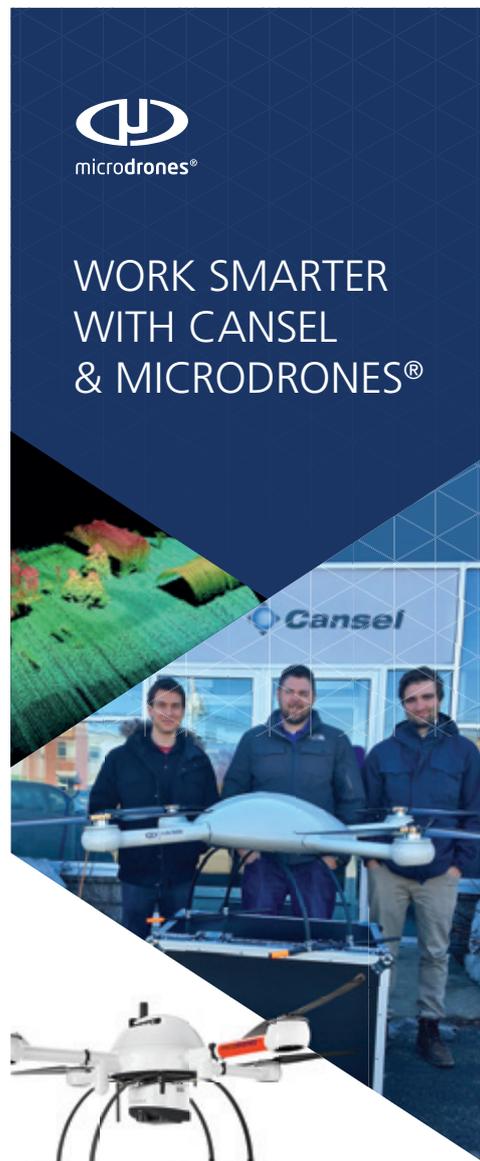
Survey live construction or mining sites without interrupting people, plans or machinery. You'll no longer have to stop work and equipment to collect the data you need, making you more valuable to your customers.

EXPANDED SERVICES

You already have a client base that knows, likes and trusts you. Consider providing more of the services they need. By incorporating swappable payloads into your system, you can offer add on services and deliverables. Microdrones offers optional accessory kits that integrate perfectly with our systems. These include inspection, thermal, multispectral, and soon LiDAR and methane gas detection.

LEADERSHIP

Customers are curious about UAV surveying technology – so providing it demonstrates that a business is an industry leader at the helm. Faster, more efficient data collection differentiates you from competitors and positions you as a subject matter expert in an emerging technology.



**WORK SMARTER
WITH CANSEL
& MICRODRONES®**



Cansel is proud to offer complete UAV mapping packages from Microdrones that include everything geospatial pros need for surveying, mapping, and inspection – and now – a fully integrated unmanned aerial LiDAR system – mdLiDAR1000.

With 23 loactions, Cansel is well positioned to support its professional customer base throughout Canada with fully integrated mapping and inspection packages.

To get in touch with the Microdrones expert nearest you, complete this form: lp.microdrones.com/ic



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The technology in drones, and the information they can produce, has exploded over the last couple of years

Benjamin Hugonet, VP European Sales at Airware



Benjamin Hugonet, vice president of European sales at Airware, said that this technology was being embraced at different construction sites around the globe.

“Drones are expanding all over the world – the original markets which embraced it were Japan, Australia and France. Those countries were the first three that allowed drones to fly in the civil air space, but very quickly regulations were put in place around the world which allowed companies like us to expand. Today it is happening very fast, and everywhere.”

Game-changer

There are no standardised regulations for flying drones, so Hugonet advises contractors to make sure they know the rules in the country where they are operating in. The benefits far outweigh the drawbacks though and Hugonet said that drones were completely changing the way that people survey and monitor their sites.

“We are really disrupting the way that people are able to collect and digest topographical data from their sites. A few years ago, if you wanted to have a survey on your site, you had to call a surveyor and it could take them days or even weeks to gather the data. Today, a drone will fly for just a few minutes and collect a huge amount of very accurate and detailed data.”

It is not just for surveying though – their ability to ‘talk’ to construction machines could be described as a game-changer. “Our goal is not to provide drone-only data, we are providing a data analytics platform. We do that by merging different data sources – for example drone and machine data,” said Hugonet.

“That is one of the biggest reasons we are so excited to have a partnership with Caterpillar, as we are combing the data. The goal is to provide a platform that will help customers work more efficiently by reducing the costs of their machines working on the site.

“To do this you have to be able to analyse the way the site is moving and the fuel consumption of the machines. By combining those data sets, you will be able to analyse your production costs and take decisions to reduce it.”

He then gave a good reason why this sector will continue to evolve and expand: “The more technology provided to customers, the bigger their appetite for new analytics and data.” **ic**

Bigger isn't always better

Construction leader turns to microdrones

Dr Thomas Gröninger and his team at Strabag in Germany were tasked with finding the best unmanned aerial system to help strengthen their work flow and processes.

“Strabag sees big potential in the use of UAS,” Gröninger said. “We’re focusing on improving our work flows with this technology. It saves time and reduces costs.”

Gröninger and his team determined that Microdrones offered one of the best professional drone platforms. They selected the mdMapper1000, for its photogrammetry capabilities, and the md4-3000 for its ability to carry heavy LiDAR sensors and mapping-grade cameras.

“Microdrones UAS have a very long flight time,” Gröninger said. “Because we fly the drone over highways in an area where there are many cars, it’s important to have a high-security, high-quality drone so it doesn’t crash into traffic.”

In the past it would take a week to collect the data necessary to create a 3D model of a highway. Using Microdrones’ systems cut that time down to a day, without putting workers in harm’s way.

Mike Dziok, marketing director for Microdrones, said, “We love seeing the work that world-class construction companies like Strabag are doing. Long before big machines start moving dirt, our systems have flown above to collect data that is used to plan, monitor and execute projects.”

Gröninger and his team deploy their Microdrones systems approximately once every two days, inspecting bridges, construction sites and projects around the world.



Microdrones are said to have a long flight time

CONSTRUCTING BETTER, TOGETHER.

The Trimble and SITECH partnership was built on the notion that better solutions and better support make for better outcomes. That's why, for ten years, our teams have blended premium construction technology with proven service expertise, delivering you a partnership where technical innovation and local support meet hardware—and your hard work—for decades to come.

construction.trimble.com



Celebrating 10 Years of Partnership



Transforming the way the world works.