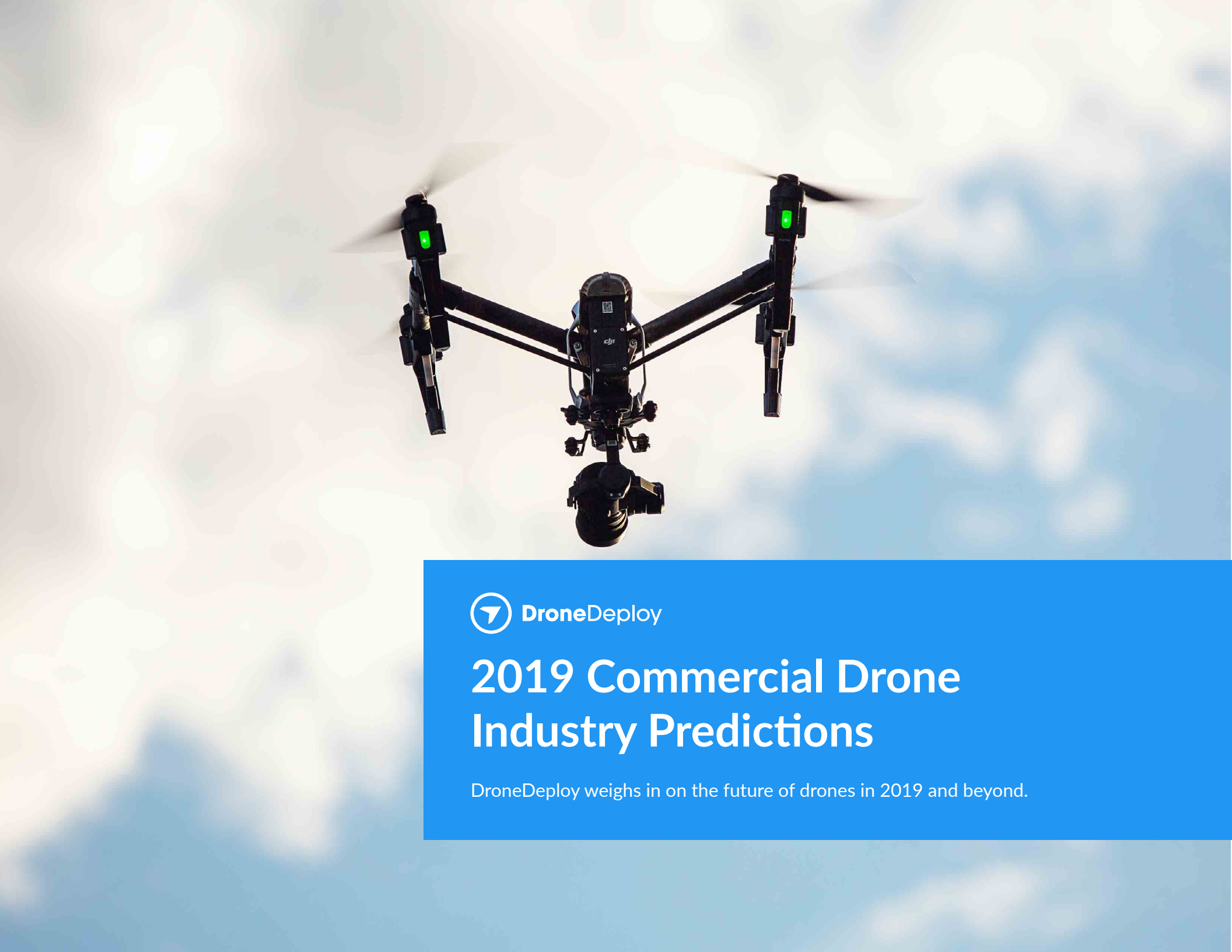


DroneDeploy

2019 Commercial Drone Industry Predictions

DroneDeploy weighs in on the future of drones in 2019 and beyond.

Introduction: 2019 Commerical Drone Industry Predictions

The golden age of drone technology is upon us, and 2019 promises to build on the industry's evolution and success over the past year. Enterprise drone use increased by 58 percent from 2016 - 2017 — with the construction, mining, agriculture, surveying, and real estate sectors leading the way. That growth continued last year, and we expect even faster growth in 2019. For context, McKinsey predicts the economic impact of the commercial drone market will increase from $1 billion in 2017 to over $31 billion by 2026.

The bottom line is that drones are starting to become an indispensable part of our economic infrastructure. "We've seen drone adoption skyrocket across sectors, game-changing technology hit the market, and new partnerships form," says Mike Winn, CEO and co-founder of Drone Deploy. "Drone technology is being used by the world's largest industries, including construction, agriculture, mining, surveying, and real estate."

While 2018 is in the rearview mirror, its momentum will bring us closer than ever to seeing unmanned aerial vehicles (UAVs) used on all kinds of job sites this year. Keep reading for our thoughts on where the industry is headed; how drone hardware and applications are increasing in sophistication; and how they make jobs safer, data more accurate, and workflows more efficient.

"Drone technology is being used by the world's largest industries, including construction, agriculture, mining, surveying, and real estate."

Mike Winn, CEO & Co-founder DroneDeploy

10 Deployments of 100+ Drones by Large Enterprises

Drone deployments are starting to get big, and we're transitioning from proof of concepts with 1-10 drones in 2016 - 2017, to scaling operations in 2018 with 10-50 drones, to having fully scaled deployments with over 100 drones.

Corteva Agrisense is a leader in this space deploying over 400 drones this agricultural season. Drone solutions have proved their value, and the onslaught of real time data, and ROI analytics is driving major adoption. Expect to see more large deployments in 2019, especially from major agriculture brands, insurers, and energy companies.

9 The Age of Automation Begins

Hardware will continue to be an important part of the drone narrative in 2019. And while we've long talked about the autonomous future of our industry, we're finally seeing that vision become a reality. Get ready for so called "drone-in-a-box" solutions!

The first FAA-certified Beyond Visual Line of Sight (BVLOS) drones, with completely autonomous functionality, was cleared for take-off in the United States at the end of last year. There will be more coming from the 25+ drone-in-a-box companies. We expect to see up to 500 deployed in 2019. Although many will be proofs-of-concept, they will be critical steps forward.

8 Enterprise Drone Hardware Outpaces Prosumer Models

Another trend that we see in the crystal ball for 2019 is growth in the amount of market share captured by drones built to meet the growing demands of the enterprise. To date, consumer, or "prosumer" models have been adopted faster than the early enterprise options. But as vendors release more enterprise versions, that will all change.

New entrants to the market, such as DJI's Phantom 4 RTK and it Mavic 2 Enterprise Dual, deliver the capabilities enterprises have long asked for at an attractive price point. For those companies seeking highly-accurate data collection, Real-Time Kinematic technology prices have dropped below $7,000, and the Mavic 2 with thermal camera is now just $2,700 (down almost 5x from previous DJI drones equipped with thermal cameras).

7 Energy Sector Drone Adoption Triples

The energy sector is DroneDeploy's fastest-growing market. We're seeing rapid deployment of drones in both the oil and gas and the solar industries, a trend that will continue at breakneck speed in 2019. Drones are a must-have on energy-related construction sites, and they are increasingly being used for surveying, operations, and maintenance.

Some of the largest oil and gas companies around the world now rely on UAVs to improve operations and safety. As we reported in our recent eBook, key benefits include making inspections safer and improving regulatory compliance.

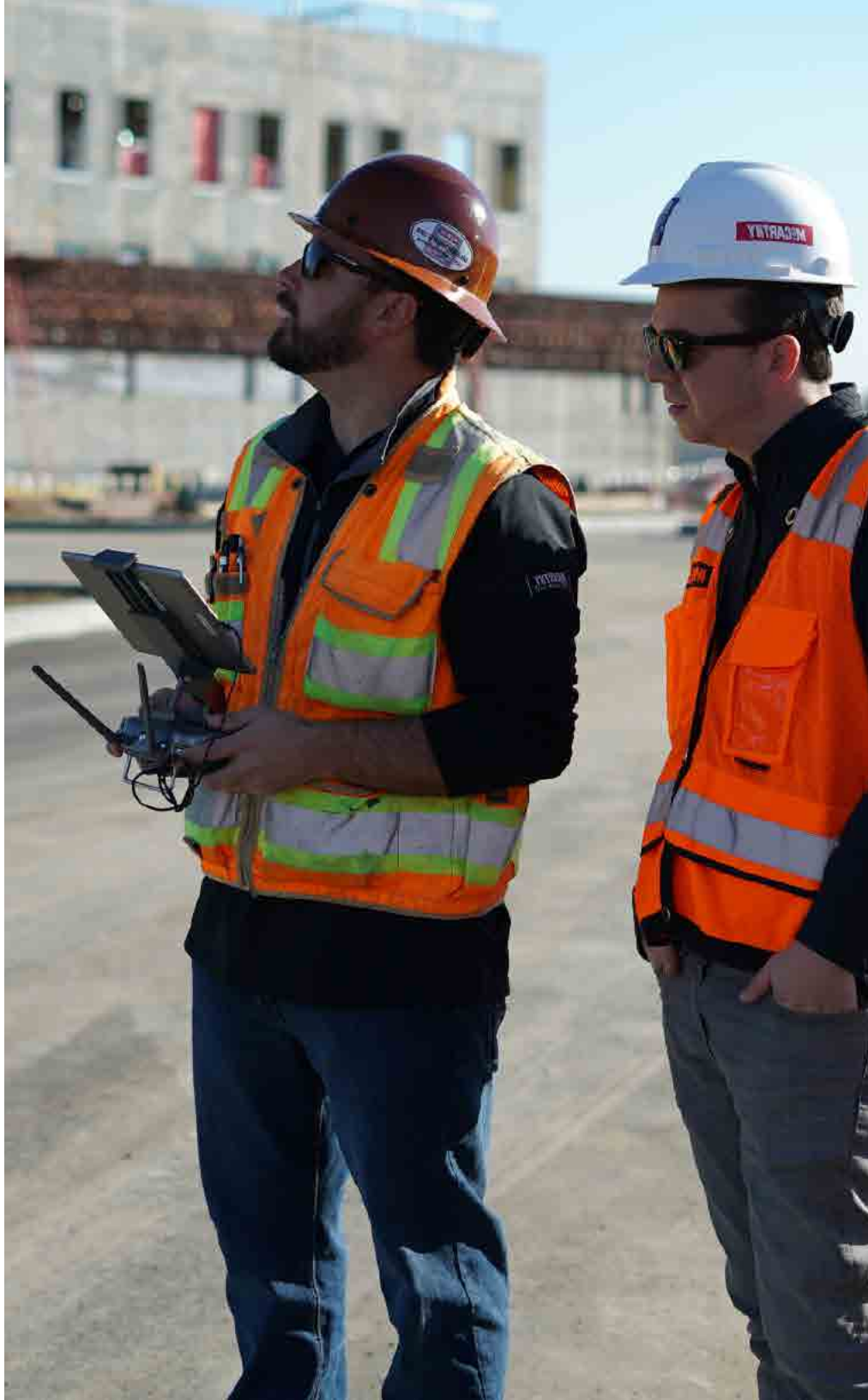
While contractors were quick to take the lead last year, we expect energy operators to outpace construction adoption in 2019. This will largely be driven by the massive opportunity for solar energy companies to unlock lower energy production costs and increase the likelihood that solar becomes the primary source of power in the US and beyond.

6 Drone Services Sector Consolidates as In-House Programs Take Flight

Reliable hardware, powerful software, and easing regulatory environments have made it easier for companies of all sizes to launch their own drone programs.

While the drone service sector continues to provide onboarding and scaling capabilities, internal growth will exceed outsourcing. Drone service providers will remain an important part of the drone ecosystem, supplementing companies' ability to start and scale operations.

To meet the rising needs of the enterprise, DroneDeploy recently launched a new professional services team to help enterprise users start and scale their in-house drone operations. We have already helped hundreds of companies set-up UAV programs, and our new professional services team has the expertise to consult about everything from FAA compliance to training and flight operations.



5 Drones Become the Norm in Emergency Response

While drones are becoming an essential part of the modern enterprise toolkit, they are also proving increasingly useful in emergencies. Expect to see more drone usage this year in response to natural disasters.

Drones were part of the emergency relief efforts in response to the devastating fires in California last year. In fact, this was the largest use of UAVs ever. During one 72-hour period, 16 teams of public safety professionals worked day and night to complete more than 500 drone flights. They captured over 70,000 images. The result was 500GB of drone data that DroneDeploy used to create high-resolution aerial maps of 26.5 square miles. Those maps were immediately accessible to help public officials prioritize recovery efforts. Also, that data can be used for future search and rescue operations, for predicting potential mudslides, issuing federal relief funds from the Federal Emergency Management Agency (FEMA), and helping to process insurance claims faster.

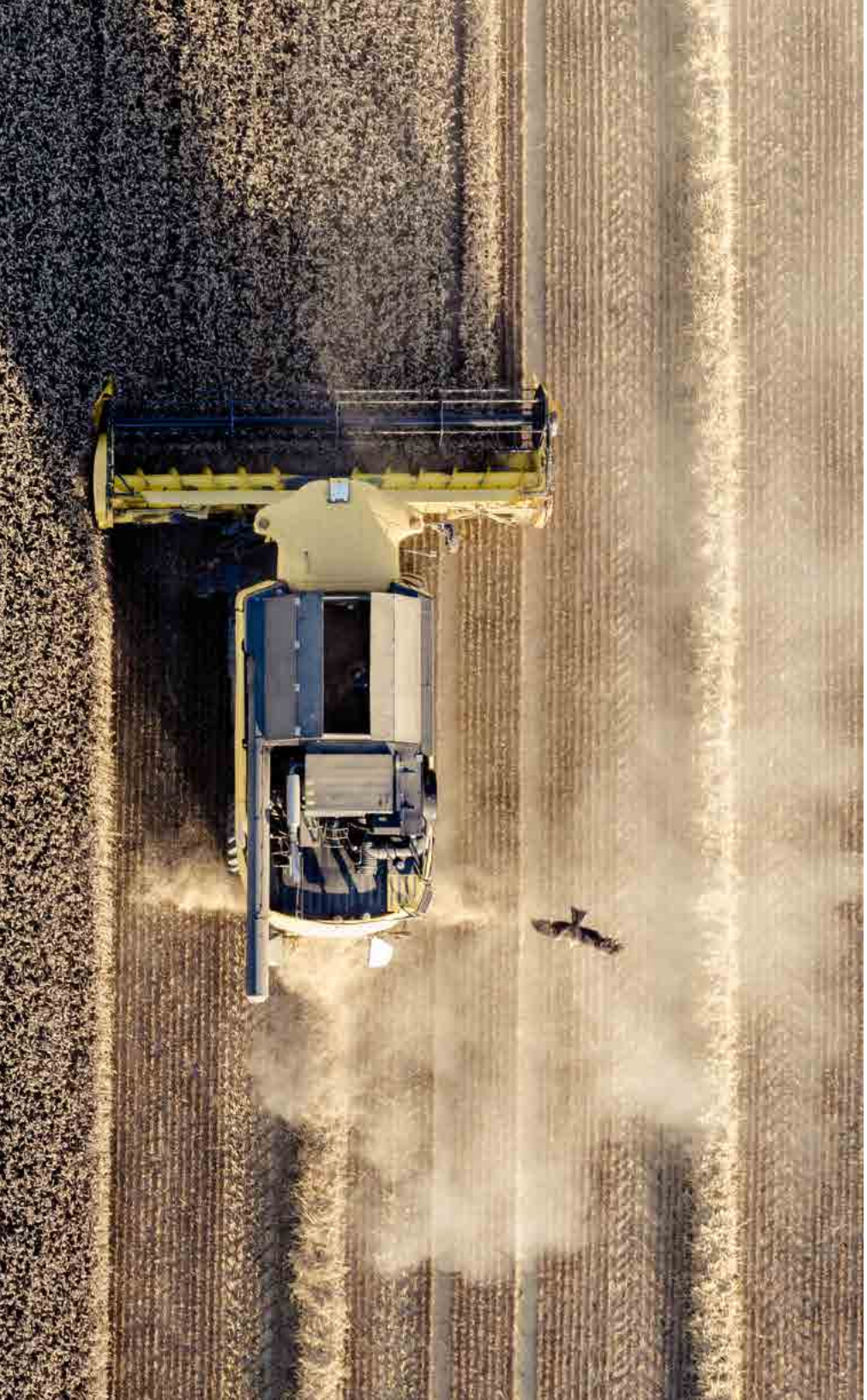
Across the Pacific Ocean, in Indonesia, drones provided Indonesia's Disaster Management Agency with real-time aerial insights in the wake of the devastating earthquake and tsunami last September. Emergency first responders used drones to take aerial photos and videos of the destruction in inaccessible areas that had suffered the most damage.

We are especially proud that DroneDeploy's software platform helped with all facets of the Indonesian rescue operation — from flight planning and flying to image processing and map analysis. Despite disruptions to Internet services, the emergency response team was able to fly their drones entirely offline, create real-time maps with Live Map, and upload them later with a a mobile hotspot and DroneDeploy's turbo uploader feature.

4 Infrastructure Inspection Booms with New Hardware

Drone deployments for inspections have emerged as one of the leading use cases for UAVs. Low-cost enterprise drones like the Mavic 2 are making zoom and thermal capabilities more accessible, particularly for infrastructure inspection of roads, bridges, towers, and utility lines.

Lower prices for high-powered drones are reducing the barriers to entry and providing end users with almost immediate ROI. The Mavic 2 enterprise ships with a micro-thermal imaging camera on board. The camera, from FLIR Systems, provides thermal imaging and enables the DJI drone to fly in a variety of conditions, including at night and in fog and smoke.



3 Real-time Data Promotes Faster Decisions in Agriculture

The agricultural sector is hungry for in-field data, and drones can provide the kind of information growers need to identify and resolve problems faster, leading to optimum yields and improved efficiency.

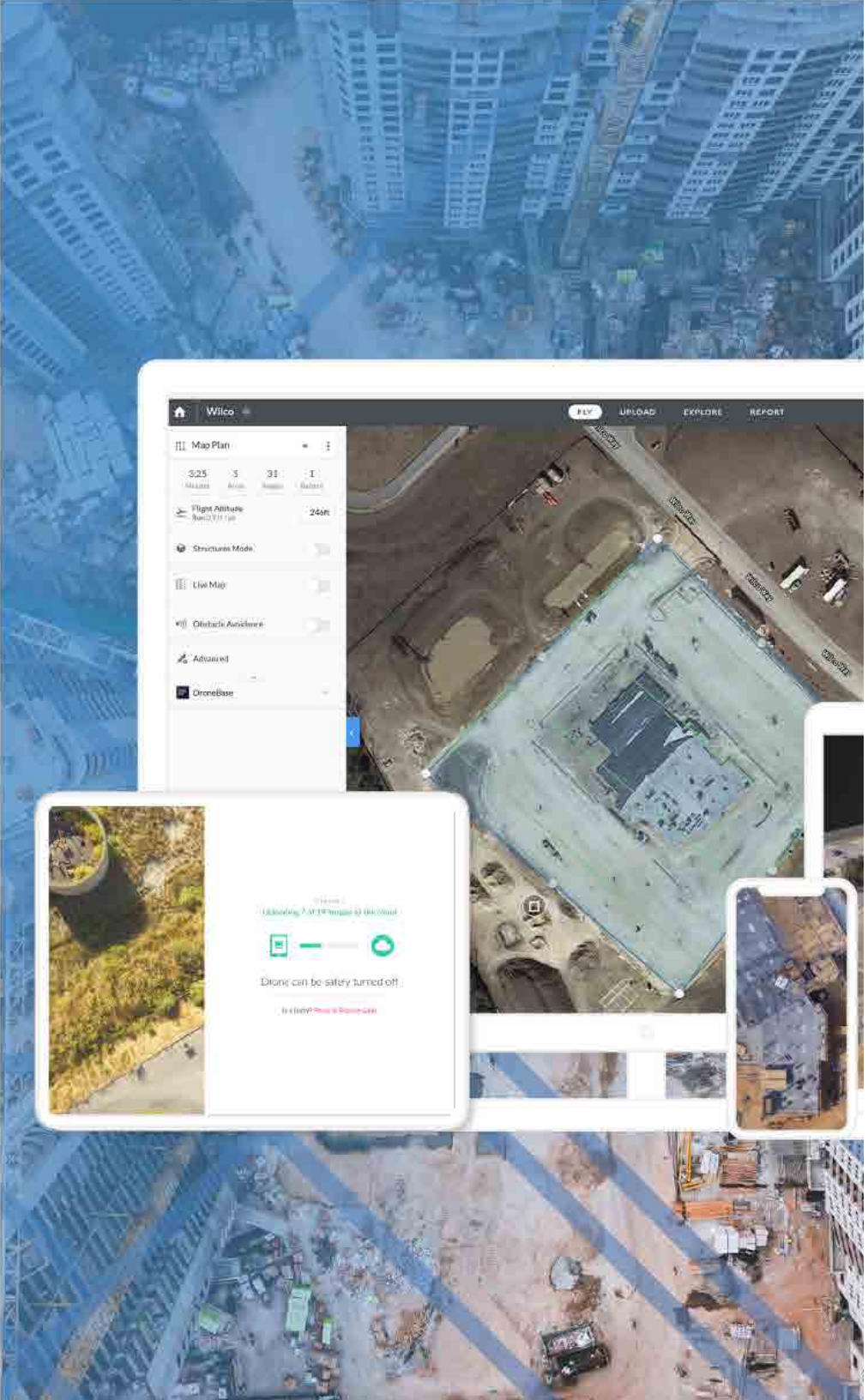
DroneDeploy provides unique capabilities that enable instant, in-field insights. With our Live Map feature, a grower can collect images from a field and instantly analyze the images to identify crop variation on the spot. The grower can then take immediate action to minimize crop loss or boost yields.

2 Large Deployments Require More Expansive Data Ecosystem

As noted in #10, Enterprise deployments are starting to truly scale. We expect to see enterprise fleets emerge with up to 500 drones in the coming months. These will be managed by hundreds of pilots as part of large enterprise roll outs from some of today's biggest corporations.

"We're seeing massive amounts of data flowing from enterprise drone fleets, and we've heard our largest customers asking for deep integrations. We're please to be partnering with the biggest software players in the world, like Procore, Autodesk, and Climate Corp, to name a few, that help our customers get the data they need in the places they need it."

Mike Winn, CEO & Co-founder DroneDeploy



1 Drone AI Becomes Real

AI is a buzzword — in our industry as well as in many others. But technology advancements are resulting in real-world products that help businesses integrate aerial data and run analyses to make the most informed decisions about their operations.

"With the rise of large fleets, automation is the key to scale. With machine learning and AI, we are teaching machines to detect patterns and objects, make accurate measurements, and transform large data sets into digestible reports. That's going to be a game changer when it comes to facilitating real-time decision-making from live drone data."

Nick Pilkington, DroneDeploy CTO

Get a deeper glimpse into our vision for the future by watching our product keynote from last year's DroneDeploy Conference.

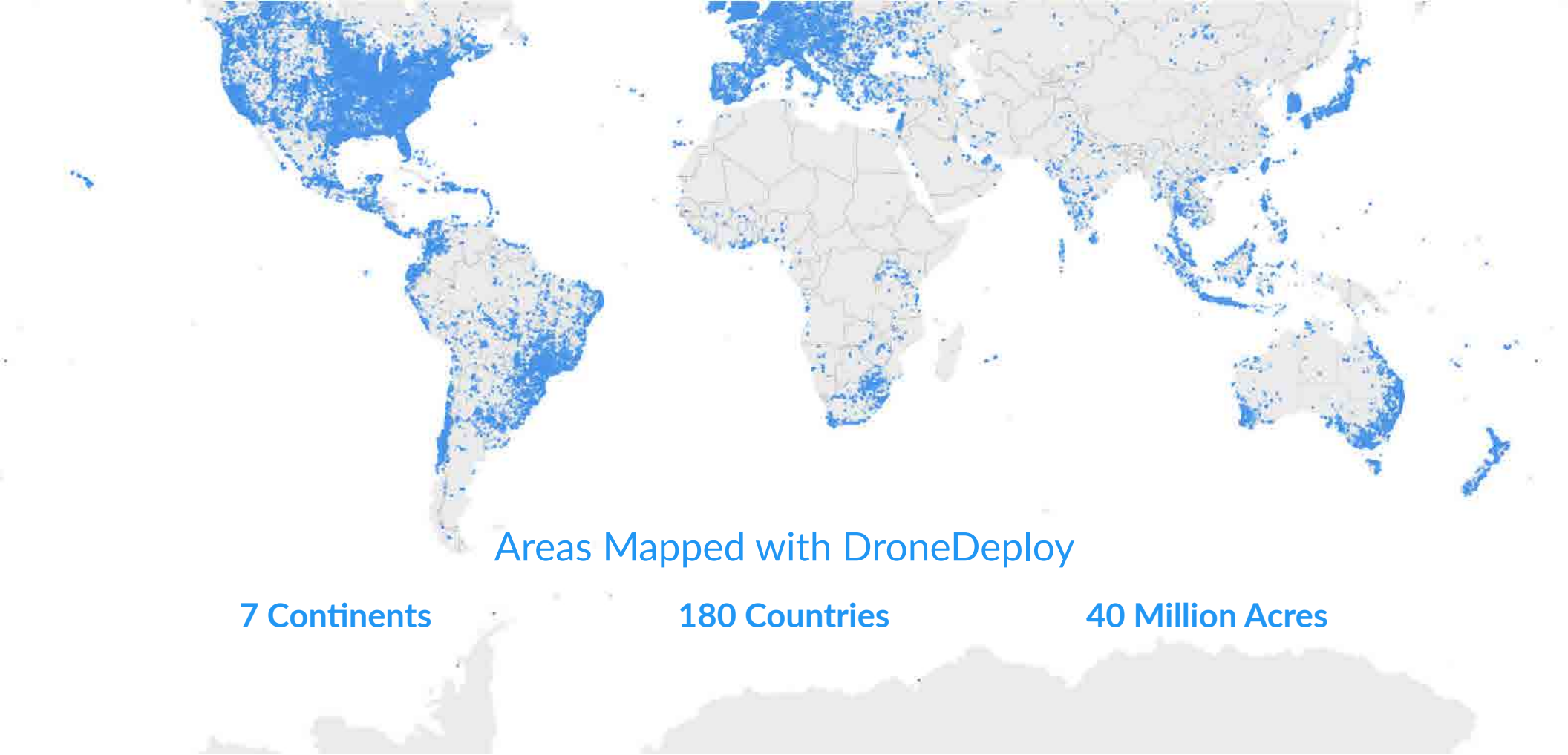
The Next Chapter:
Looking Ahead

Big changes are on the horizon as the drone industry expands rapidly to meet the needs of the marketplace. We will see new technology introduced this year that promises to make drones more cost-effective and attractive. At the same time, the industry itself is likely to see more consolidations, with mergers and acquisitions, and unfortunately a few players closing their doors. We believe this is the year that the true industry leaders emerge as winners.

"Drones have become an everyday tool, and as our industry has matured, so has the use of drone data," says DroneDeploy CEO Mike Winn. "As the world's largest industries expand their use of drone technology, 2019 is going to be a year in which drone data will help more companies make smarter business decisions at scale."

Mike Winn, CEO & Co-founder DroneDeploy

Learn more about DroneDeploy, the leading cloud software platform for commercial drones.



About DroneDeploy

DroneDeploy is the leading cloud software platform for commercial drones, and is making the power of aerial data accessible and productive for everyone. Trusted by leading brands globally, DroneDeploy is transforming the way businesses leverage drones and aerial data across industries, including agriculture, construction, mining, inspection and surveying. Simple by design, DroneDeploy enables professional-grade imagery and analysis, 3D modeling and more from any drone on any device.

DroneDeploy is located in the heart of San Francisco. To learn more visit us online and join the conversation on Twitter.

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