CASE STUDY:
Drone Data Management Case Study
Department of Interior

EXECUTIVE SUMMARY

The insights data brings to analytics and decision support across every vertical is growing rapidly.

But the ever-increasing amount of collected information makes managing, integrating, and interpreting data to derive meaningful and relevant insights a challenge. And when you factor in new forms of visual and sensor data, the challenge becomes nearly insurmountable.

Organizations need a way to efficiently put all of the data pieces together so that decision-makers and stakeholders can see the big picture.

THE CHALLENGE:

Data is disorganized, unsearchable, too often siloed, and geographically dispersed.

The Department of Interior (DOI) oversees areas where land management and asset management takes place. And without the high bandwidth needed to easily upload (or download) drone imagery, the task was nearly impossible.

With continuous improvements in LIDAR and camera technology, data volumes dramatically grow every year. The DOI needed a cost-effective solution for high-resolution visual assets, and given the exponential growth in data volume, traditional capacity planning didn't work.

And the information has to make sense to decision-makers - not just geospatial experts, making it critical to weave data into key strategies.

THE SOLUTION:

Zivaro's DDM solution, powered by AWS, provides tiers of object storage to support an unlimited amount of data and data lifecycle management. This allows customers to move inessential assets to more affordable storage.

With the solution, organizations no longer have to worry about data durability. They can provision any amount of computing capacity in the same region, securely download and process data in the cloud, and safely upload and store their results.

Our solution provides a cohesive data model that allows for all forms of integration and management of visual data (including ortho-rectifying) and tabular data. This is one of the most significant issues we solved for the DOI.

The Zivaro drone data management system has intelligent search capabilities to enable the quick discovery of data. Imagery and metadata are indexed spatially and temporally using knowledge graphs to allow you to see changes to your sites across time.

Sensors, flights, raw imagery, processed imagery, metadata, and processing outputs are all connected and searchable within the Zivaro DDM platform, and the content can be securely shared.

Controlling access to critical infrastructure data is a top priority in all segments of the market, and Zivaro's DDM solution offers the highest level of security.

THE BENEFITS

- The DOI can process data faster, and with higher levels of information security than ever before.

- The DOI can now operate in low bandwidth areas.

- Ongoing costs are minimized by optimizing workloads and leveraging more affordable storage.

- Efficiency in data understanding is optimized for key stakeholders.

- The solution allows for secure access and data control.

ABOUT ZIVARO

Zivaro seeks to serve those charged with serving others. We relentlessly work to enable our regulated market customers to maximize focus on their outcomes. We design and deliver secure, scalable, and cost-effective solutions through our expertise in IT infrastructure and our flexible service delivery models.