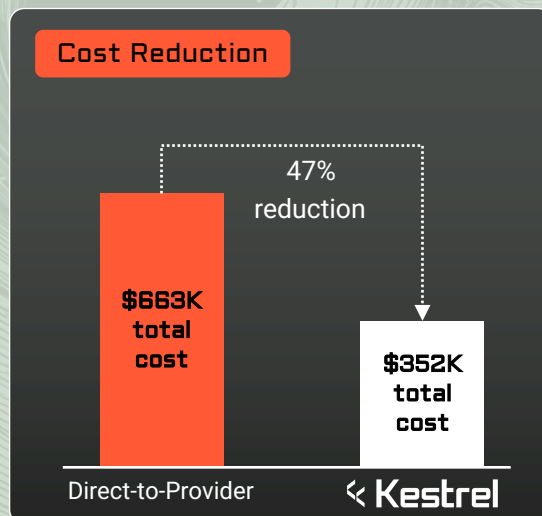
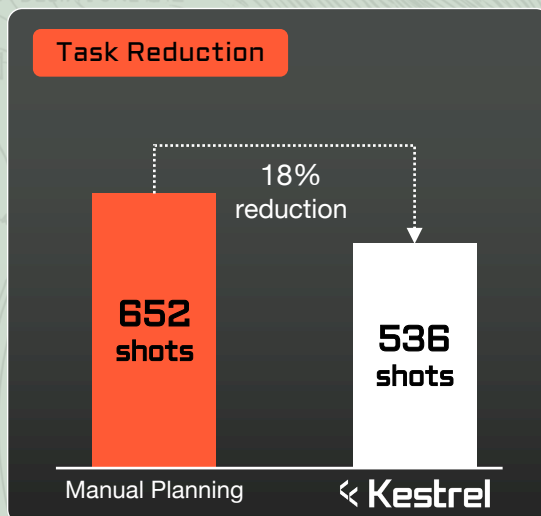


Case Study

Reducing Geospatial Data Cost by *Half*

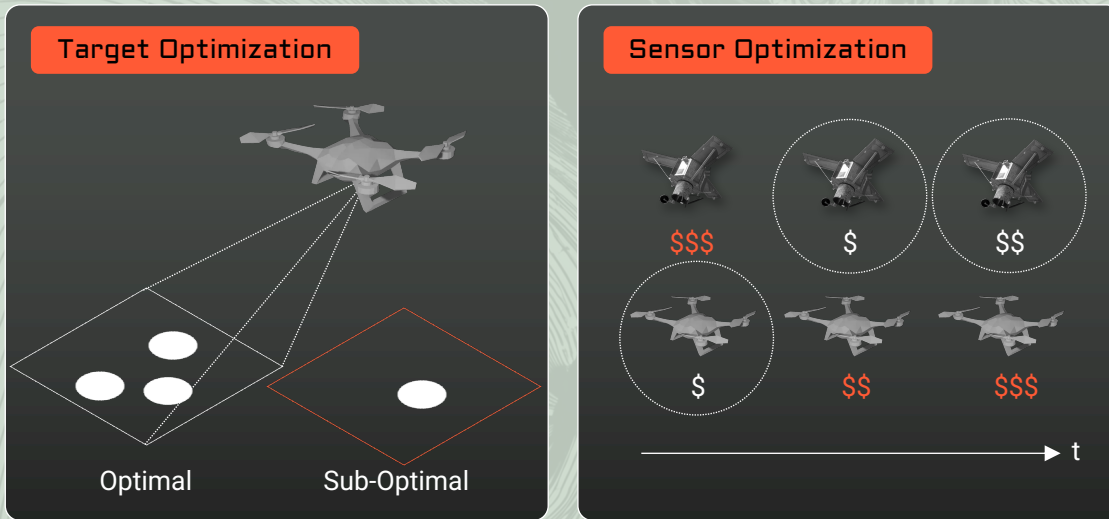
Kestrel's software helped a commercial geospatial consulting firm significantly reduce their data cost, achieving a nearly **80x return on investment** on a subscription to Kestrel's software. This case study details those cost savings and how Kestrel's software enables them.

Kestrel is an Agentic AI software platform that unifies and optimizes geospatial data collection across a network of 3,500+ sensors. Kestrel's software is usable across domains (e.g., space, air, sea), modes (e.g., visual, radiofrequency), and use cases (e.g., agriculture, mining) without custom configuration or significant expertise. Kestrel's Agentic AI has the embodied intelligence of experts across a wide range of sensors and use cases, enabling collection of lucrative and unique data and insights.



How does it work?

Kestrel's software manages cost by: (1) reducing the number of tasks sent to sensors by creating collection geometries that can collect on clusters of targets at once, and (2) creating optimal sensor-subject match at every moment, enabling intelligent cost optimization.



Company Overview

Kestrel is a US-based software product company led by a team with more than 70 years of expertise in geospatial science, software development, and military/intelligence operations. Kestrel's team has built Agentic AI and software systems for the largest and most complex satellite operators and users - often in austere and remote locations - with a focus on usability even by non-expert personnel.

For more information, visit Kestrel's website at www.kestrelintelligence.com

Plan and execute collection across a mode- and domain-agnostic virtualized constellation.

The screenshot displays the Kestrel software interface, which is used for planning and executing collection operations. The interface is divided into several panels:

- Map Panel:** Shows a geographical map with a collection path and target locations. A legend on the right indicates different types of collection areas.
- List Sensors Panel:** A table listing available sensors and their capabilities. The table includes columns for sensor ID, name, description, and various parameters like 'created_at', 'updated_at', 'status', 'profile_image_bucket', 'profile_image_key', 'sensor_id', 'sensor_name', 'sensor_type', 'sensor_capabilities', 'sensor_status', 'sensor_location', 'sensor_altitude', 'sensor_speed', 'sensor_acceleration', 'sensor_gyro', 'sensor_magnetometer', 'sensor_barometer', 'sensor_temperature', 'sensor_humidity', 'sensor_pressure', 'sensor_illumination', 'sensor_sound', 'sensor_vibration', 'sensor_acceleration', 'sensor_gyro', 'sensor_magnetometer', 'sensor_barometer', 'sensor_temperature', 'sensor_humidity', 'sensor_pressure', 'sensor_illumination', 'sensor_sound', 'sensor_vibration'.
- Collection Plan Panel:** Shows a detailed view of a collection plan, including a list of tasks and their associated sensors. The plan includes a 'Task ID', 'Task Name', 'Task Description', 'Task Status', 'Task Location', 'Task Altitude', 'Task Speed', 'Task Acceleration', 'Task Gyro', 'Task Magnetometer', 'Task Barometer', 'Task Temperature', 'Task Humidity', 'Task Pressure', 'Task Illumination', 'Task Sound', 'Task Vibration'.

Below the map, there is a section titled 'Use Kestrel through open natural language, visual, or API-based interfaces'. This section includes a code block showing a REST API call to the Kestrel API:

```
GET /api/v1/sensors/
1 curl https://v1.dev.kestrelintelligence.com/api/v1/sensors/
2 --header 'Authorization: Bearer YOUR_SECRET_TOKEN'
```

The code block also shows a 'Successful Response' with a list of sensor details.