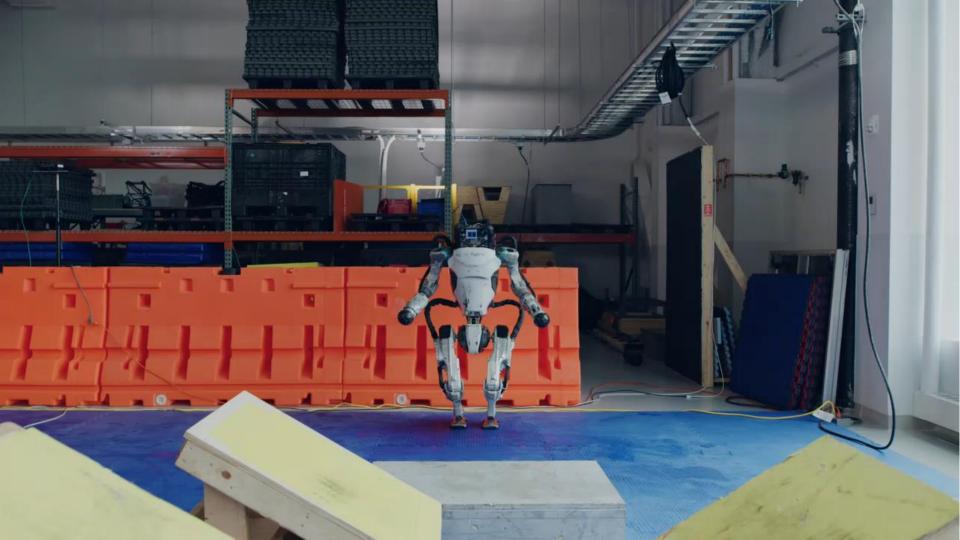


Welcome to Boston Dynamics!

## Our Mission

To imagine and create exceptional robots that enrich people's lives.













Autonomous data collection and inspection

Pick + Stretch

Flexible warehouse automation

Atlas

Cutting-edge research platform





# Spot

- Agile mobile robot with customizable platform
- Improves safety, efficiency, and predictability
- Dynamic Sensing
- Automating hundreds of sites across utilities, oil & gas, manufacturing, construction, and more



# Spot's Value



- Remove personnel from dangerous environments
- Collect data remotely and identify risks from afar



- Reduce time to inspection
- Improve uptime
- Redeploy high-value labor to critical decision making



- Find failures before they prompt shutdowns
- Gather consistent data to meet regulatory requirements
- Proactively manage sites and perform predictive maintenance



## **NB** Power

Remote Visual Inspection

- Inspected issue with a weld in a high-pressure steam pipe
- Ran Autowalk missions every day for 45 days straight
- Avoided costs of full plant shut-down





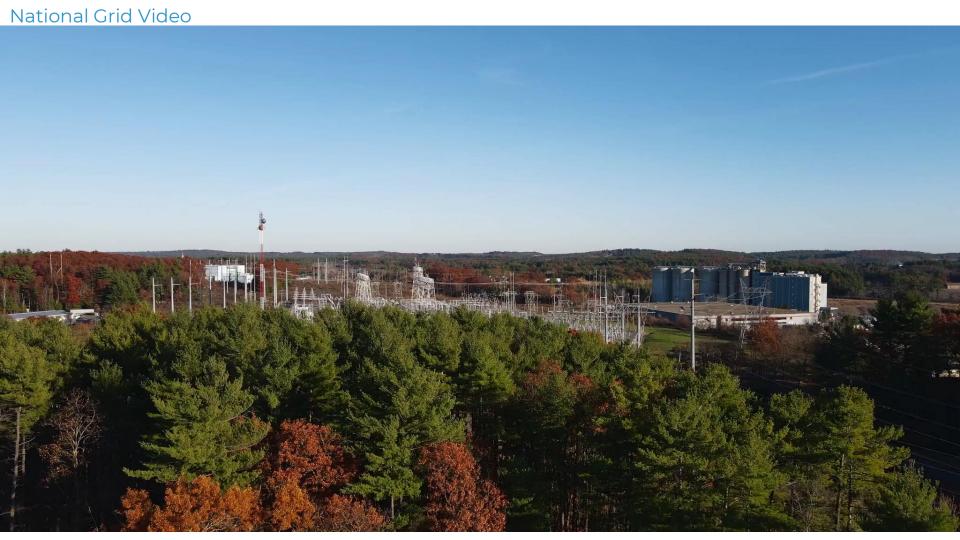
operational savings Spot provides, are unparalleled."

- Dean Berlin, Lead Technology Analyst

## **National Grid**

Visual and Thermal Inspections

- Gathering data in highvoltage power transmission facilities
- Capturing photos to detect water leaks and IR images to inspect integrity of bushing connections
- Data collection prior to yearly shutdown ensures minimal down-time



## Woodside

Remote Inspection

- Reducing risk and improving efficiency in routine inspections
- Gauge reading, leak detection, noise anomaly detection, thermal inspection, gas detection



"Every 12 hours, we follow the same path through the plant, and we're assessing situational awareness. Spot is going to capture things we may not notice or that we're not always around to see." Christopher Phillips - Woodside Production Technician

#### Construction:



#### Site Documentation:

- Automating capture of nearly 5,000 images weekly on 500,000 Sq.ft. building project
- Saving approx. 20 hours of work per week through streamlined process

### Manufacturing: KV/ERNER

#### Asset Management:

- Automating tracking and mgmt. of 100,000 assets in 200,000 sqm shipyard
- Performing daily survey rounds of the shipyard
- Capturing 360° photos and using computer vision to identify assets

### Oil & Gas:



#### Remote Inspection:

- Deployed on oil rig Mad Dog, nearly 200 miles offshore
- Scanning for abnormalities, tracking corrosion, and checking gauges
- Making work on the rig safer by reducing number of people on-site

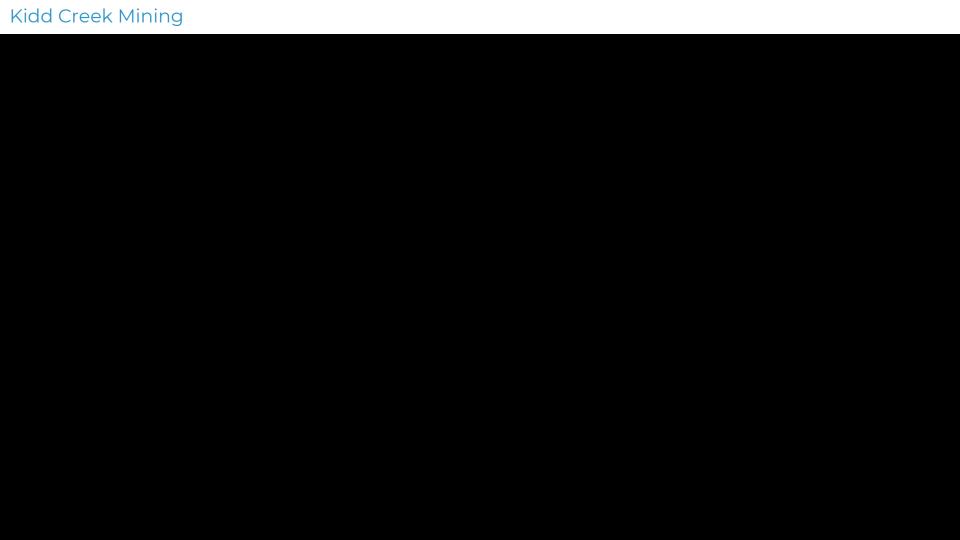
### **Mining:**



#### Seismic Survey and Gas Inspection:

- Monitoring seismic activity and sensing for dangerous gases pre and post blast
- Protecting human workers in the deepest base metal mine in the world

  Boston Dynamics











Leak Detection



Noise Anomaly Detection



Search and Alert



Gauge Reading



Telemedicine



Digital Twin Creation





Performance Art

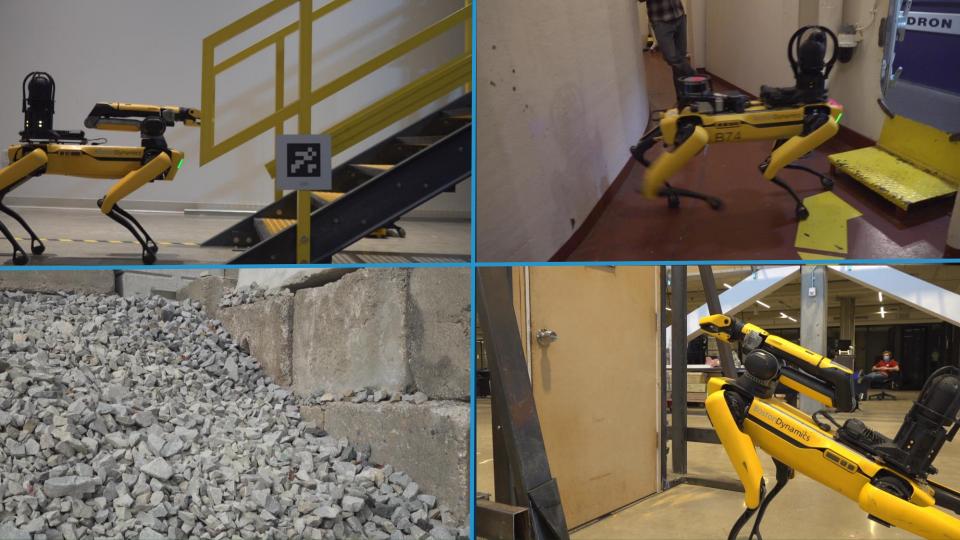


Gas Detection

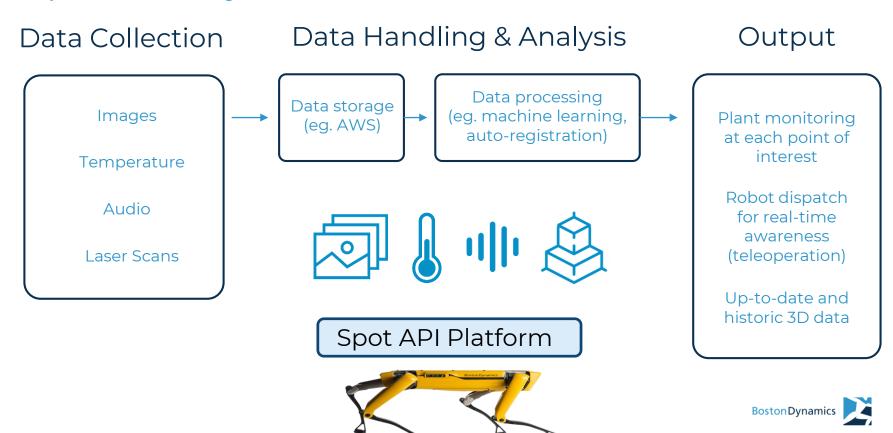


Site Documentation





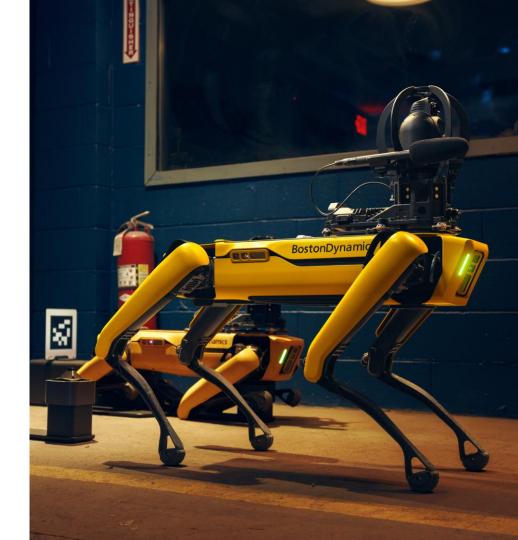
## Spot as a System





## Summary

- Transformative mobility
- Flexible platform for industrial solutions
- Dynamic Sensing through Autonomous Inspections
- ROI in safety, efficiency, and predictability



# Thank you

### Contacts

Paul Cisternelli Enterprise Channels pcisternelli@bostondynamics.com

https://www.bostondynamics.com/spot-sales

Come meet us at IMC - 2021



