CLIENT

PROJECT **CANARY**

CUSTOMER OVERVIEW

Project Canary, a startup based in Denver, Colorado, was created to help reduce the unintended release of natural gas into the earth's atmosphere. Project Canary uses an IoT solution which continuously gathers real-time air quality data that will help industrial customers curtail emissions, avoid fines, and protect the environment.

THE PROBLEM

Natural gas leaks at oil and gas production sites result in millions of dollars in fines for oil and gas companies as well as lost revenue and damage to the environment. The challenge is that methane, the primary constituent in natural gas, is lighter than air, odorless, and invisible. There are few options for effectively monitoring leaks.
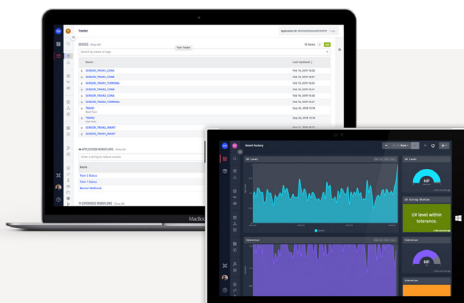
THE BRIEFING

Until Project Canary was developed, the only way to detect the presence of a leak was to physically inspect each producing site with an expensive, highly specialized infrared camera.

The Project Canary device consists of a small solar panel mounted on the roof of an actual bluebird house. This panel charges a lithium battery that powers a microprocessor connected to a cellular network. Project Canary engineers have modified these sensors, which were originally designed to monitor indoor air quality, and have optimized them for outdoor application at industrial facilities. This new generation of sensors is exceptionally stable, power efficient, and sensitive to atmospheric contamination levels at parts per billion.

THE RESULTS

The VOCs associated with natural gas are detectable at ground level, and the Project Canary team was one of the first groups to realize that they could be used as a proxy for leak detection.
Because Project Canary requires reports and a dashboard through which clients can access their information from anywhere, the team selected the Losant Enterprise IoT Platform for its End-User Experiences capability. Project Canary was able to use Losant to sift through the telemetry data; publish dashboards for time series charts and other graphs; and quickly implement authentication, user management, and REST endpoints that customers use to stream data to their internal systems.

LOSANT ENTERPRISE IoT PLATFORM TEAM: WHAT WE BELIEVE

Losant is a progressive product team composed of software engineers, solutions engineers, and automation specialists. Together, we produce superior technology for enterprise IoT solutions. We believe in continuous improvement and work toward our vision of an ever-connected world. As we adapt to our changing environment and add features to our IoT cloud platform, we consider usability, flexibility, reliability, and security to promote ease of use for our customers.

CLIENT

PROJECT **CANARY**

INDUSTRY

OIL & GAS

THE SOLUTION

Currently, there is no real-time data available on air quality from the vast majority of remote oil and gas well locations. When leaks of harmful volatile organic compounds (VOCs) occur, oil and gas companies are fined, lose revenue, and cause damage to the environment. To help, Project Canary created a sensor system which takes measurements of air quality and reports data to Losant.

> "Losant has been fabulous for rapidly ingesting and visualizing IoT data. I am still discovering new ways to use it for large-scale deployments."
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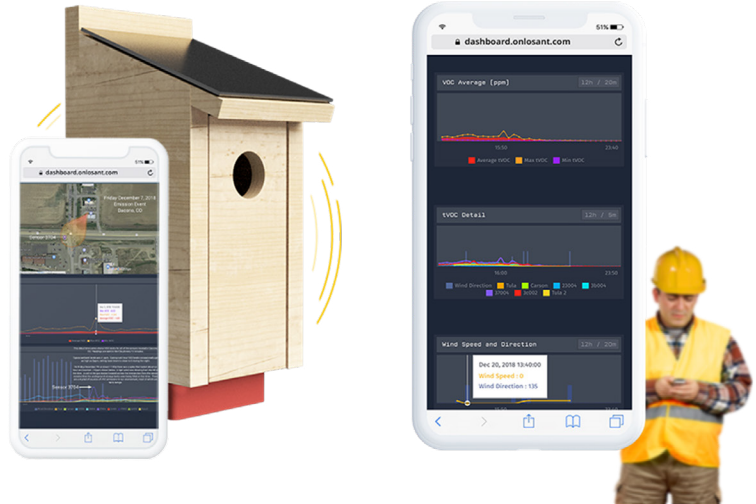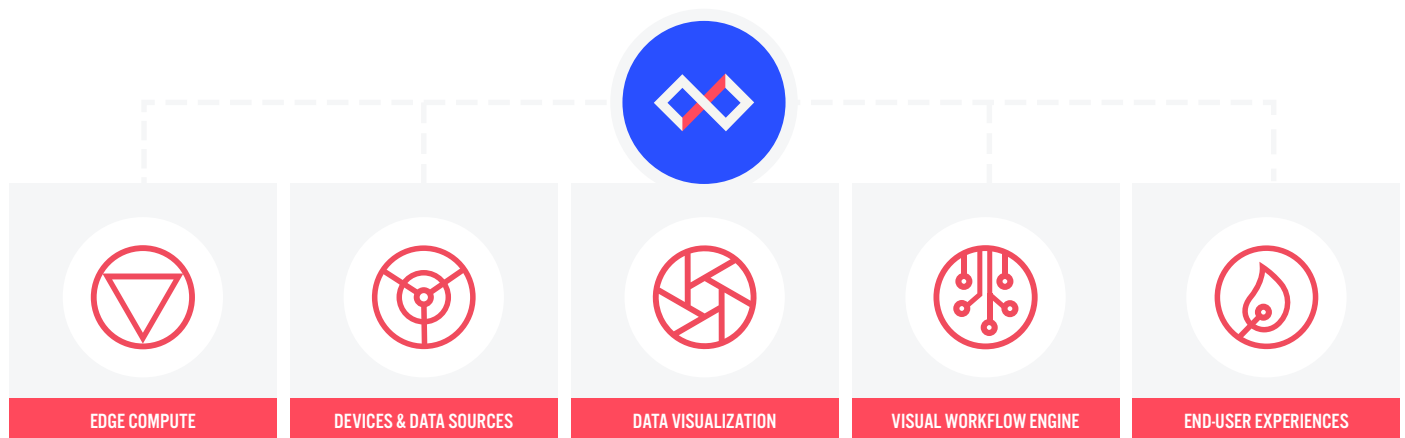> **DAVID ARMITAGE**
> FOUNDER

LOSANT PROVIDES THE TOOLS YOU NEED TO SUCCEED

The Losant Enterprise IoT Platform is an application enablement platform which allows enterprises to effectively build applications that securely scale to millions of devices. With real-time stream processing and batch processing capabilities, users can create dynamic experiences and perform complex analytics. All of Losant's components, from Edge Compute to End-User Experiences, work seamlessly together to transform data into tailored IoT solutions.

| EDGE COMPUTE | DEVICES & DATA SOURCES | DATA VISUALIZATION | VISUAL WORKFLOW ENGINE | END-USER EXPERIENCES |

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