# Keeping the streets safer with computer vision at the edge

VSaaS.ai

VSaaS.ai harnesses Lenovo ThinkEdge solutions to bring the power of AI to ordinary camera systems, enabling more accurate and effective video monitoring.

Lenovo

Al Innovators

Partner Ecosystem



## Who is VSaaS.ai?

VSaaS.ai specializes in cloud video analytics and Al-powered video surveillance as a service (VSaaS). The Chile-based startup was founded by professionals with more than 10 years of experience in analytics and Internet of Things technology.

VSaaS.ai solutions are hardware agnostic and can be connected to any camera, allowing users to access device data and control cameras remotely through a cloud-based app. They also offer powerful object detection and pattern recognition capabilities, turning normal cameras into intelligent devices.

VSaaS.ai has three smart city initiatives: municipality (public safety), subway (fare evasion, security, traffic flow), and traffic light system (traffic violations; vehicle and license plate recognition). Its Smart City Surveillance Platform serves as an overarching solution to address these diverse needs—a foundation for different specialized surveillance applications.



## 2

## The Challenge

Video surveillance has become a key part of public safety in cities worldwide. But setting up and maintaining this technology often comes with high costs and complexity. There are cameras to install, video feeds to monitor, and big volumes of data to store.

VSaaS.ai saw an opportunity to solve these challenges by making smart use of AI, cloud, and edge technologies. Its solutions are designed to sit on top of existing camera networks, adding a small edge computing device to connect to the camera's video feed, run analytics in real time, and transmit the data to a cloud or data center environment for processing and storage.

VSaaS.ai already had the AI and cloud capabilities covered with its software. What it lacked was edge computing hardware, powerful enough to process large amounts of data and tough enough to withstand harsh city conditions.

"One of our first projects was a pilot with one of the largest cities in Latin America, where we used very basic edge devices to connect with around 50 CCTV cameras. However, as we started to scale up, covering more use cases and hundreds more cameras, it was clear that we needed a more powerful edge computing platform."

**Francisco Soto** 

Founder & CEO, VSaaS.ai

#### Enterprisegrade edge computing

To take its edge computing capabilities to the next level, VSaaS.ai turned to Lenovo ThinkEdge: enterprise-grade portfolio specifically designed for AI and machine learning (ML) applications.

The Smart City Surveillance Platform is chip agnostic, which means that VSaaS.ai can take advantage of different architectures.

As a first step, VsaaS.ai worked with Lenovo to replace 10 existing edge devices—deployed throughout the city—with two ThinkEdge SE70 clients. They integrate with existing camera installations, enabling AI and ML models to run right at the edge, analyzing video data in real time.

#### **Hardware**

Lenovo ThinkEdge SE70

#### **Software**

VSaaS.ai Smart City Surveillance Platform

## **Protecting**public safety

That small trial quickly blossomed into a large-scale deployment. Today, VSaaS.ai has deployed around 400 ThinkEdge clients in partnership with the city and its metro system—connected with 3,200 cameras—adding AI and edge capabilities to camera installations on streets, traffic intersections, and metro stations.

Compact and built to withstand the toughest conditions, Lenovo ThinkEdge devices can be exposed to high temperatures, water, dust, and vibrations without issues. It makes them an ideal fit for deployment outdoors where they are exposed to the elements or in public transport stations where space is limited.

With computer vision, public authorities gain a better view of what's happening on the street. The solution can, for example, detect if a car crash has happened, allowing emergency services to be dispatched fast. It can also be used at metro entrances to spot potential fare evaders.

"With Lenovo ThinkEdge SE70 clients, we enable very complex AI monitoring and detection work to be performed right at the edge, next to any kind of camera. It's been a game-changer for our business."

**Francisco Soto** 

Founder & CEO, VSaaS.ai

### 3

#### Results

With Lenovo ThinkEdge underpinning its solutions, VSaaS.ai can now reach out to clients with a compelling package, offering a fast, affordable way to enhance existing camera installations with powerful Al and edge capabilities.

For instance, AI can automatically monitor data from 250+ camera feeds simultaneously—orders of magnitude more than a human operator—and detect dangerous or anomalous behavior. It means agencies can mobilize faster to prevent a threatening situation from escalating or protect people who might be at risk.

Enables fast, Al-powered video analysis at the edge

Rugged, compact Lenovo devices are made to deploy anywhere

Offers an easy, affordable way to supercharge video monitoring

"With Lenovo edge devices, we offer a quick, easy, and affordable way to add sophisticated video analytics capabilities to cameras that are already in place. In a way, it's like giving ordinary video cameras superpowers."

**Francisco Soto** 

Founder & CEO, VSaaS.ai

## Why Lenovo?

Lenovo's robust ThinkEdge devices instantly appealed to VSaaS.ai. After further evaluation, the company determined that Lenovo offered the right combination of resilience and processing power, at the right price point.

Soto confirms: "The Lenovo ThinkEdge devices really impressed us: they are tough, perform very well, and are competitively priced. We've also found Lenovo's post-sales support to be excellent. We had a small issue with one of our devices and Lenovo replaced it quickly. They really take care of the product and their customers."

As part of the Lenovo Al Innovators program for independent software vendors (ISVs), VSaaS.ai not only benefits from best-in-class devices optimized for Al but also Lenovo Al technical expertise. "We continue to work very closely with the Lenovo Al team to finetune the solution to ensure it meets the city's evolving needs," says Soto.



## How can cities make surveillance systems smarter?

Supercharging cameras with powerful analytics and Al capabilities using Lenovo edge devices.

Explore Lenovo Edge Solutions

