

# VANTIQ



Anonymous Use Cases

Nov, 2025

# Use Cases

# Leading disaster management system in Japan

Japan frequently faces earthquakes, floods and other disasters, yet most response systems are slow, fragmented and outdated. Agencies struggle to coordinate, share intelligence and reach citizens in time.



## Solution:

Using the Vantiq platform, a Global 5000 IT services organization in Japan built a real-time system that integrates evacuation protocols, analyzes threats from sensors and satellite data and delivers live updates to the public automatically and instantly.

## Why Vantiq?

Only Vantiq can handle the speed, complexity, and unpredictability of disaster scenarios—connecting data, systems and actions in real time, across any environment.

**Integrates** municipality-specific evacuation protocols and operations

**Analyzes** threats utilizing external sensing mechanisms, satellite imagery, vision AI and sensors

**Adapts** to changing circumstances constantly using GenAI and real-time data to ensure an effective response



Solution:

# Intelligent building management and operations platform

Modern buildings rely on thousands of sensors, systems and services, but integrating them in real time is complex and costly.



## Solution:

Using the Vantiq platform, a major telecom provider in Tokyo built a system to orchestrate sensors, cameras, AI and GenAI across diverse building technologies, creating an environment that adapts in real time to security, energy and occupancy needs.

## Why Vantiq?

Vantiq drastically reduces the time and effort to deploy complex intelligent infrastructure—managing high-volume data and system coordination without the overhead of traditional development.

Orchestrates all building tech to enable safer, smarter, more responsive space

Manages complex environments with thousands of sensors, cameras and services

Cuts development time and human effort by handling integration and logic in real-time



# Intelligent force readiness system for the a large government military operation

Defense organizations need to track force readiness in real time using biometric data to detect health issues early, reduce burnout and improve long-term performance.



## Solution:

Using the Vantiq platform, a large U.S. defense organization built a system that integrates biometric sensors, AI and GenAI to deliver continuous readiness scores and health alerts. This enables faster decisions and real-time coordination at the edge.

## Why Vantiq?

Vantiq enables rapid development and deployment of complex real-time solutions under strict timelines—perfect for high-stakes, data-intensive missions.

Normalizes **biometric data** across wearable devices for real-time individual and unit performance

Uses AI to generate readiness scores at both **individual and team levels**

Deploys **GenAI agents** to guide optimal performance using any supported device (Garmin, Oura ring, Whoop, etc)



# Real-time vandalism detection system for small cities

Cities often lack fast, unified systems to monitor public spaces, detect vandalism and respond in real time, leading to costly damage and delayed intervention.



## Solution:

Using the Vantiq platform, a city in the United States implemented a system that connects existing cameras, sensors and control systems to enable real-time detection, smart alerts and automated responses, reducing costs and protecting public assets.

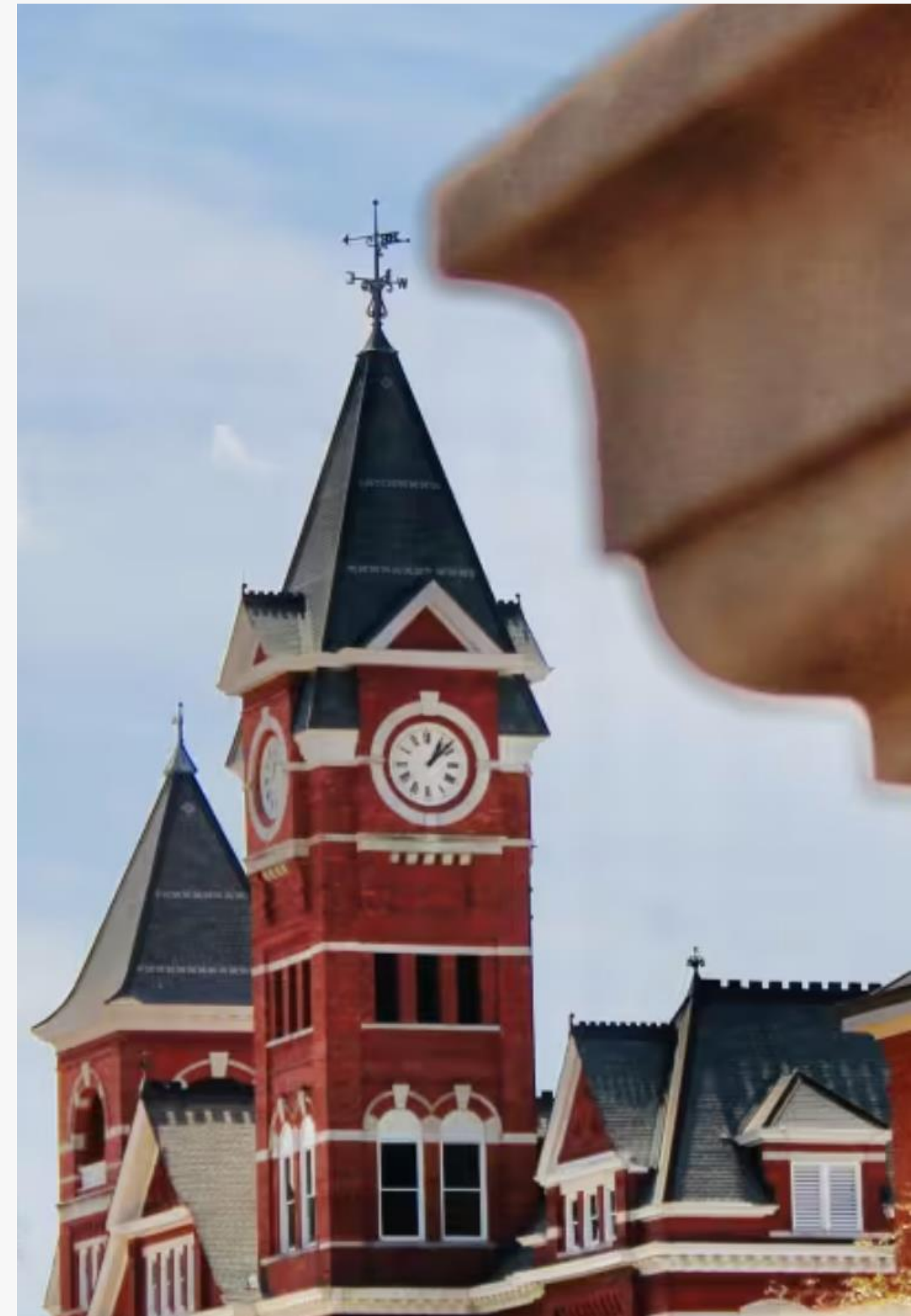
## Why Vantiq?

Vantiq connects data, sensors and systems with low code tools that adapt easily to any city's environment—enabling rapid deployment and reliable automation.

Delivers real-time alerts and automation **across connected infrastructure**

Enables rapid integration of **sensors, cameras and control systems**

**Supports AI and video analytics** for smarter decision-making and incident response



# Real-time asset management and tracking system

Organizations struggle to track physical assets in real time across large, distributed environments, causing delays, losses and inefficiencies.



## Solution:

Using the Vantiq platform, a global logistics company built a system that combines sensors, RFID and AI to monitor asset movement in real time, automate updates and streamline operations across the supply chain.

## Why Vantiq?

Vantiq enables rapid development of scalable, flexible solutions that connect data and systems in real time—reducing risk and accelerating time to value.

Tracks asset movement in real-time using sensor and RFID data

Integrates easily with existing systems for seamless visibility and control

Supports AI and analytics to improve routing, reduce losses and protect high-value assets



# Intelligent retail display system for grocery chains

Retailers need a way to manage pricing updates across stores in real time, but manual changes are slow and labor intensive.



## Solution:

Using the Vantiq platform, a retail technology company built a system that automates digital shelf labels, synchronizes price updates and coordinates marketing promotions in real time.

## Why Vantiq?

Vantiq helps businesses move faster with low code orchestration, real-time processing and seamless integration—meeting aggressive timelines with less effort.

Automates price changes across stores in real-time using AI and sensor data

Integrates with infrastructure to coordinate updates and resolve issues instantly

Delivers real-time insights into shopper behavior and inventory for smarter retail decisions



# Reactive AI HR agent for S&P 500 companies

HR teams are overwhelmed by routine questions and system complexity, making it difficult to support hybrid work and deliver timely employee support.



## Solution:

Using the Vantiq platform, a large enterprise built an AI-powered HR agent that automates internal inquiries, delivers real-time answers and frees HR staff to focus on strategic work.

## Why Vantiq?

Vantiq supports real-time intelligence, secure integrations and adaptive learning—making it easy to deploy scalable, human-like agents across enterprise systems.

Automates routine HR requests like policy lookups and benefits questions

Integrates with existing tools to enhance support without replacing core systems

Protects sensitive information through role-based access controls, privacy filters and safe AI practices



# Real-time ambulance technology to guide EMS personnel

EMS teams need real-time access to physicians and data during transport to make faster decisions and improve patient outcomes in the field.



## Solution:

Using the Vantiq platform, a well-known healthcare provider deployed a system that connects medics with remote doctors, streams patient data in real time and enhances situational awareness with AI and GenAI support.

## Why Vantiq?

Vantiq enables rapid development of scalable systems that operate across mobile and satellite networks—ideal for mission-critical response environments.

Real-time links between field teams and [experts for diagnosis and treatment](#)

[Streams patient data from connected devices to support better decision-making](#)

Uses [GenAI to assist with documentation](#), virtual support and medical workflows



# Interconnected outdoor workforce safety system

Organizations with outdoor workforces face risks from extreme conditions, but current safety monitoring is slow and reactive.



## Solution:

Using the Vantiq platform, a technology company deployed a system that combines sensor data, video analytics and AI to monitor workers, detect hazards and issue real-time safety alerts across job sites.

## Why Vantiq?

Vantiq makes it easy to integrate and deploy safety applications across complex environments—delivering real-time insight and automation to reduce risk and improve response.

Monitors environmental conditions and **worker safety in real-time**

**Detects incidents and hazards** across facilities and job sites

Enhances response with **live alerts, automated actions and AI-driven insights**



# Real-time wildfire detection and response platform

Firefighters rely on manual camera monitoring across large regions, making early smoke detection slow and inconsistent. Disconnected tools and delayed alerts limit a crew's ability to respond before a small fire becomes a major incident.



## Solution:

Using the Vantiq platform, a large multi-agency wildfire detection network connects hundreds of cameras and AI vision feeds into one real-time system that spots smoke automatically and alerts the right teams instantly.

## Why Vantiq?

Only Vantiq could orchestrate AI, camera networks and multi-agency data flows into one real-time operating layer.

Automated smoke detection using [AI vision models](#)

[Instant alerts](#) to fire crews across regions

Coordinated response by [routing the right data to the right teams](#)



# Real-time smart agriculture monitoring platform

Large livestock farms lacked real-time visibility into temperature, humidity and air quality across multiple sites, making it difficult to detect hazards early and protect animal health.



## Solution:

Using the Vantiq platform, a major agriculture technology provider connected IoT sensors across multiple livestock farms into one real-time monitoring system. The platform detects changes instantly, sends alerts and gives operators centralized control across all sites.

## Why Vantiq?

Vantiq provided the speed, flexibility and scale needed to build one platform that serves many farms and customers.

Instant hazard alerts for **temperature, humidity and air quality**

**Unified farm monitoring** across all livestock sites

Fast configuration using **low-code tools** to add sensors and new logic



# Real-time solar production monitoring and operations platform

A major energy and infrastructure provider needed a unified, real-time view of solar production across multiple sites. Data came from many supplier systems, making it hard to detect issues, track performance or give technicians a single place to manage alerts and operations.



## Solution:

Using the Vantiq platform, a major energy and infrastructure provider combined all solar asset data into one real-time monitoring system. The platform displays live production status, flags malfunctions instantly and gives technicians streamlined tools to analyze and act.

## Why Vantiq?

Vantiq delivered the fast development, easy integration and flexibility Electra needed, enabling a full system build in six weeks instead of a year.

1/8 development time with rapid low-code build and easy integrations

Unified operations with SSO access to ERP and supplier systems on one screen

New growth engine by enabling more end-user portals built by internal staff



# Intelligent large scale irrigation system

Growers needed real-time visibility into soil conditions and equipment status. Legacy tools refreshed too slowly and couldn't manage thousands of sensors, leading to wasted water and missed issues in the field.



## Solution:

Using the Vantiq platform, a large precision-irrigation provider in the United States connected soil sensors, pressure data and valve controls into one real-time irrigation system. The platform surfaces issues in seconds and automates irrigation based on live conditions.

## Why Vantiq?

Only Vantiq delivered the real-time performance, scalability and fast development WaterBit needed to run continuous, distributed farm operations.

Instant sensor alerts for pressure drops, faults and soil changes to [prevent crop damage](#)

[Automated irrigation](#) based on real-time moisture levels

Remote device updates [across thousands of field units](#)



# Real-time refinery safety and accident prevention

A major energy and refinery company needed a way to detect equipment faults, gas leaks and safety risks before they escalated. Their existing systems collected data in silos and reacted too slowly, leaving operators without a clear, real-time view of onsite conditions.



## Solution:

Using the Vantiq platform, a major global energy and refining company unified sensors, safety systems and operational data into one real-time monitoring layer. The platform detects anomalies instantly, triggers alerts and gives operators a live, consolidated picture of emerging hazards.

## Why Vantiq?

Only Vantiq could combine diverse refinery data and safety signals into one real-time operating view.

Early fault detection for leaks, failures and abnormal behavior

Real-time operator alerts across refinery systems

Unified situational view from all safety and sensor sources



# AI-powered elderly care and disaster response platform

Seniors living alone need fast, reliable protection day to day and during disasters. Traditional monitoring tools miss key signals and can't show who is home, at risk or needs urgent rescue.



## Solution:

Using the Vantiq platform, and developed with regional partners, a large nationwide elderly-care service unified IoT data, location signals and AI models into one real-time system that monitors daily well-being and switches to disaster response when emergencies occur.

## Why Vantiq?

Vantiq provides the real-time AI orchestration required to merge care, safety and multi-agency response into one continuous, reliable operation.

Live IoT monitoring with [real-time pattern detection](#)

[AI-driven risk alerts](#) during disasters

Aligns Coordinated response [across agencies and caregivers](#)



# Real-time clinical workflow orchestration for EHR systems

Clinicians rely on EHR updates that surface slowly across disconnected systems. Teams waste time tracking down information, and routine coordination becomes manual when it should be automatic.



## Solution:

Using the Vantiq platform, a leading clinical workflow software provider connected live EHR events, AI models and team workflows into one real-time system that automates steps, interprets notes and alerts clinicians instantly.

## Why Vantiq?

Vantiq enabled production-ready clinical workflows in weeks, providing the orchestration, reliability and speed TransformativeMed needed.

Rapid deployment with live EHR integration

Agentic automation for care team coordination

Actionable insights using AI to structure clinical data



# Real-time camera monitoring system across a major city

Cities managing large infrastructure need a way to monitor safety and security across thousands of cameras and data sources in real time.



## Solution:

Using the Vantiq platform, a regional technology provider deployed a system that integrates video feeds, sensors and AI to manage traffic, track objects and improve public safety across a major city in the Middle East.

## Why Vantiq?

Vantiq delivers real-time intelligence and adaptable integration for complex deployments—far beyond what traditional off-the-shelf systems can support.

Ingests and analyzes thousands of camera streams **in real time**

Enables **crowd management**, object tracking and automated security alerts

Supports smart surveillance with **facial recognition**, pattern detection and AI



# Health monitoring platform to proactively address health concerns

Preventive healthcare platforms need real-time insights and personalized engagement to help users stay healthy and take action before problems arise.



## Solution:

Using the Vantiq platform, a wellness company built a mobile health system that tracks data from wearables, provides AI-driven recommendations and supports proactive care through real-time engagement.

## Why Vantiq?

Vantiq enables fast development of scalable, intelligent apps that combine live data, AI and orchestration for a more connected health experience.

Delivers **real-time wellness metrics** and personalized health guidance

Supports **AI-driven recommendations**, scheduling and virtual check-ins

Powers custom health apps that adapt to user needs and **trigger timely interventions**



# Instant mapping and location platform for enterprise operations

Enterprises managing complex location services and high-volume telemetry often lack real-time visibility into system health and risks, slowing response.



## Solution:

Using the Vantiq platform, an IT services provider created a system that transforms live server logs and telemetry into real-time intelligence, giving enterprises instant visibility without replacing infrastructure.

## Why Vantiq?

Vantiq processes massive data streams in real time and integrates easily with APIs and platforms to power smarter mapping, logistics and monitoring systems.

Streams and analyzes live telemetry from servers, sensors and edge devices

Adds real-time intelligence without disrupting existing workflows or APIs

Supports faster logistics, smarter city planning and rapid incident response



# Multi-Domain Integrated C2 Platform for forward deployed soldiers

Defense and mission-critical operations demand real-time coordination across domains, systems and data sources—yet traditional platforms lack the speed, flexibility and intelligence required.



## Solution:

Using the Vantiq platform, a defense organization developed a C2 system that integrates sensors, AI and GenAI at the edge to support faster decisions and adaptive operations in the field.

## Why Vantiq?

Vantiq automates and integrates complex workflows at the edge—making it possible to deploy smart, multi-domain systems that operate at mission speed.

Integrates GenAI, LLMs and [sensors to support real-time](#) multi-domain operations

Powers autonomous software for [flight reprogramming and robotic systems](#)

Enables [dual-use applications](#) that adapt to changing missions and user roles



# Intelligent wound management app for healthcare professionals

Clinicians need a faster, more accurate way to assess and manage wounds—without the high cost or rigidity of traditional systems.



## Solution:

Using the Vantiq platform, a healthcare provider built a system that automates wound assessments, delivers AI-driven recommendations and streamlines clinical workflows at the point of care.

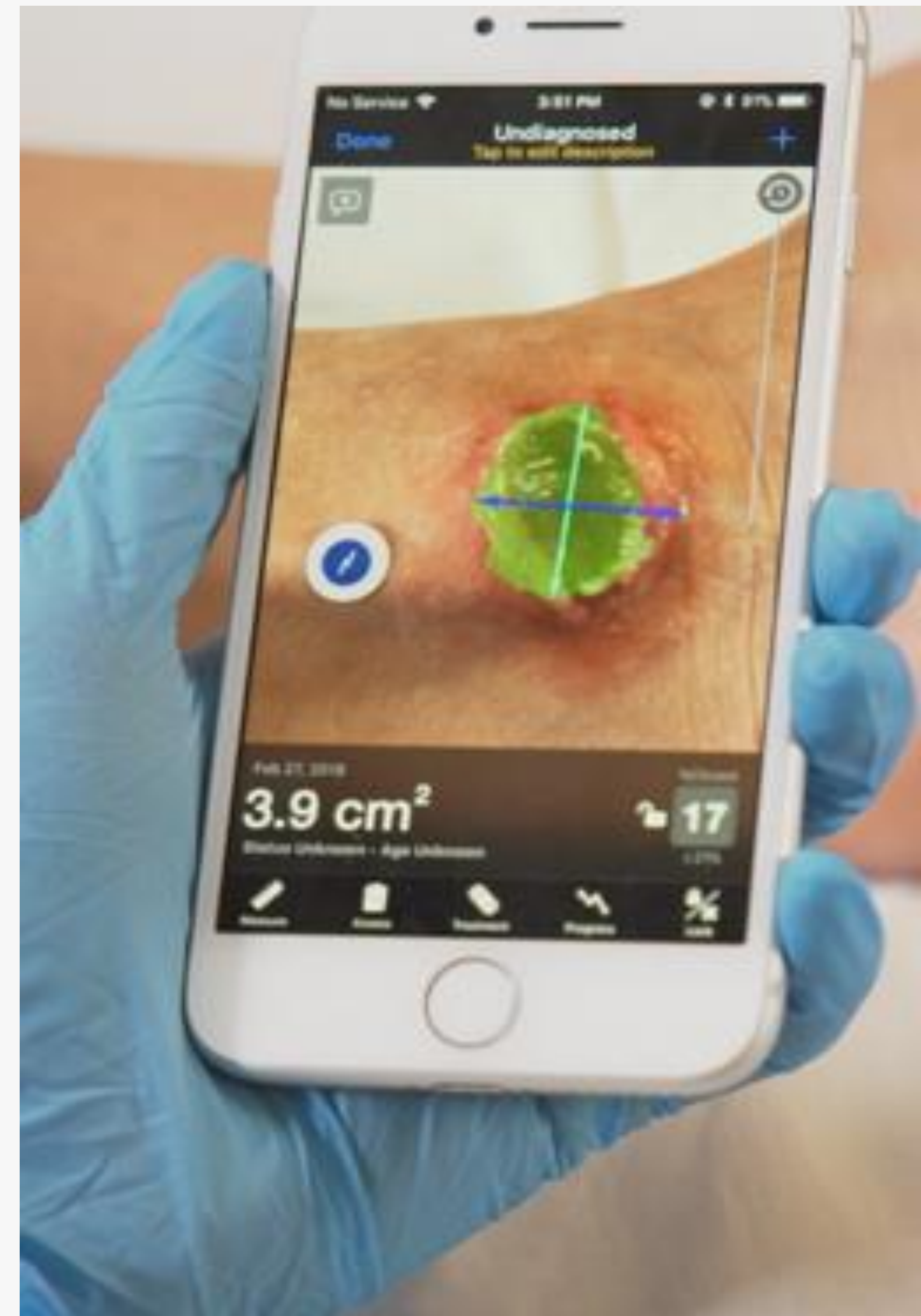
## Why Vantiq?

Vantiq enables agile development of scalable solutions that adapt quickly to medical environments, helping reduce risk and improve care delivery.

Delivers [mobile-ready AI support](#) for frontline clinical decision-making

Supports secure, federated [learning across multiple hospitals and care sites](#)

Enables [rapid prototyping](#) and rollout with minimal development resources



# Real-time traffic optimization system for large cities

Cities and transportation agencies need a smarter way to reduce congestion and improve roadway safety—especially during high-traffic events and poor weather conditions.



## Solution:

Using the Vantiq platform, a major U.S. research institute built a system that integrates vehicles, sensors and infrastructure to adjust traffic lights, predict risk and coordinate emergency response in real time.

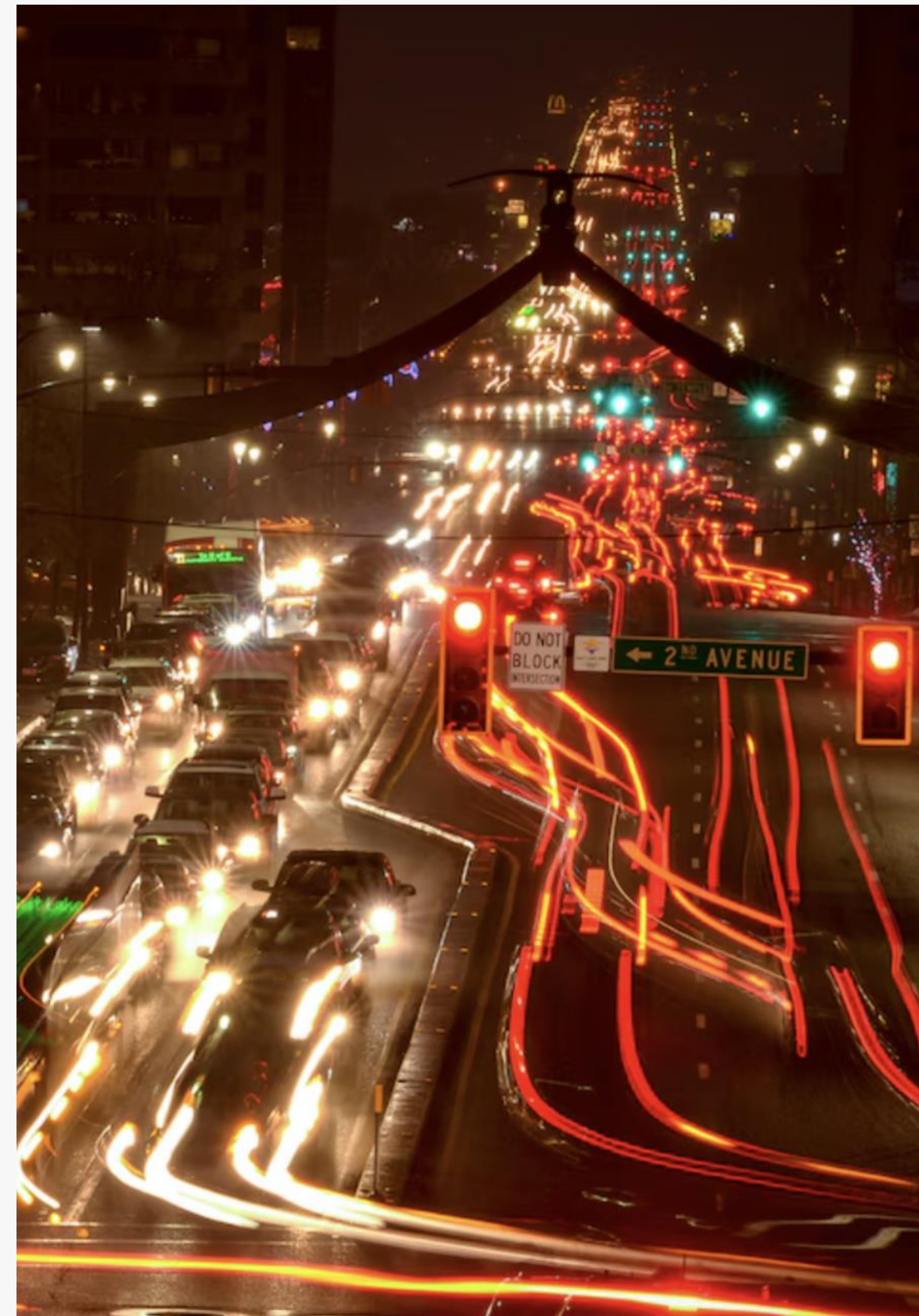
## Why Vantiq?

Vantiq enables fast orchestration of complex systems, delivering adaptive, mission-critical solutions that respond in real time to changing road conditions.

Adjusts traffic signals and routes using [GenAI and live sensor inputs](#)

[Anticipates road hazards](#) and congestion for safer, smoother travel

Automates emergency response based on [live traffic and weather data](#)



# Smart neonatal ICU monitoring system

Hospitals face a shortage of specialists to monitor newborns around the clock, making it difficult to detect early warning signs and respond in time.



## Solution:

Using the Vantiq platform, a pediatric healthcare provider built a system that analyzes EEG and camera data at the edge, generates GenAI-driven treatment recommendations and reduces the burden on neonatal teams.

## Why Vantiq?

Vantiq enables fast, scalable monitoring by processing data on-site—reducing costs and eliminating delays caused by cloud dependency.

Enables one doctor to **monitor up to 200 babies**, scaling from the current limit of 20

Real-time GenAI systems **automatically alert doctors** to any critical health changes, reducing the need for constant manual monitoring

**Enhanced AI-driven analysis** through camera driven object recognition



# Intelligent surgical readiness system for major hospitals

Hospitals often face costly last-minute cancellations when critical pre-op steps like labs, imaging or consent forms are missed.



## Solution:

Using the Vantiq platform, a U.S. children’s hospital created a real-time system that tracks surgical tasks, predicts cancellation risk with GenAI and alerts care teams before delays occur.

## Why Vantiq?

Vantiq offers predictive intelligence, flexible integration and fast deployment—making it easy to automate surgical workflows without replacing core systems.

Tracks **dozens of tasks** like labs imaging vendor approvals and consent forms

**Predicts cancellation risk** using GenAI based on urgency and timing

Notifies care teams and families early to **reduce last-minute disruptions**



# Home healthcare monitoring system for aging population

Most seniors either live with limited in-home care or move into facilities when risks rise. Without real-time monitoring clinicians miss early signs that lead to avoidable emergencies.



## Solution:

Using the Vantiq platform, a home health provider developed a system that combines patient data, AI and orchestration to deliver real-time monitoring and personalized care in the home.

## Why Vantiq?

Vantiq connects health data, EMRs and AI tools into one flexible, real-time platform—ideal for home-based care that needs to scale fast.

Monitors vitals trends [activity sleep and medication correlations](#)

[Predicts clinical risks early](#) using AI-driven consensus models

Integrates directly into [Epic PointClickCare and telemedicine workflows](#)



# Intelligent virtual power plant application

As demand for cleaner energy grows, utilities need a smarter way to manage distributed sources like solar, batteries and fuel cells in real time.



## Solution:

Using the Vantiq platform, a Japanese energy company built a virtual power plant that connects fuel cells, solar panels and batteries, enabling real-time optimization of grid demand and supply.

## Why Vantiq?

Vantiq enables fast, scalable orchestration of distributed energy systems—empowering providers to meet demand with flexibility and resilience.

**Integrates** Connects and manages solar, fuel cells and batteries in real time

**Analyzes real-time energy demand signals** to respond quickly to power requests.

**Scalable architecture** allows easy incorporation of new distributed energy resources, **future-proofing the virtual power plant as it grows**



# Smartest hospital command system for streamlined patient care

Hospitals need a unified way to coordinate care, monitor operations and respond in real time, but siloed systems and manual workflows slow everything down.



## Solution:

Using the Vantiq platform, a U.S. healthcare provider built a command center that integrates patient data, improves visibility and streamlines hospital flow with real-time orchestration.

## Why Vantiq?

Vantiq delivers fast, flexible system integration with real-time orchestration—making it ideal for rapidly modernizing hospital operations without disrupting existing infrastructure.

Modernize hospital command centers and redesign hospital-at-home models

Improve patient care coordination by integrating real-time data from various healthcare systems, enabling seamless collaboration between providers, caregivers and admin teams

Enhance predictive analytics using genAI to anticipate patient needs and optimize healthcare resource allocation



# Real-time occupancy management and security system for judicial departments

Large organizations need a better way to monitor occupancy, detect anomalies and ensure workplace safety—especially across multiple buildings and teams.



## Solution:

Using the Vantiq platform, a government agency in the Middle East built a system that combines video, AI and analytics to track entry and exit, analyze behavior patterns and trigger alerts in real time.

## Why Vantiq?

Vantiq supports fast integration, complex event processing and flexible deployment—including on-prem setups—making it ideal for high-security environments.

Uses real-time video and AI to track occupancy and movement across facilities

Correlates activity data to identify policy violations, extended absences or breaches

Delivers real-time alerts and insights to improve oversight and building security



# Intelligent perimeter security and threat management system

Enterprises need advanced technology to detect and respond to threats, but traditional security tools are siloed and reactive.



## Solution:

Using the Vantiq platform, a defense technology provider deployed a system that integrates video, vibration, audio and sensor data with AI to detect anomalies, assess risks and coordinate real-time responses.

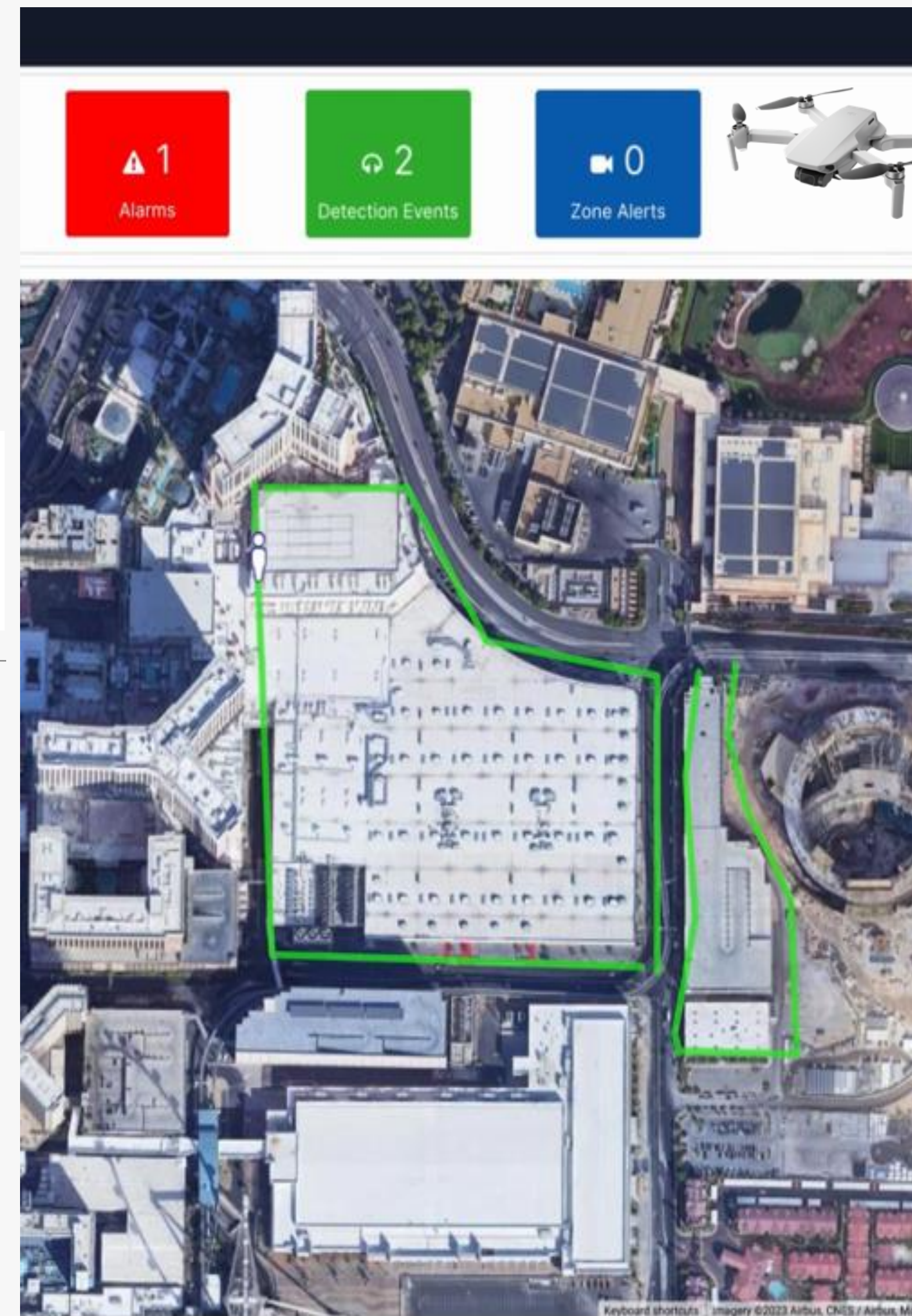
## Why Vantiq?

Vantiq enables seamless integration and real-time processing of complex sensor networks, making it ideal for proactive threat detection at scale.

**AI Powered system** integrates data from vibration sensors, audio sources, cameras and more, creating a unified threat detection network

**Intelligent real-time data processing** monitors, tags, and tracks potential threats with AI, providing security teams with **actionable insights instantly**

Scalable architecture supports the easy addition of new IoT sensors and AI capabilities, **future-proofing national security operations as needs evolve**



# Real-time emergency operations system for defense agencies

Agencies responding to emergencies or national threats need real-time coordination across people, data and infrastructure, but most systems cannot keep up under pressure.



## Solution:

Using the Vantiq platform, a defense agency created an event-driven system that unifies data from sensors, systems and teams to automate response, allocate resources and maintain operational control as events unfold.

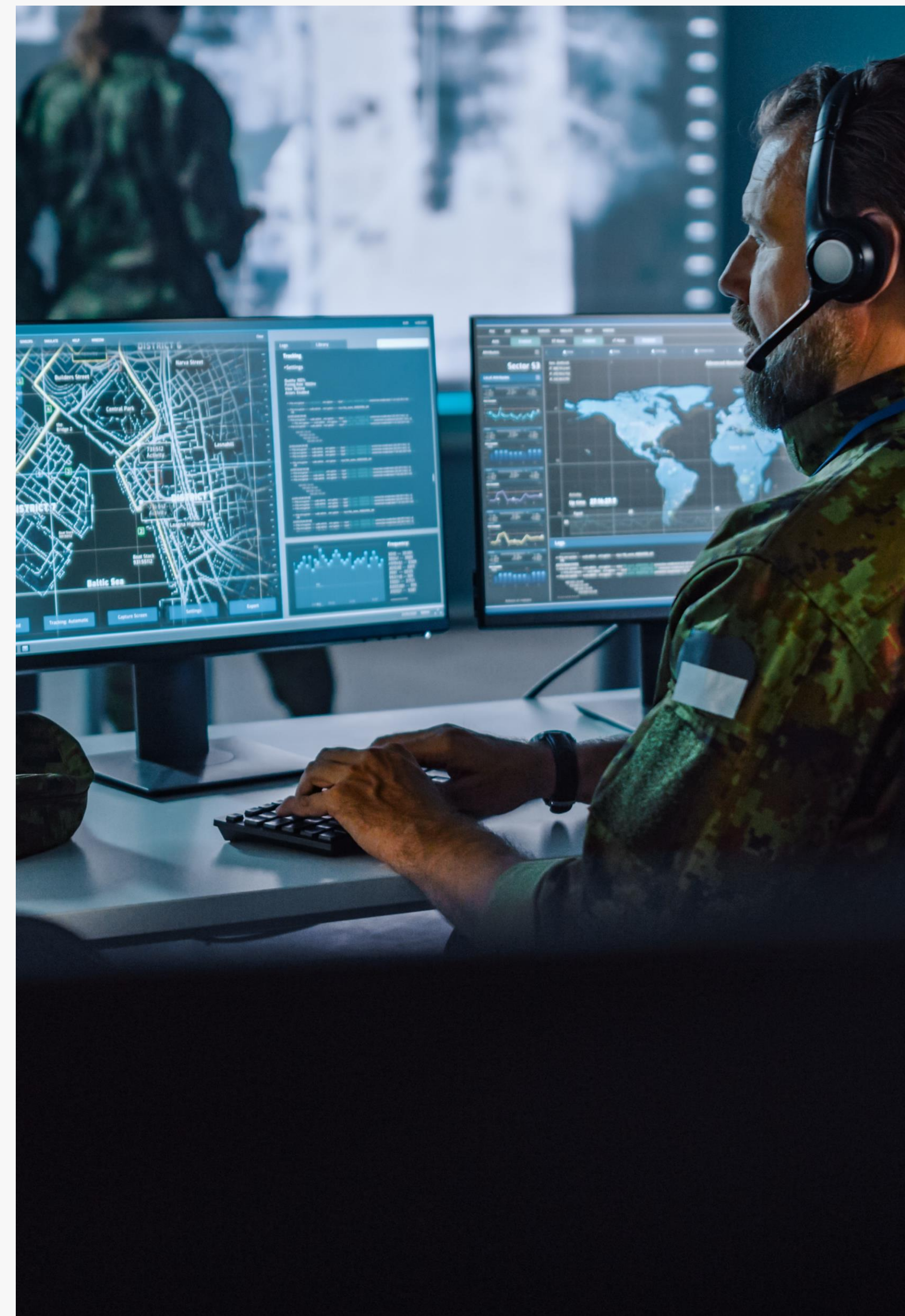
## Why Vantiq?

Vantiq delivers modular, scalable infrastructure that supports secure orchestration and real-time AI—ideal for fast-moving, mission-critical environments.

Orchestrates cross-agency operations using event-driven intelligence

Uses GenAI and real-time analytics to automate actions under pressure

Integrates across edge, cloud and air-gapped environments for resilience



# Smart weather management system for drone operations

Drone operators and industrial systems need access to low-altitude weather data in real time, but most platforms cannot process it quickly at the edge.



## Solution:

Using the Vantiq platform, a weather technology company built a system that processes high-density sensor data at the edge to deliver real-time insights for flight safety and operational decisions.

## Why Vantiq?

Vantiq provides the agility, integration and processing power needed to build weather-aware systems that are fast, scalable and future-ready.

Analyzes high-density weather sensor data in real time for better decision-making

Integrates rapidly into existing systems to support fast deployment and adaptation

Supports advanced IoT frameworks with secure, time-stamped weather intelligence



# The most agile and comprehensive computer vision system

AI and computer vision systems often lack a unified way to orchestrate and monitor real-time data streams across devices and locations.



## Solution:

Using the Vantiq platform, a semiconductor and AI hardware provider developed a real-time orchestration layer that integrates data from vision devices and AI models, enabling seamless monitoring and decision-making across industries.

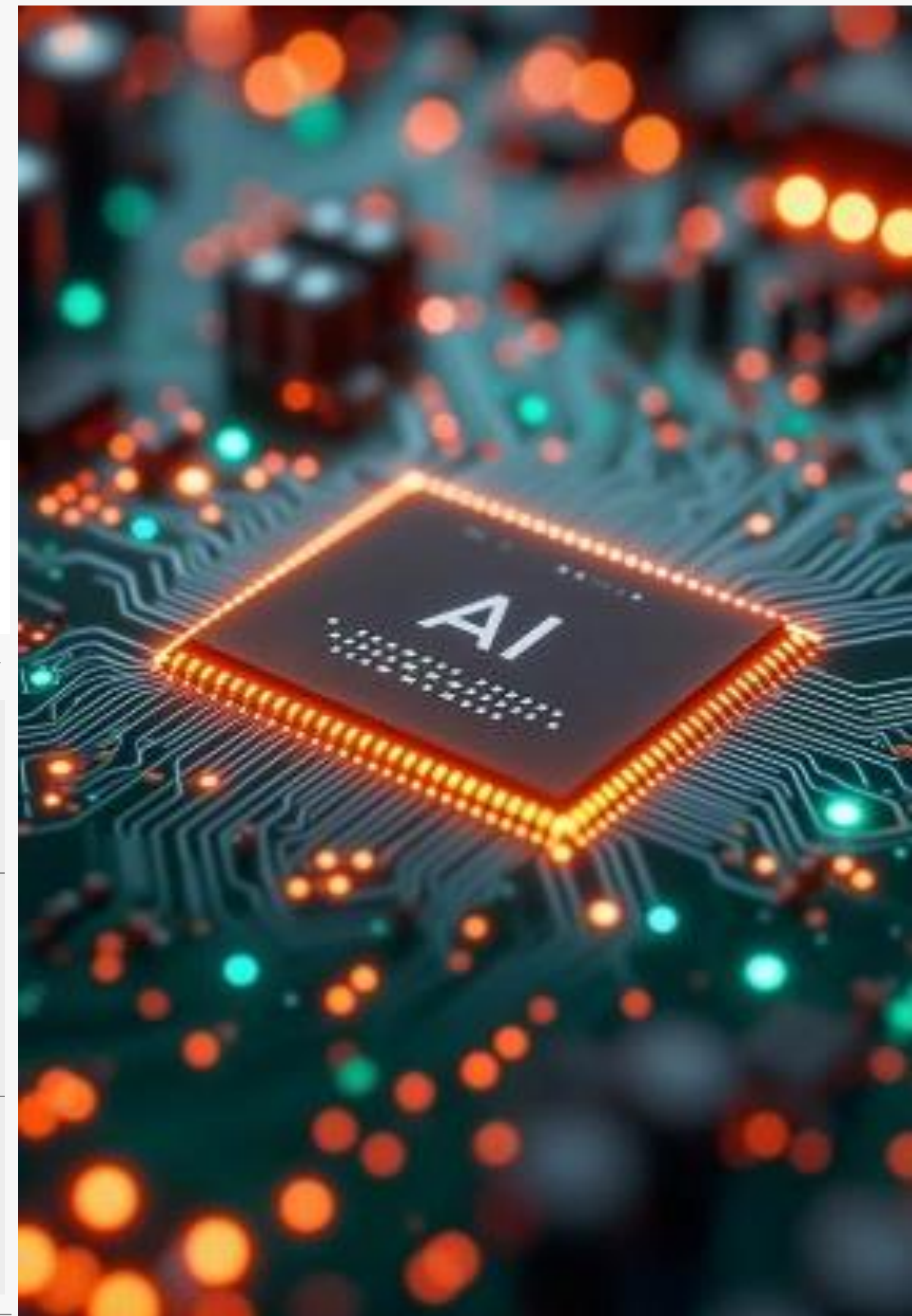
## Why Vantiq?

Vantiq delivers scalable orchestration with low latency, rapid deployment and flexible integration—ideal for complex AI-driven environments.

Integrates real-time vision data across multiple sources for edge-based decision-making

Supports customizable deployment across sectors like healthcare, security and defense

Powers affordable, scalable AI solutions in emerging and resource-constrained markets



# Smartest public safety visibility system in Australia

Cities need faster ways to detect and respond to vehicle-related incidents without hiring more staff or relying on manual monitoring.



## Solution:

Using the Vantiq platform, an Australian city deployed a system that analyzes license plates in real time, detects anomalies and triggers instant alerts while running on existing infrastructure.

## Why Vantiq?

Vantiq delivers the speed, flexibility and edge-ready orchestration needed to activate smart city systems quickly and without disruption.

Under **<2 seconds** from video to license plate detection

Edge + cloud coordination **reduces false alerts and response time**

AI-generated actions **pinpoint locations** and trigger alerts instantly



# Intelligent foot traffic monitoring application for crowd control in airports

Airports often struggle with crowding and blocked walkways, which create delays for passengers and inefficiencies for staff.



## Solution:

Using the Vantiq platform, a major airport in Australia built a system that leverages existing CCTV, computer vision and real-time alerts to keep pathways clear and passengers moving efficiently.

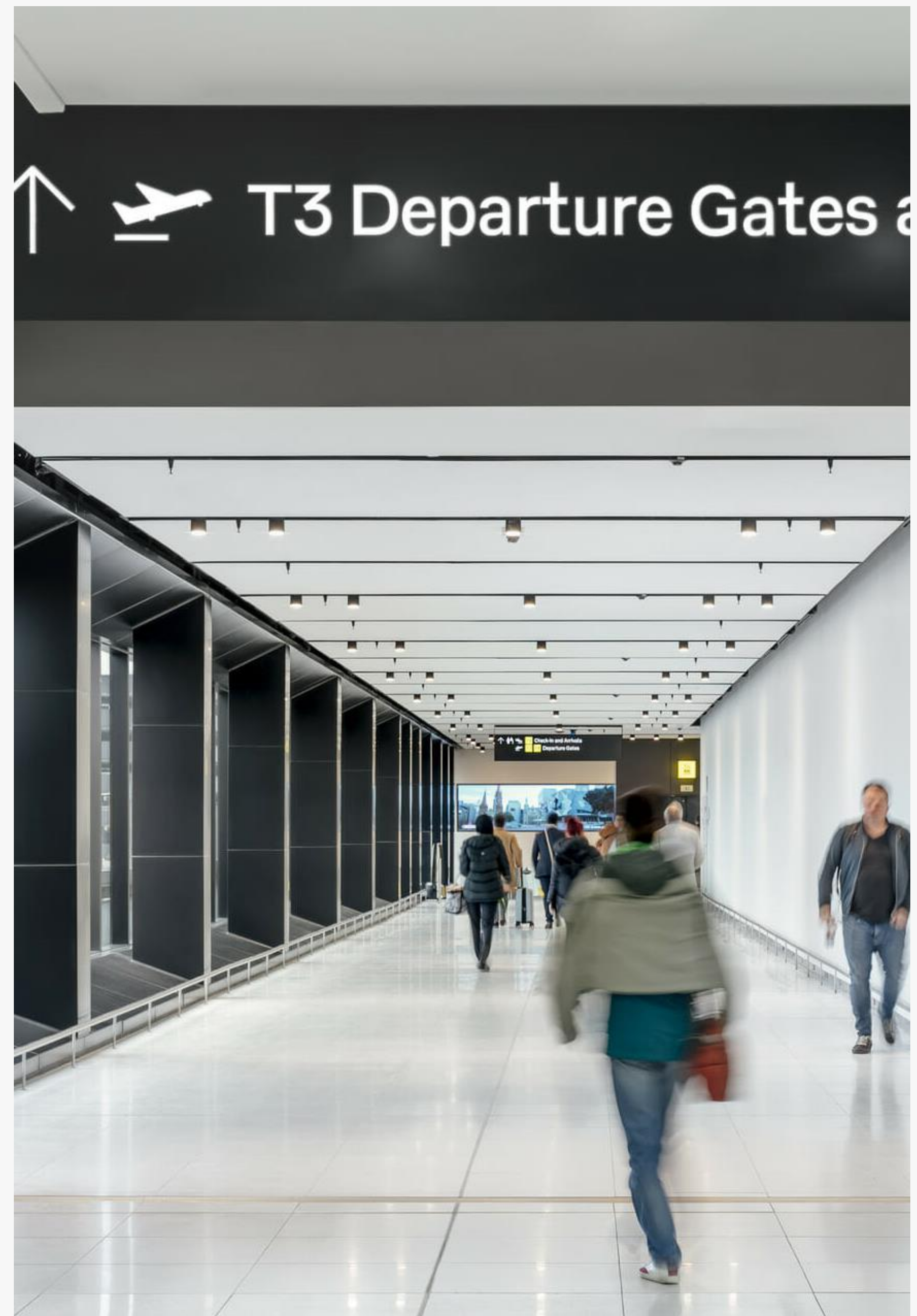
## Why Vantiq?

Vantiq works with current infrastructure and delivers real-time insights in seconds—minimizing disruptions while maximizing flow and safety.

Uses video analytics to detect obstructions like carts or crowding in **real-time**

**Sends prioritized alerts** based on location, duration and urgency

Increases response speed while **reducing manual sweeps and delays**



# Smart workforce heat stress prevention application

Extreme heat is a rising threat at construction sites, industrial zones and public events, but traditional safety methods react too late.



## Solution:

Using the Vantiq platform, a safety technology provider developed a biometric monitoring system that connects to wearables, analyzes heat stress data at the edge and triggers alerts before symptoms appear.

## Why Vantiq?

Vantiq enables instant action across thousands of devices without needing infrastructure upgrades—making safety scalable in any environment.

**No new infrastructure** — Vantiq connects directly with HP1T wearables and existing systems

Real-time alerts notify medics, supervisors and command centers **the moment heat stress risks appear.**

Tracks location **only during emergencies** to keep users safe and data private.



# Real-time anti money laundering investigation system

Financial investigations are slowed by siloed systems and manual reviews, making it difficult to detect threats and stop them in time.



## Solution:

Using the Vantiq platform, a financial services agency created a system that integrates AI, event-driven workflows and secure data connections to detect suspicious activity and accelerate case resolution.

## Why Vantiq?

Vantiq connects across databases and systems without requiring infrastructure changes—empowering faster decisions and better coordination across teams.

Integrates directly with customs, AML and intelligence platforms without added infrastructure

Filters out noise with AI to surface only high-risk entities, shipments and behaviors

Manages investigations, documents and requests with workflows built for frontline teams



# Intelligent emergency text triage system for police operations

Emergency operators are overwhelmed by large volumes of inbound texts, many of which are misclassified or not urgent, slowing response.



## Solution:

Built on the Vantiq platform, a public safety technology company developed a system that classifies incoming texts in real time, routes true emergencies to operators and reduces noise so response teams act faster.

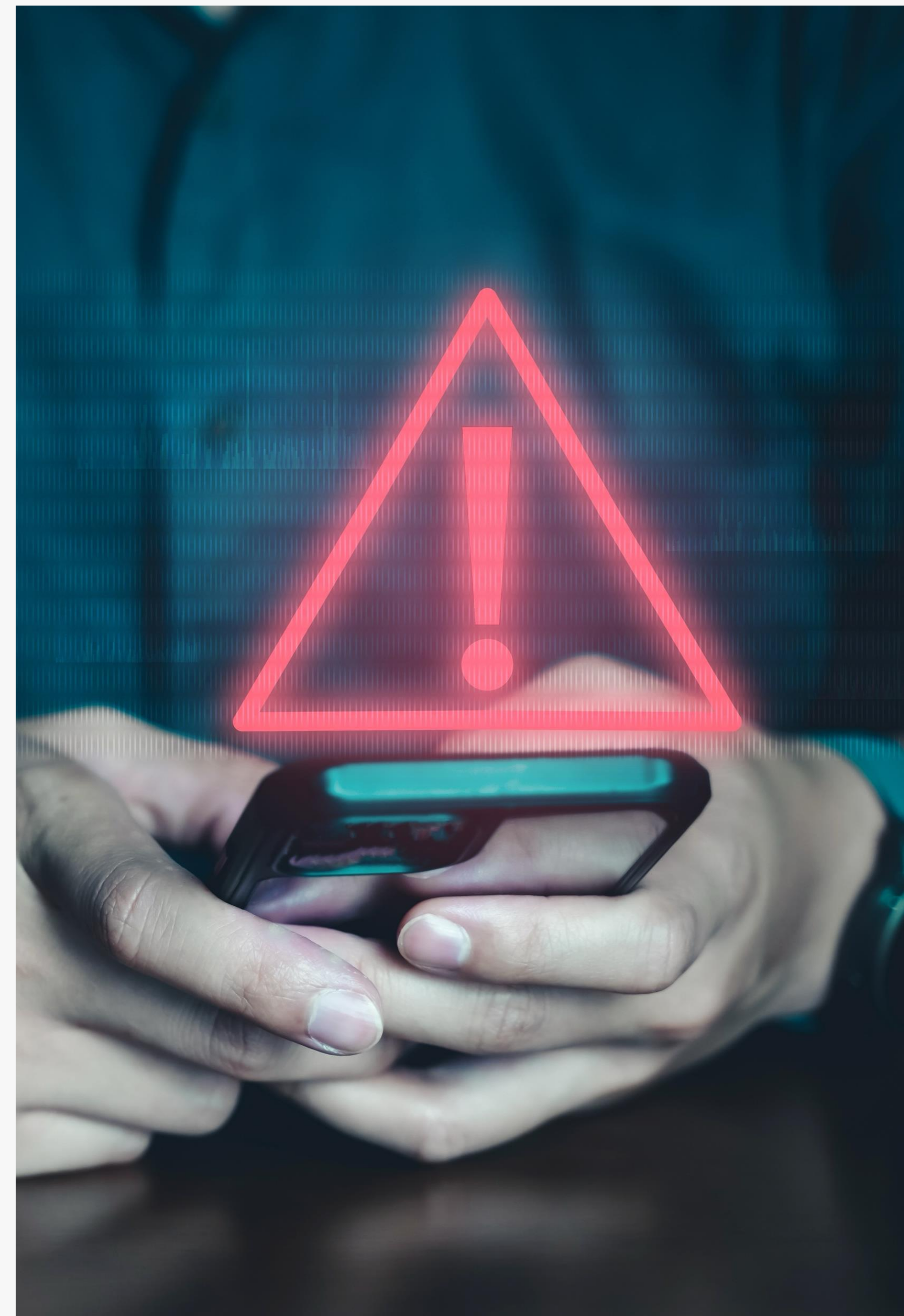
## Why Vantiq?

Vantiq enables real-time event classification, LLM integration, and model testing in high-accuracy, high-stakes environments.

Reduces operator noise by **automatically filtering and routing** only true police emergencies

Early tests show the LLM **identifying misclassified texts** that were missed by human reviewers

Includes custom **testing tools to validate model performance** case-by-case or in aggregate, and compare outputs across different models



# Proactive hospital alarm reduction system

Hospitals experience millions of alarms each year, most of them false, which overwhelms staff and delays responses to real emergencies.



## Solution:

Using the Vantiq platform, a U.S. healthcare provider built a system that classifies alarms with historical data, simulates responses with digital twins and tunes suppression algorithms to reduce noise while keeping patients safe.

## Why Vantiq?

Vantiq enables safe testing, simulation and real-time deployment of suppression logic—helping teams go live with confidence and without disrupting existing systems.

Simulates **patient sensor readings** with realistic playback for true vs. false alarms

Enables **algorithm tuning by patient type**, age and sensor configuration

Visual UI shows which alarms are suppressed and why, ensuring **no real alarms are missed**



# Smart large vessel monitoring system for international shipments

Large vessels carry hundreds of sensors, but limited bandwidth makes it hard to detect faults and send alerts in time, leading to costly delays and repairs.



## Solution:

Using the Vantiq platform, a global shipping operator created a system that processes sensor data on board, flags anomalies in real time and sends only critical alerts to shore, keeping fleets on schedule and costs down.

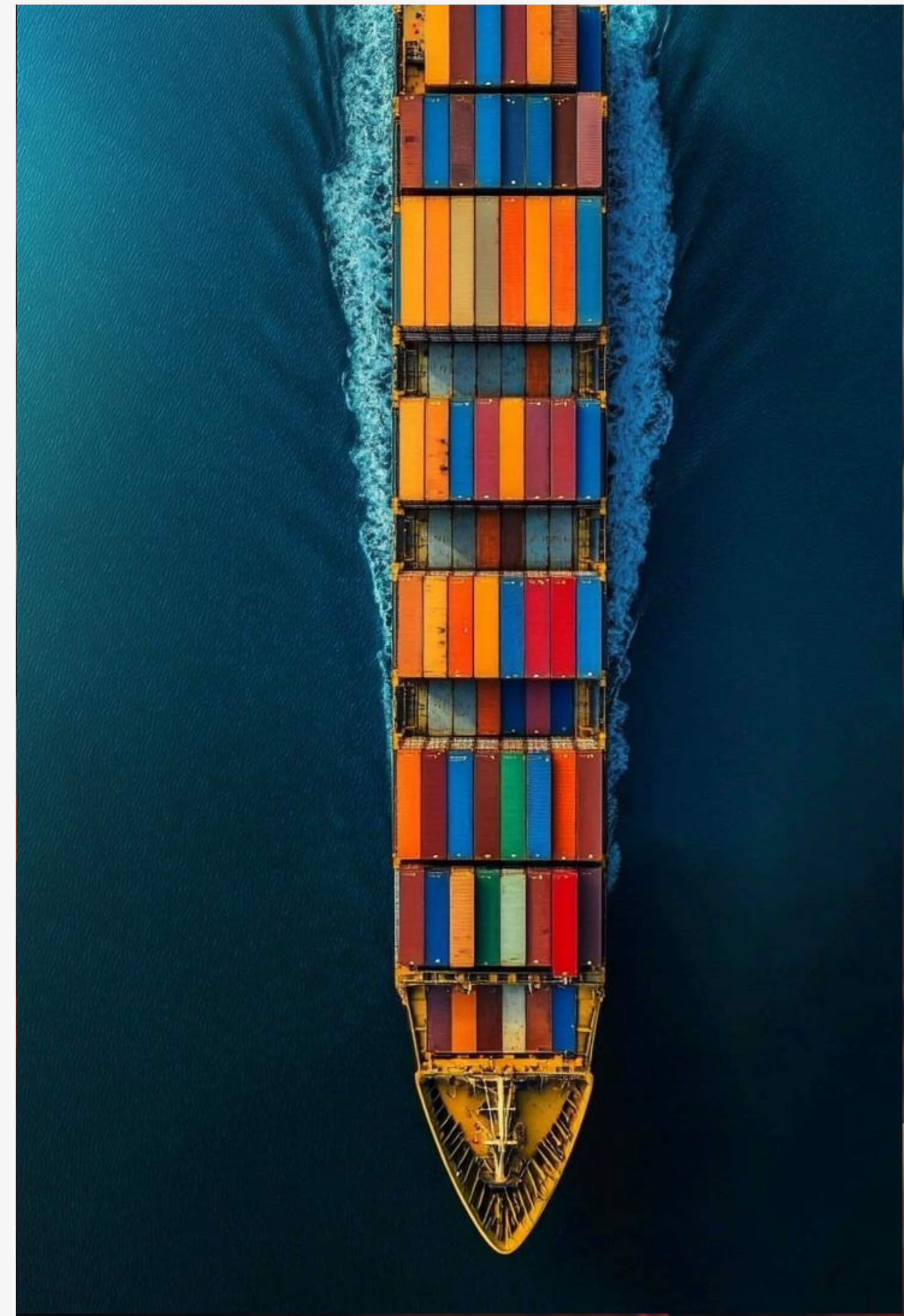
## Why Vantiq?

Vantiq orchestrates and processes IoT events at the edge or in the cloud, so crews see issues instantly while satellite traffic stays lean.

Cuts satellite load by processing events on-board and **sending only actionable alerts**

Predicts failures early with AI **on streaming data to stop breakdowns** before they happen

Visual UI keeps crew and HQ in sync via automated workflows that assign tasks and **log fixes in real time**



# Intelligent unmanned sports facility monitoring

Unmanned sports venues struggle to detect broken equipment or disruptive behavior quickly, causing lost revenue and customer complaints.



## Solution:

Using the Vantiq platform, a recreation technology provider built a system that analyzes live video and sensor data, flags faults or misconduct and alerts staff in seconds.

## Why Vantiq?

Vantiq enables edge-based event processing and fast deployment with low-code tools—helping venues stay secure, responsive and cost-efficient.

Uses AI to monitor video and sensor feeds for **equipment faults and misuse**

Surfaces **only actionable events** through event-driven filtering at the edge

Deploys in weeks with low-code architecture that **cuts dev effort by 90 percent**



# Integrated elderly safety and health monitoring system

Agencies need to protect vulnerable seniors, but cameras and wearables are costly or intrusive, and many incidents go unnoticed.



## Solution:

Using the Vantiq platform, a care technology company deployed a radar-based system that detects falls and inactivity in real time and alerts caregivers or emergency services automatically without capturing images.

## Why Vantiq?

Vantiq enables fast, secure orchestration of radar-based events across the edge or cloud—supporting rapid deployment without new infrastructure.

Protects privacy with contactless radar that **sees motion but never captures images**

Detects falls and inactivity instantly by **analyzing thousands of radar events per second** on Vantiq's streaming engine

Launches in weeks thanks to **low-code design**



# Smart duty-free customer flow analysis system

Retailers need insights into customer movement, but strict privacy regulations block traditional video analytics and leave blind spots.



## Solution:

Using the Vantiq platform, a duty-free operator in Korea built a system that anonymizes video at ingestion, generates real-time heatmaps and provides movement insights without exposing personal data.

## Why Vantiq?

Vantiq enables real-time anonymization, fast deployment and flexible analytics without violating privacy or needing large cloud infrastructure.

Meets **privacy mandates** by anonymizing video at ingestion rather than storing raw faces

Delivers **heatmaps and demographic insights in near real time** by processing streams at the edge and cutting cloud bandwidth

Launches up to 90 percent faster thanks to **Vantiq's visual low-code platform**



# AI driven small city monitoring platform

Cities often run transit, safety and air quality systems separately, which prevents operators from coordinating or responding in real time.



## Solution:

Using the Vantiq platform, a city in Korea is building a unified system that streams live data from multiple departments, visualizes it in one dashboard and automates actions for faster citywide response.

## Why Vantiq?

Vantiq offers a flexible, scalable backbone that supports fast integration, event-driven automation and low-latency response without replacing existing systems.

Unifies **siloed systems** on an event-driven platform for instant data sharing

Deploys in weeks—**up to 90 percent faster** than custom builds

Scales from **edge to cloud** to optimize bandwidth and act the moment events occur



# Real-time gaming automation platform

Game developers need fast, reliable tools for ad bidding, abuse detection and ops alerts—but current systems are slow, fragmented and hard to scale.



## Solution:

Using the Vantiq platform, a gaming company created a real-time event layer that filters live game data, applies AI rules for fraud and monetization and routes only actionable alerts to operations teams.

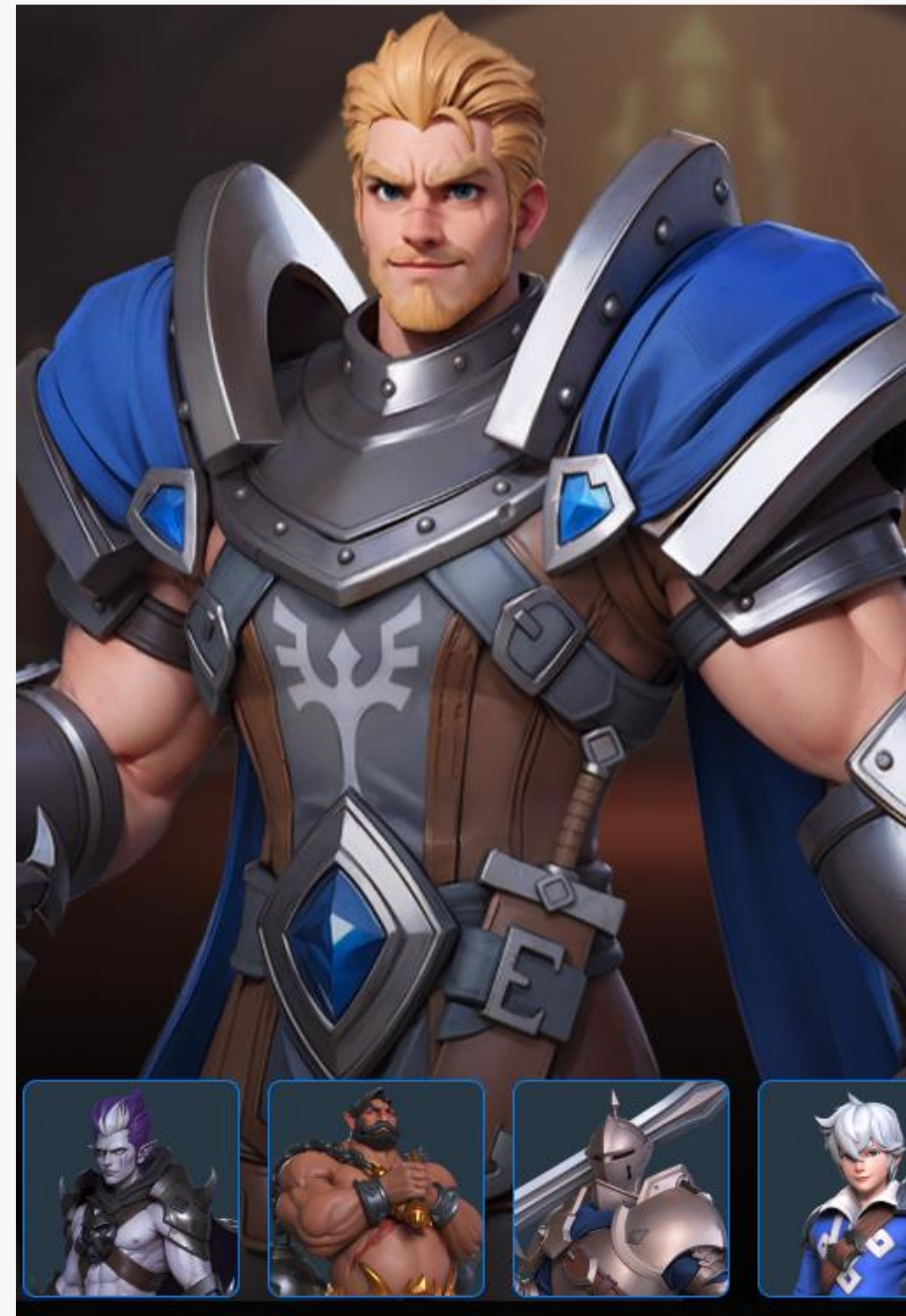
## Why Vantiq?

Vantiq processes massive volumes of data at the edge or in the cloud, helping studios launch scalable automation without adding infrastructure overhead.

Combines **ad bidding, fraud detection and ops alerts** in one platform

Filters **millions of events per second** at the edge to slash latency and cost

Deploys in weeks with low-code tools so **devs stay focused on gameplay**



# Intelligent virtual hospital network for university hospitals

Hospitals must extend care beyond their walls, but legacy on-prem systems slow response times and create dangerous gaps in remote monitoring.



## Solution:

Using the Vantiq platform, a university hospital built a system that connects bedside devices, telehealth carts and home monitors to one command center, enabling clinicians to track vitals, start video visits and dispatch teams in real time.

## Why Vantiq?

Vantiq orchestrates real-time data at the edge or cloud so hospitals can expand virtual care quickly—without replacing core systems.

Extends specialist reach to **every ward and home**

Filters detect deterioration early by **analyzing continuous vital streams**

Deploys in weeks with low-code workflows that cut **custom build time by up to 90 percent**



# Smart healthcare command-and-control center for hospitals

Hospitals rely on disconnected systems for patients, staff and incidents, which slows decision-making and risks safety when time is critical.



## Solution:

Using the Vantiq platform, a healthcare provider developed a command center that fuses data from EHRs, IoT devices and security sensors into one console, giving teams real-time visibility and automated workflows across the hospital.

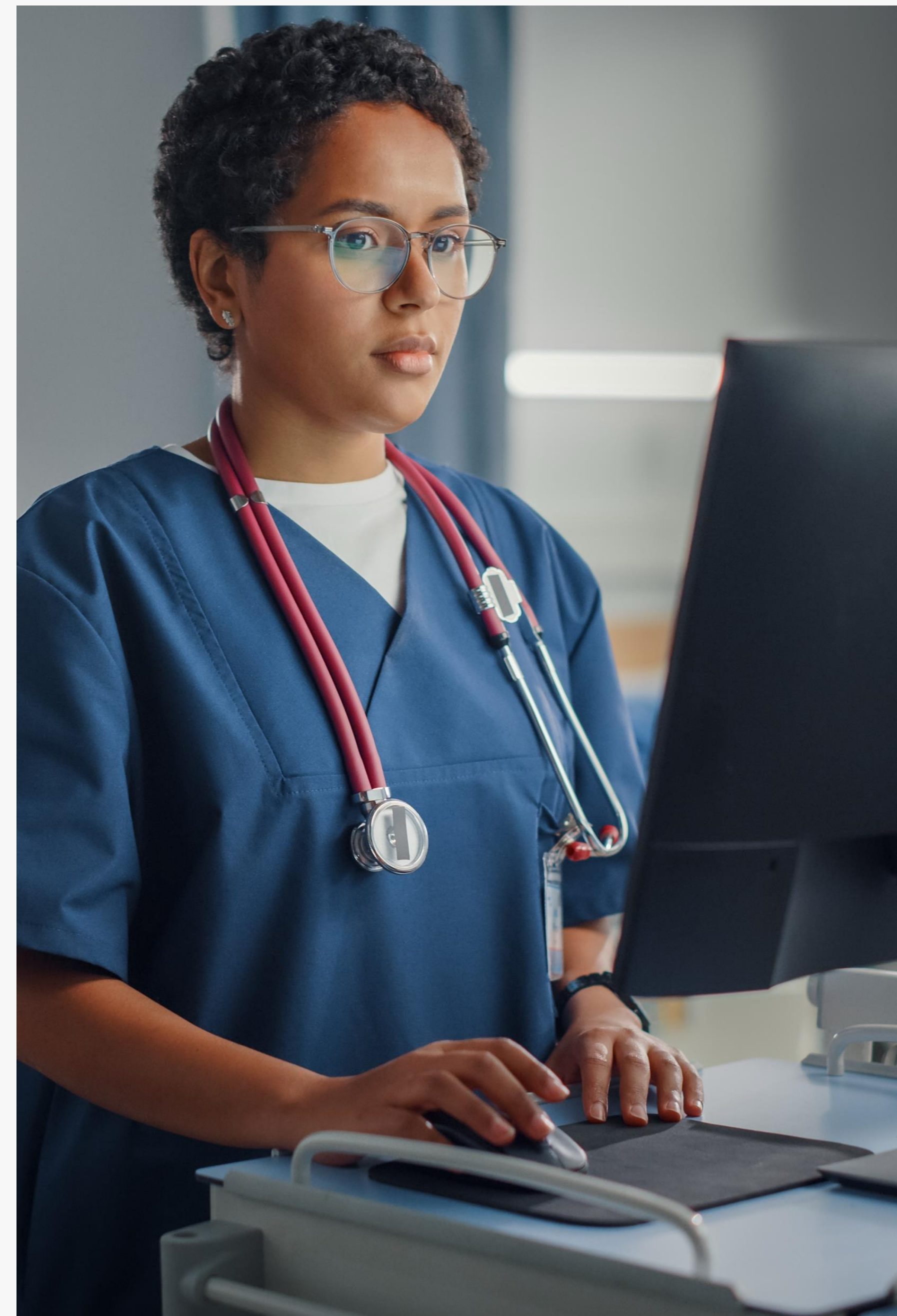
## Why Vantiq?

Vantiq orchestrates data across edge or cloud environments without ripping and replacing infrastructure—delivering a fast, secure path to unified command.

Predicts bed and staff demand **with live occupancy and acuity analytics**

Cuts emergency response time by **auto-alerting teams** and routing critical tasks

Secures operations on a hardened, **Ministry-approved architecture** that scales system-wide



# Smart mobile oncology clinic management platform

Cancer patients in remote regions wait weeks for diagnostics or chemotherapy because care is locked in city hospitals. Mobile units that could close the gap lack real-time oversight of drugs, equipment and patient vitals, risking delays and errors.



## Solution:

Using the Vantiq platform, a health ministry deployed a mobile clinic system that streams infusion pump data, imaging and vehicle telemetry to oncologists in real time, enabling dose adjustments, resupply alerts and faster interventions.

## Why Vantiq?

Vantiq links medical devices, IoT sensors and telecom networks at the edge, giving one continuous care platform without new infrastructure.

Safely administers chemo with **live pump alerts and automatic dose checks**

Protects drug integrity by **tracking cold chain and clinic environment** in transit

Scales fast with **low-code templates** that let the **ministry deploy** more units



# Real-time telecom security as-a-service platform for security teams

Telecom operators manage thousands of sites with separate systems for video, sensors and access logs, leaving threats unnoticed and outages costly.



## Solution:

Using the Vantiq platform, a telecom provider in the Middle East created a system that streams and correlates data from cameras, IoT sensors and access controls into one dashboard, detecting intrusions instantly and triggering automated responses.

## Why Vantiq?

Vantiq unifies live events at the edge or in the cloud, scaling to thousands of cameras and devices without new on-prem hardware.

Detects intrusions instantly with **AI video analytics** unified on Vantiq's real-time engine

Cuts false alarms and response time by **correlating video, door and environmental sensors** in one dashboard

Deploys in weeks—low-code tools shrink build time by up to **90 percent**



# Smart real-time data fusion platform for armed forces

Military organizations need to pull and process intelligence from many disconnected systems, but manual workflows create delays and missed opportunities.



## Solution:

Using the Vantiq platform, a defense organization built a system that ingests raw data from multiple sources, tags it in real time and uses AI to generate summaries, enabling faster decisions and clearer insights.

## Why Vantiq?

Vantiq reduces manual overhead and speeds up situational awareness by automating data fusion and preprocessing across any environment.

Connects and cleans data from diverse intelligence sources

Uses GenAI to highlight patterns and generate fast summaries

Speeds up analyst workflows with real-time preprocessing



# Intelligent biometric and geolocation tracking system

Security teams need faster ways to identify and track high-risk individuals, but traditional systems rely on manual reviews and slow data matching.



## Solution:

Using the Vantiq platform, a national defense agency deployed a system that correlates biometric scans, geolocation data and sensor inputs in real time, automatically detecting patterns and sending alerts the moment risks appear.

## Why Vantiq?

Vantiq links live feeds across systems instantly, enabling proactive monitoring and audit-ready coordination without adding infrastructure complexity.

Tracks movement and identity **across locations and data sources**

Detects **high-risk associations** as they happen

Keeps teams in sync with **real-time alerting and coordination**



# Smart influence operation detection platform

Coordinated online influence campaigns spread quickly, but most monitoring tools detect them too late to stop the damage.



## Solution:

Using the Vantiq platform, a public safety organization created a system that monitors live social data, flags spikes in targeted phrases or sentiment and generates real-time alerts so teams can intervene early.

## Why Vantiq?

Vantiq processes streaming data with event-based logic. It adapts quickly to new themes and keywords, enabling faster threat detection and response.

Flags targeted language and **messaging trends early**

Triggers alerts before **influence campaigns gain traction**

**Adapts fast** to evolving themes and keywords



# AI powered hospital discharge management system

Patients often wait hours to be discharged because staff coordinate by phone, tasks slip through the cracks and managers lack real-time visibility. This keeps beds full and delays admissions from the ED.



## Solution:

Using the Vantiq platform, a U.S. hospital built a system that tracks every discharge in one dashboard, alerts staff when delays occur and flips bed status automatically once rooms are cleaned.

## Why Vantiq?

Vantiq connects EHR data, IoT inputs and mobile workflows into a single low-latency platform. Hospitals can launch quickly without replacing existing systems.

Flags stalled tasks instantly, [cutting discharge time](#)

Opens beds sooner [to improve patient flow](#) and surgical scheduling

[Launches in weeks with low-code](#) workflows tuned to hospital policy



# Smart edge AI C4I platform for forward deployed military units

C4I teams need AI tools that work at the edge, not just in the cloud. Most systems can't function without connectivity or respond fast enough to local events.



## Solution:

Using the Vantiq platform on rugged edge hardware, a military organization built a system that deploys AI agents, LLMs and workflows directly on site, enabling real-time decision support even without network access.

## Why Vantiq?

Vantiq runs locally, syncs when networks return and lets teams update mission logic quickly using low-code tools—no recoding needed.

Runs **AI agents and LLMs** directly on the edge—no cloud needed

Mesh architecture keeps **mission logic live during comms outages**

**Low-code tools** let operators update workflows in minutes



# AI driven air mission planning system

Mission planning is too slow and too manual. Teams rely on siloed tools to piece together intel, weather, logistics and targeting. That creates delays, misallocations and missed opportunities.



## Solution:

Using the Vantiq platform, a defense organization developed a digital twin that unifies mission data, refreshes tasking orders in real time and helps teams adjust plans in seconds while staying aligned.

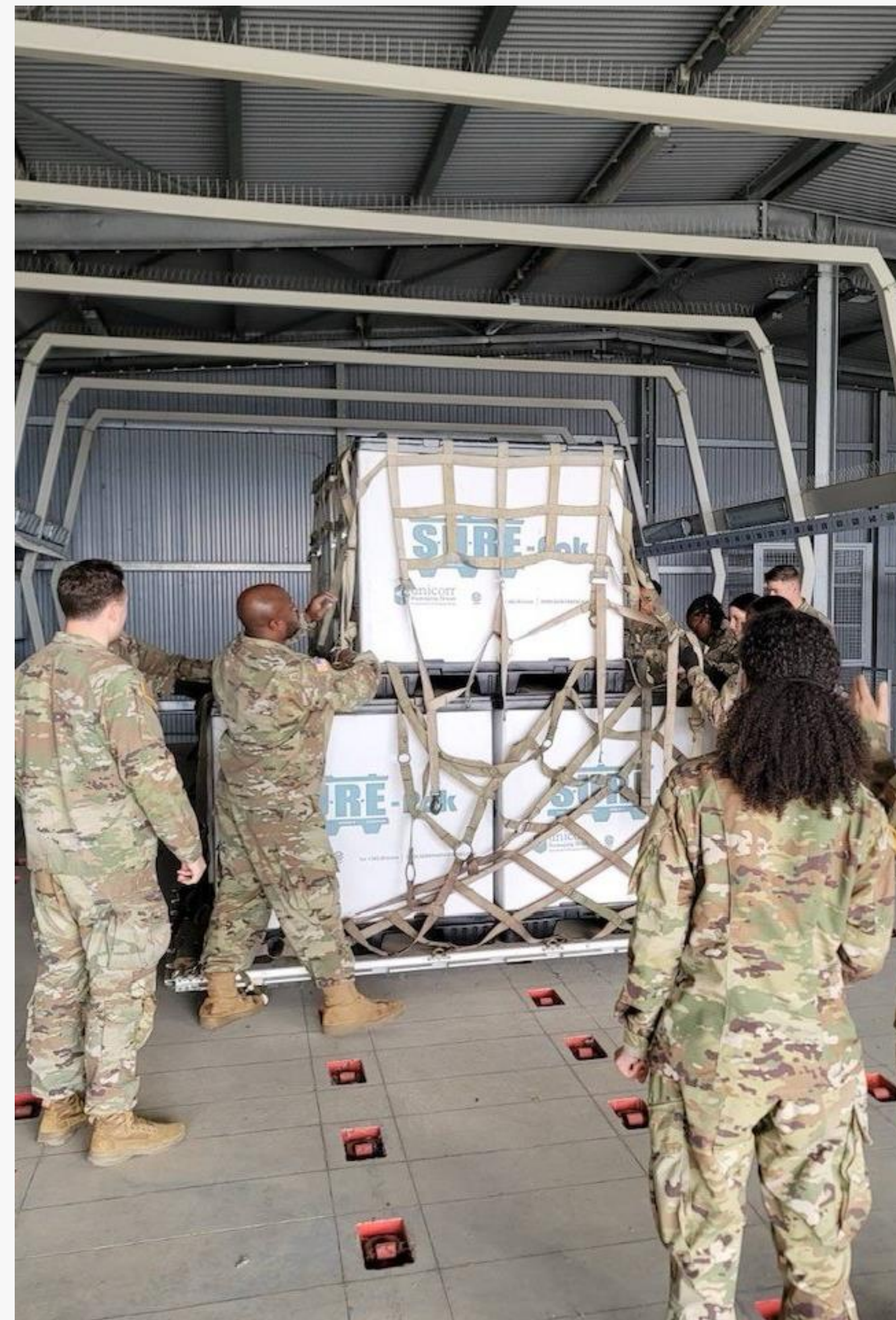
## Why Vantiq?

Vantiq runs at the edge or in the cloud, auto-syncs across systems and can adapt fast without code-heavy changes.

Live twin shows aircraft, targets, weather in one view

AI refreshes tasking orders in under a minute

Mesh runtime keeps planners synced during comms loss



# Smart joint battlespace management platform

Commanders struggle to make fast decisions because each domain—air, land, GBAD—uses different systems. There’s no unified view, which leads to gaps, delays and risk.



## Solution:

Using the Vantiq platform, a defense agency created a single dashboard that fuses sensor and track data across domains, highlights conflicts in real time and routes actions to the right teams.

## Why Vantiq?

Vantiq speaks 160+ protocols and runs on a distributed mesh that’s built for resilience under pressure.

Creates one digital twin across **all assets and domains**

Flags **real-time conflicts** before they escalate

**Keeps systems online** even under jamming or degraded links



# Intelligent cyber operations integration hub for military operations

Security teams switch between outdated tools that don't talk to each other. That slows response, hides threats and forces manual intervention when time matters most.



## Solution:

Using the Vantiq platform, a military organization built a system that ingests logs in real time, correlates events across systems and uses AI agents to automate responses before attacks escalate.

## Why Vantiq?

It integrates fast with legacy tools, operates across air-gapped systems and scales response using real-time logic and AI.

Connects **160+** data sources with low-code adapters

AI agents flag and act on coordinated threats instantly

Mesh runtime keeps systems **running during attacks**



# Autonomous drone command platform

Drone swarms lose coordination when communications fail, as most systems rely on centralized control and proprietary software.



## Solution:

Using the Vantiq platform, an aerospace technology provider developed an onboard system that runs directly on each UAV, enabling swarm-wide collaboration and decision-making at the edge without a central controller.

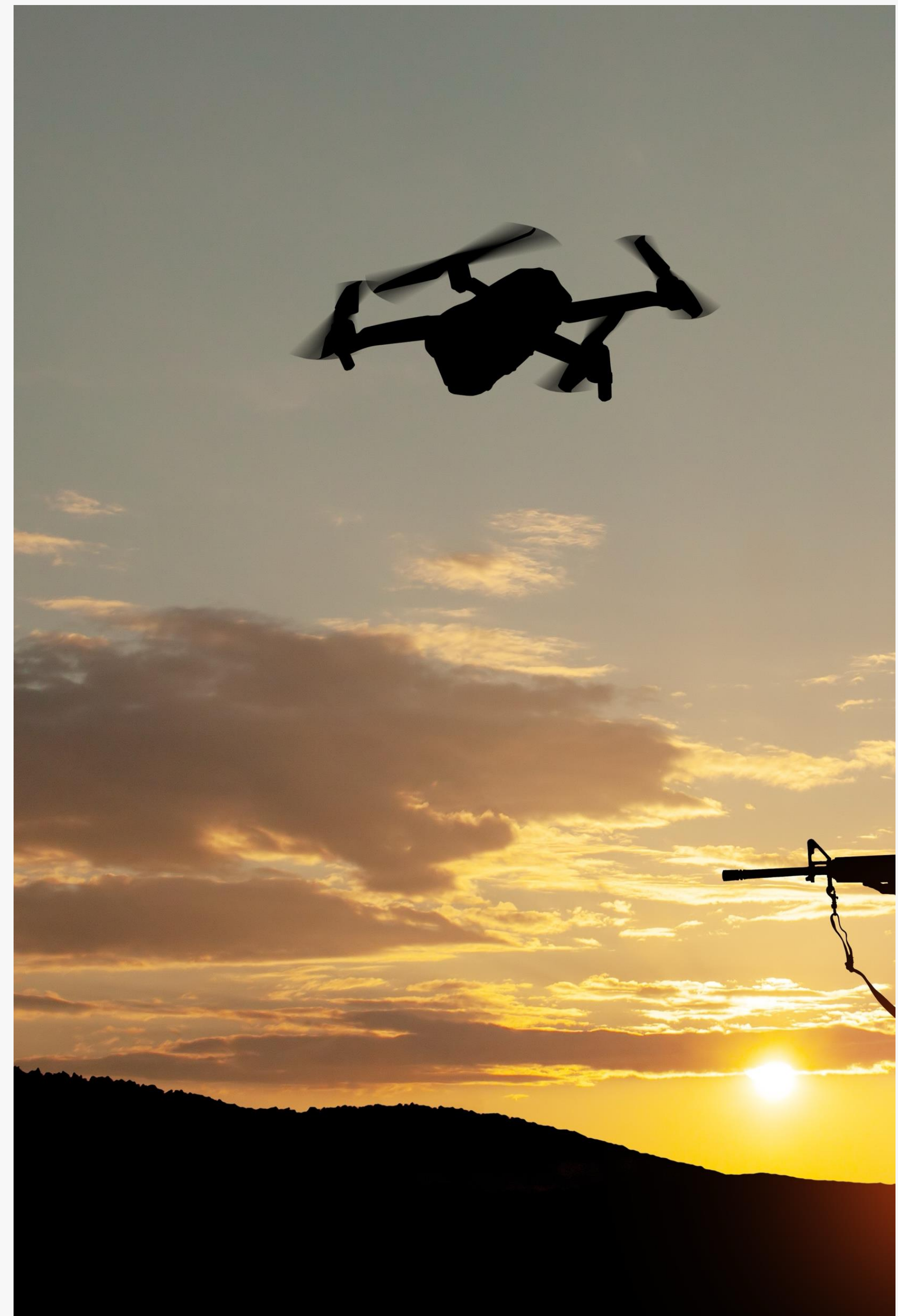
## Why Vantiq?

The system uses an event-driven mesh and onboard AI, so drones operate together even in denied environments.

Onboard runtime supports **full autonomy and mission logic**

**Unified event bus** lets mixed drone types work as one team

**Mesh protocol ensures** coordination beyond line-of-sight



# Real-time prison security monitoring system

Prison officials needed a better way to monitor facilities in real time. Traditional systems required switching between disconnected feeds, slowing incident response and letting threats slip through.



## Solution:

Using the Vantiq platform, a corrections agency built a system that fuses CCTV, access control and perimeter sensors into one dashboard, triggering instant alerts and tasks when breaches or abnormal behavior are detected.

## Why Vantiq?

Vantiq processes and correlates live data at the edge, enabling fast, automated coordination without replacing existing systems.

Combines security feeds into one live operational view

Flags and routes response to potential breaches within seconds

Mesh runtime keeps alerts active even during network failures



# Smart real-time operations platform for complex military operations

Base and battlefield operators rely on siloed dashboards and phone calls to make fast decisions. Without a real-time common view, coordination lags—and critical events are missed.



## Solution:

Built on the Vantiq platform, a defense organization created an operations center that unifies sensor data, video and personnel status into one real-time dashboard, enabling automated workflows and coordinated responses.

## Why Vantiq?

Vantiq unifies live data across domains, scales from base ops to national command, and can run disconnected at the edge.

One real-time dashboard for logistics, alerts and personnel

Role-based views adapt instantly to evolving missions

Edge-ready platform keeps ops online even when networks fail



# Real-time aviation safety platform for drone and plane operations

As advanced air mobility and drone operations expand, safety checks still rely on manual review and post-mission analysis, slowing response and risking compliance.



## Solution:

Using the Vantiq platform, an aerospace safety provider developed a system that monitors flight health in real time, detects anomalies mid-flight and triggers automated risk responses to improve safety.

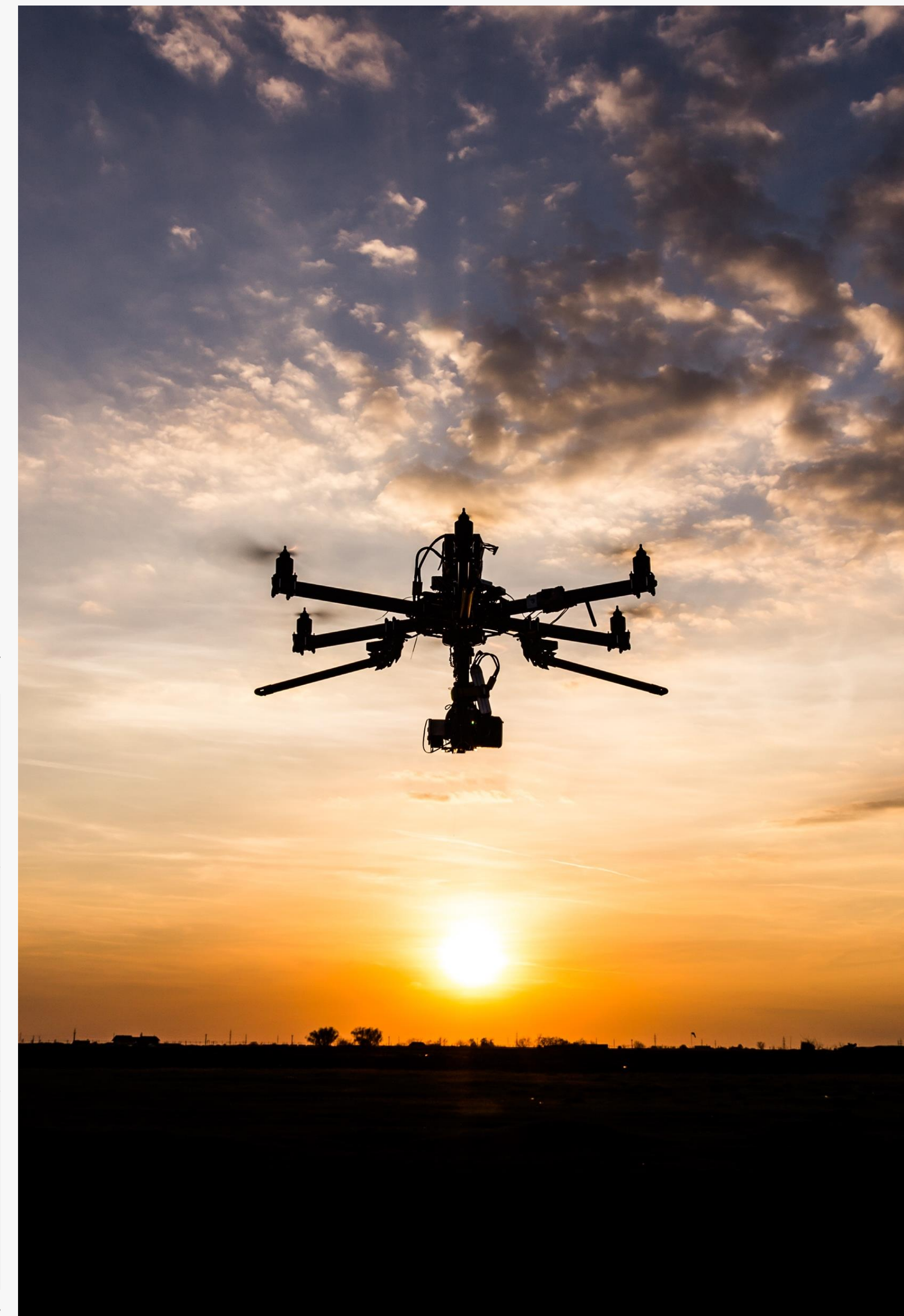
## Why Vantiq?

Vantiq provides the speed, scale and integration needed to bring in-flight safety systems online for next-gen aviation, without waiting for ground review.

Detects off-nominal events and triggers **real-time risk responses**

Meets **FAA requirements** for BVLOS and AAM operations

Brings IASMS tech from **R&D into the real world**



# Smart naval AI and logistics modernization platform

Naval teams need a unified way to manage logistics, maintenance and mission data across ships and support systems. Most platforms are siloed and can't adapt to contested or GPS-denied environments.



## Solution:

Using the Vantiq platform, a naval technology integrator built a real-time system that connects ship operations, automates logistics coordination and supports alternative navigation intelligence when GPS is unavailable.

## Why Vantiq?

Vantiq combines real-time orchestration, AI agent coordination and low-code flexibility into one platform ready for fleet-wide deployment.

Enables live coordination across **maintenance, supply chain and operations**

Supports **GPS-denied autonomy** with integrated navigation intelligence

**Connects legacy and emerging naval systems** in a unified digital backbone



# Intelligent mission system for C-JADC2 enablement

Mission systems often depend on centralized infrastructure that fails in contested or degraded environments, limiting coordination across joint forces.



## Solution:

Using the Vantiq platform, a military organization built a decentralized command system that ingests telemetry, fuses ISR data at the edge and drives automated decisions while supporting stealth communications.

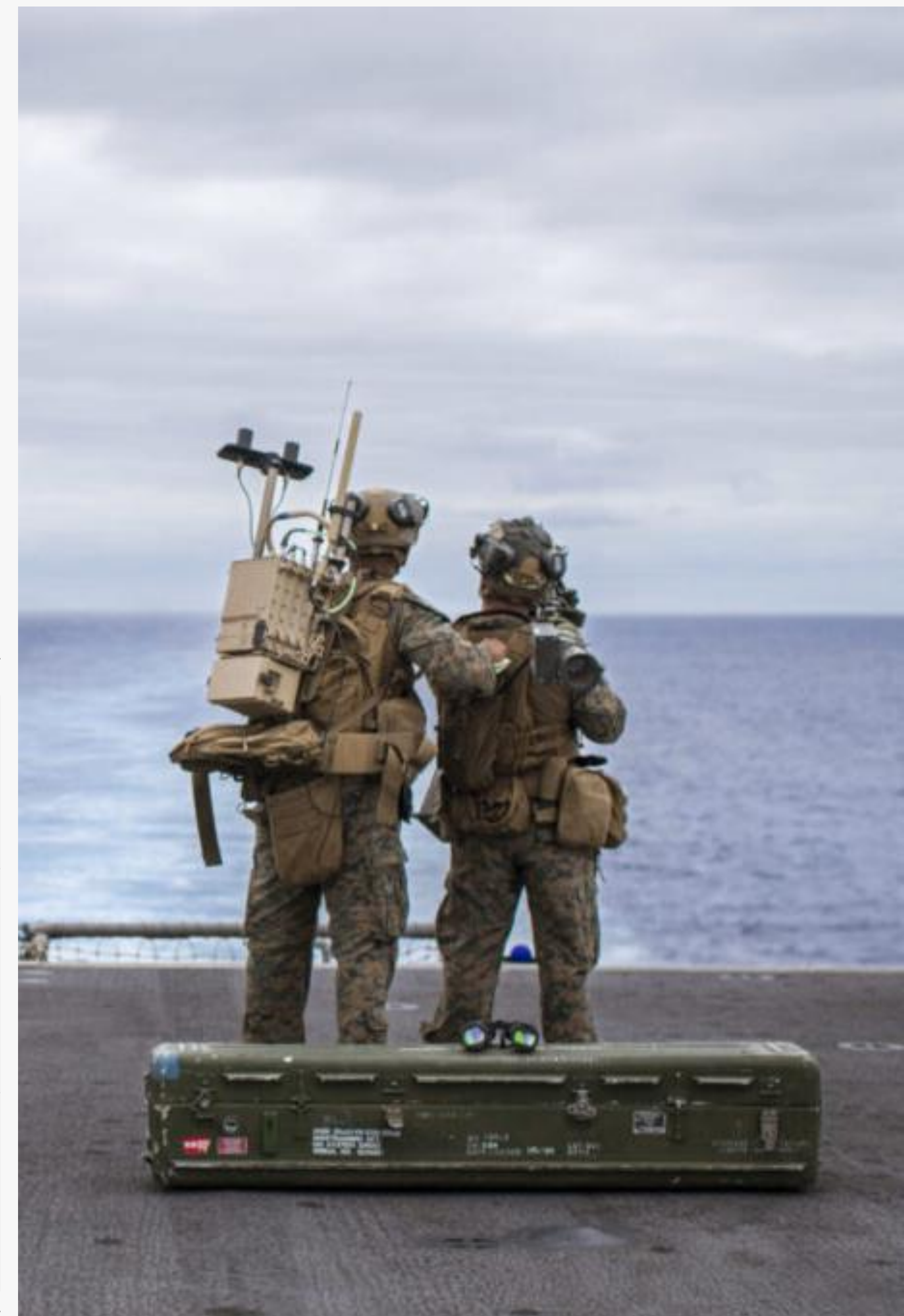
## Why Vantiq?

Vantiq delivers low-code adaptability, edge-native performance and AI-powered coordination in one platform built to support C-JADC2 modernization.

Operates fully at the edge to [maintain C2 in contested environments](#)

[Integrates stealth comms](#), AI agents and ISR into a unified decision loop

Aligns with [Crystal Vista and NSA modernization initiatives](#)



# AI orchestration system for space operations

Space operations teams need to process live mission data across sensors, ISR and ops platforms. Most systems aren't built to unify that data or respond fast enough in contested environments.



## Solution:

Using the Vantiq platform, a space technology group built a system that fuses ISR feeds, automates coordination with agentic AI and connects distributed systems into one real-time command layer.

## Why Vantiq?

Vantiq delivers AI-native orchestration with event-driven logic, built to support space missions in dynamic, multi-domain conditions.

Processes **live sensor and ISR feeds** across distributed operations

Automates coordination **through agentic AI and event workflows**

**Integrates legacy and future systems** into one unified ops layer



# Real-time online crime prevention system

Violent threats spread quickly online. Most public safety teams don't have a scalable way to monitor platforms in real time or act before language turns into action.



## Solution:

Using the Vantiq platform, a nonprofit organization in New York developed a system that streams social content, filters it with a custom LLM and pushes alerts to intervention teams, helping detect violent rhetoric and coordinate early response.

## Why Vantiq?

Vantiq connects real-time monitoring, GenAI and automated outreach into one integrated platform built to prevent violence before it escalates.

**Real-Time monitoring** across multiple social media feeds such as X, Reddit and 4Chan

**Custom language model** able to differentiate between violent rhetoric and intent to commit violent acts

**Coordinates outreach** across community ambassadors, targeted ads and eventually **gen AI coaches**



# Smart real-time intersection intelligence platform

Intersection data is generated every second from roadside units (RSUs), but most systems can't act on it fast enough to improve safety or optimize traffic flow—especially in time-critical scenarios.



## Solution:

Using the Vantiq platform, a transportation authority in the United States built a system that ingests live roadside unit data, responds instantly to road changes and powers safer, smarter intersections.

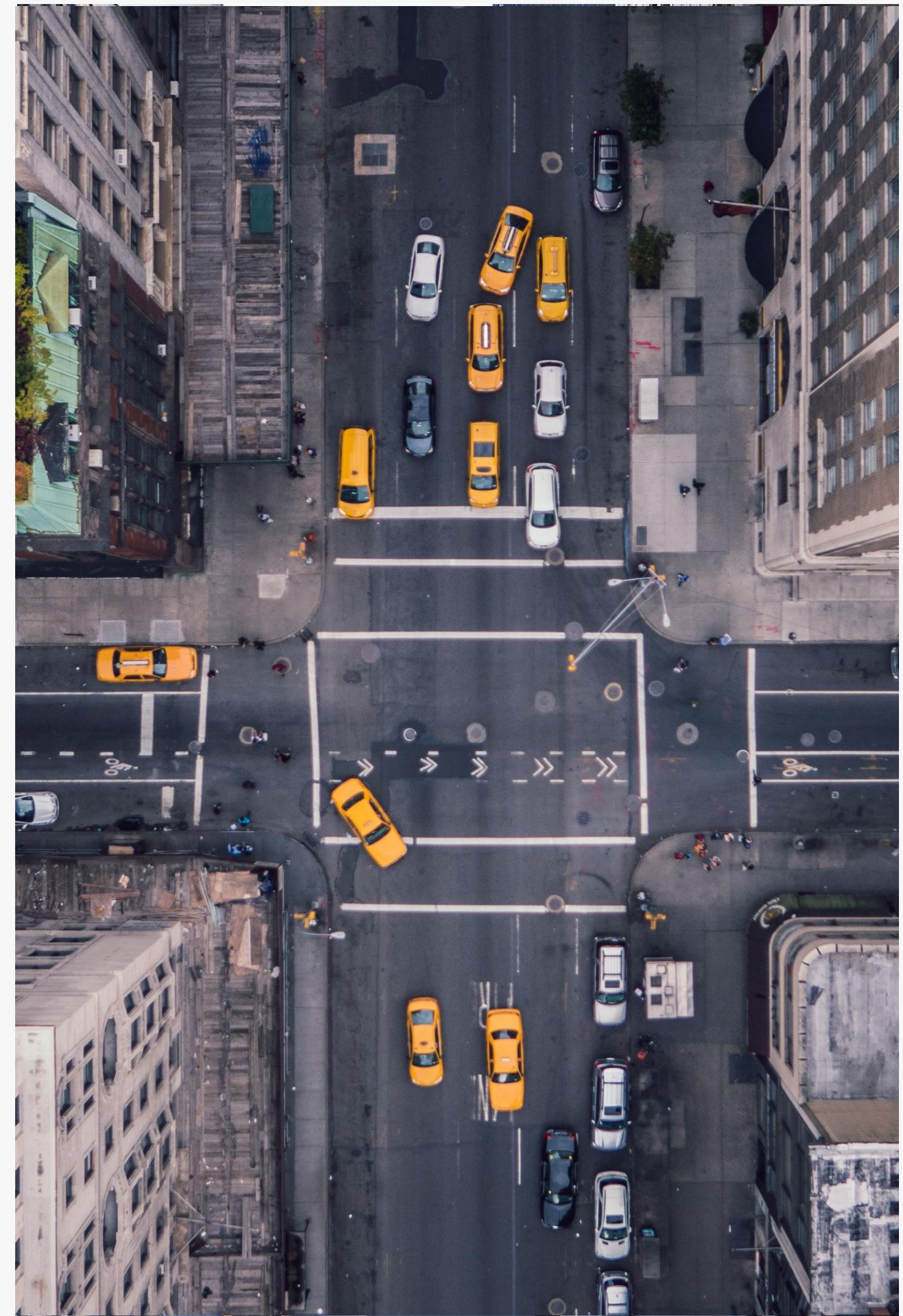
## Why Vantiq?

Only Vantiq can process fast-moving, multi-source traffic data and trigger instant actions with edge-based decisioning.

Ingests 10+ messages/second from RSUs and [intersection sensors](#)

[Powers live applications](#) for driver awareness and pedestrian safety

Responds instantly to [signal, vehicle and emergency event changes](#)



# AI-driven tactical land C5ISR platform

Tactical units need real-time decision support that works across command layers, even in contested or disconnected environments. Most systems fail when bandwidth drops or local intel can't reach central ops fast enough.



## Solution:

Using the Vantiq platform, a NATO defense project developed an edge-ready C5ISR system that runs locally or in the cloud, connects live ISR inputs and supports layered orchestration for vehicles, squads and command posts.

## Why Vantiq?

Only Vantiq delivers real-time orchestration across all echelons of command, operating in connected or denied battlespace with AI-enabled resilience.

Optimized for edge ops, **from HQ to individual soldier or vehicle**

Runs in cloud or disconnected environments with **zero rework**

Supports **layered C2** across AI, ISR and mission execution



# Smart air and space battle management system

Legacy air C2 systems can't keep up with the scale and speed of modern warfare. They struggle to support AI-driven tasking, mobile teams and rapid mission coordination across global forces.



## Solution:

Using the Vantiq platform, a European defense contractor created a mission system that supports thousands of daily operations, enables AI-driven tasking and integrates legacy and next-gen systems into one real-time loop.

## Why Vantiq?

Only Vantiq delivers real-time orchestration that integrates legacy platforms, adapts rapidly and scales from enterprise command to edge AI.

Supports AI-driven tasking and weaponering at global scale

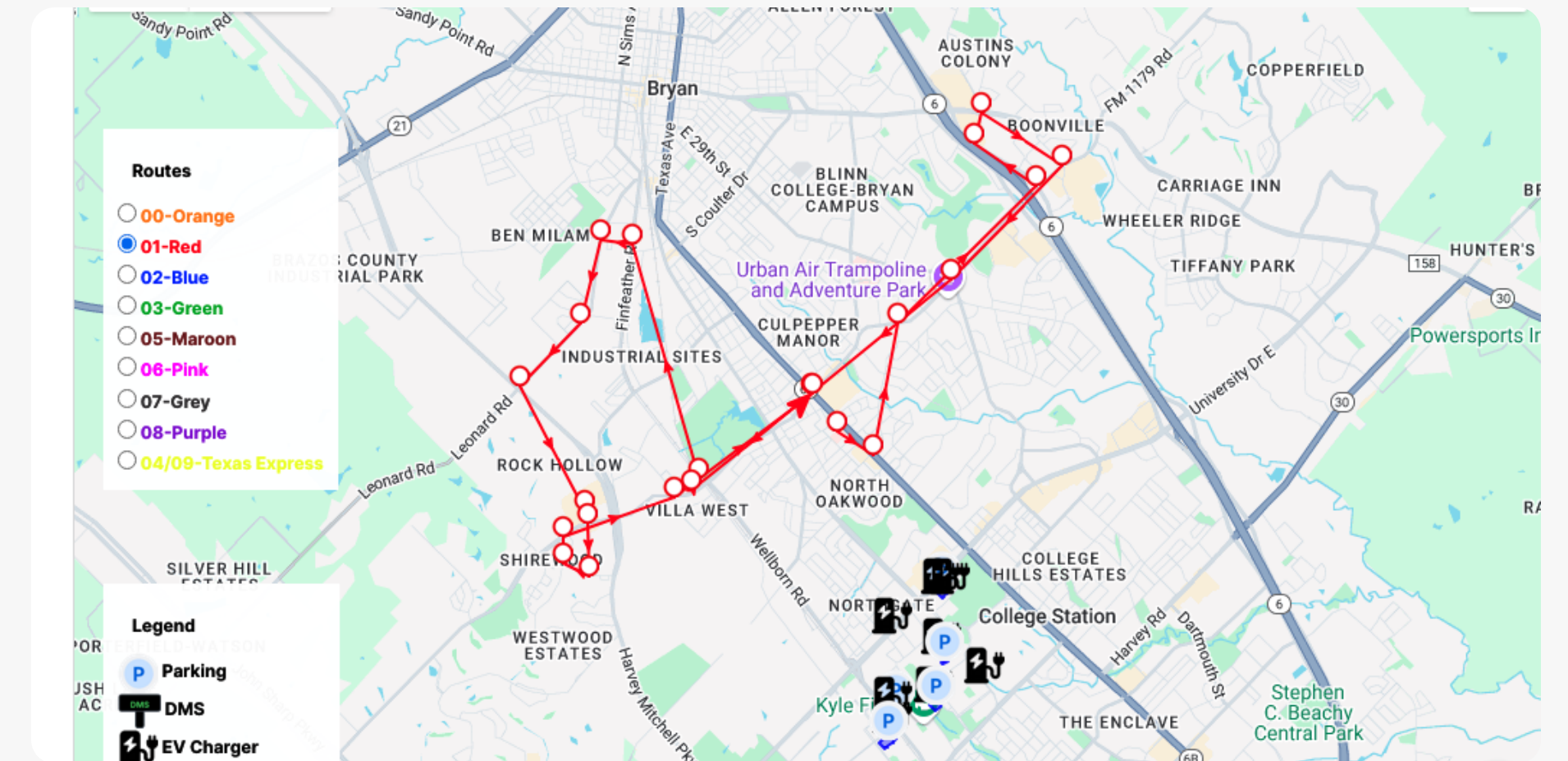
Operates across CAOCs and briefcase-sized mobile units

Integrates legacy and next-gen systems in one real-time loop



# Smart real-time traffic command center

City leaders needed a single platform to manage traffic during emergencies and large-scale events—but data was scattered across intersections, maps, city systems and third-party sources.



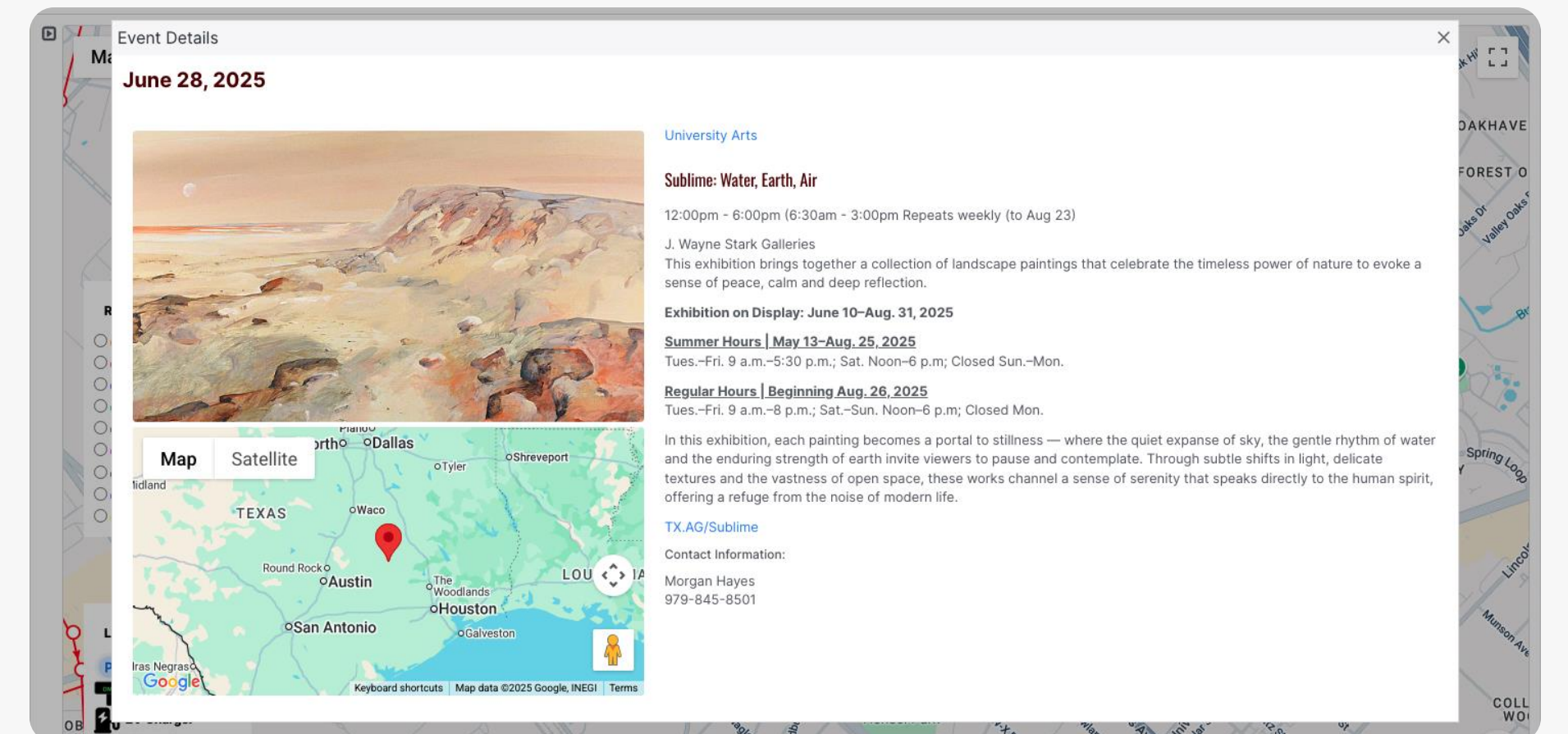
Command Center showing Busy routes

## Solution:

Using the Vantiq platform, a U.S. city integrated more than 20 data sources—intersections, GIS, sensors, maps and APIs—into a live command center. The dashboard shows busy routes and real-time markers for parking garage occupancy, EV chargers, calendar event locations, and Dynamic Message Sign (DMS) activity, helping staff coordinate faster, smarter responses.

## Why Vantiq?

Only Vantiq offers the flexibility to unify diverse data sources into a live, event-driven dashboard with real-time responsiveness.



Command Center displaying TAMU calendar even details

# AI driven manufacturing worksite safety system

Monitoring worker health across large, high-risk environments like loading zones or hot facilities is difficult and reactive. Safety teams can't catch issues fast enough.



## Solution:

Using the Vantiq platform, a manufacturing company built a system that collects real-time data from wearables and sensors, detects heat risks and triggers automated responses like rest breaks or crew rotations.

## Why Vantiq?

Vantiq fuses real-time data, AI and existing systems to detect risks instantly and trigger the right response automatically.

Automates [heat-related risk detection](#) using vitals, temperature and location data

Issues real-time alerts and [instructions to workers and supervisors](#)

[Scales across facilities](#) with live dashboards, predictive AI and unified command views



# Intelligent retail pricing system

In-store pricing is often fixed and disconnected from real-world conditions. Retailers miss opportunities to respond to local demand, weather, or competitor behavior in real time.



## Solution:

Using the Vantiq platform, a retailer developed a dynamic pricing system that connects sales data, foot traffic, weather and competitor pricing to update store displays instantly.

## Why Vantiq?

Vantiq connects live inputs and AI logic to automate pricing decisions instantly without disrupting existing POS systems.

Adjusts prices in real-time based on weather, sales trends and competitor behavior

Unifies external and internal data to optimize margin and inventory

Powers smarter campaigns like flash discounts or timed offers at specific stores



# Smart welding QA system for large HVAC system

Welding defects in large HVAC systems are hard to detect until it's too late. Manual inspections are time-consuming, and quality depends on individual skill levels.



## Solution:

Using the Vantiq platform, a manufacturer created a system that connects sensors and AI vision to analyze welds in real time, flag defects and guide corrective actions before products ship.

## Why Vantiq?

Vantiq brings live data and AI together to automate inspection, prevent rework and boost quality at the edge.

Monitors weld current, voltage and position **in real-time**

Uses **AI to detect defects** and trigger non-destructive testing

Builds a knowledge base of **success and failure cases to improve processes**



# Armored truck security and operations optimization

Armored truck operations are exposed to theft, delays, and safety risks. Crews juggle separate tools for routing, monitoring, and security, leaving gaps in visibility and slowing response times.



## Solution:

Vantiq connects IoT sensors, vehicle data, cameras, and edge AI into one real-time system. Identity is verified, driver behavior is monitored, routes are adjusted instantly, and all events are logged even if the network drops.

## Why Vantiq?

Only Vantiq delivers continuous, event-driven intelligence at the edge and cloud, syncing systems automatically and adapting fast without code-heavy changes.

Verifies crew identity and **detects unsafe behavior**

Adjusts routes in **real time** to cut delays

**Records events locally** during comms loss



# Grinding and multi-circuit optimization in mining operations

Mining operations lose millions from inefficient grinding, crushing, and flotation. Delayed adjustments waste energy, lower throughput, and reduce output quality.



## Solution:

A North American gold mining operation (US\$250M rev/year) is using the Vantiq Platform to apply real-time AI across grinding and related circuits. The system adjusts mill settings on the fly, increases throughput, stabilizes quality, and reduces energy

## Why Vantiq?

Only Vantiq delivers continuous real-time AI across circuits, instantly syncing processes and adapting to changing conditions

AI adjusts grinding and flotation in real time for higher yield

Predicts equipment failures to reduce downtime

Optimizes energy use to cut costs and emissions



# Real-time last-mile delivery optimization for logistics companies

Delivery companies struggle with delays, high fuel costs, and poor visibility into driver performance. Customers are left frustrated with missed or inaccurate ETAs.



## Solution:

The Vantiq Platform powers a real-time AI system that integrates GPS, IoT sensors, and driver data to dynamically reroute vehicles, monitor behavior, and send instant customer updates—cutting costs and improving reliability.

## Why Vantiq?

Only Vantiq delivers real-time AI that adapts instantly to traffic, weather, and fleet conditions, syncing data across systems without complex integrations.

Optimizes routes **in real time to reduce delays**

**Monitors driver behavior** to improve safety and fuel efficiency

**Sends live updates to customers** for higher satisfaction



# Supply chain visibility and anomaly detection for global enterprises

Supply chains suffer from blind spots, delayed alerts, and costly disruptions. Inventory goes untracked, shipments are delayed, and operators react too slowly to risks.



## Solution:

The Vantiq Platform delivers real-time AI for end-to-end supply chain visibility. It integrates RFID, IoT, and transport data to track shipments, detect anomalies, and trigger corrective actions—ensuring resilience and transparency.

## Why Vantiq?

Only the Vantiq Platform applies continuous real-time AI across the supply chain, instantly surfacing issues and automating responses without complex integrations.

Tracks inventory and [shipments in real time](#)

[Detects anomalies](#) to prevent delays and stockouts

[Automates corrective actions](#) to reduce costs



# Real-time quality control in manufacturing

Manufacturers risk waste, rework, and customer dissatisfaction when quality issues are detected too late. Traditional inspections cannot keep pace with modern production lines.



## Solution:

The Vantiq Platform powers a real-time AI system for a major ecom business that detects defects, adjusts machine settings, and monitors material transport—ensuring consistent quality and efficient operations.

## Why Vantiq?

Only the Vantiq Platform applies continuous real-time AI across production lines, instantly detecting issues and driving automated corrections without complex integrations.

Detects defects instantly to **reduce waste**

**Optimizes processes** for consistent quality

**Monitors material transport** to prevent delays



# Real-time vehicle-aware weather alerting system

Drivers often receive generic weather alerts that aren't aligned with their exact location or direction of travel, leaving them unprepared for hyperlocal hazards.

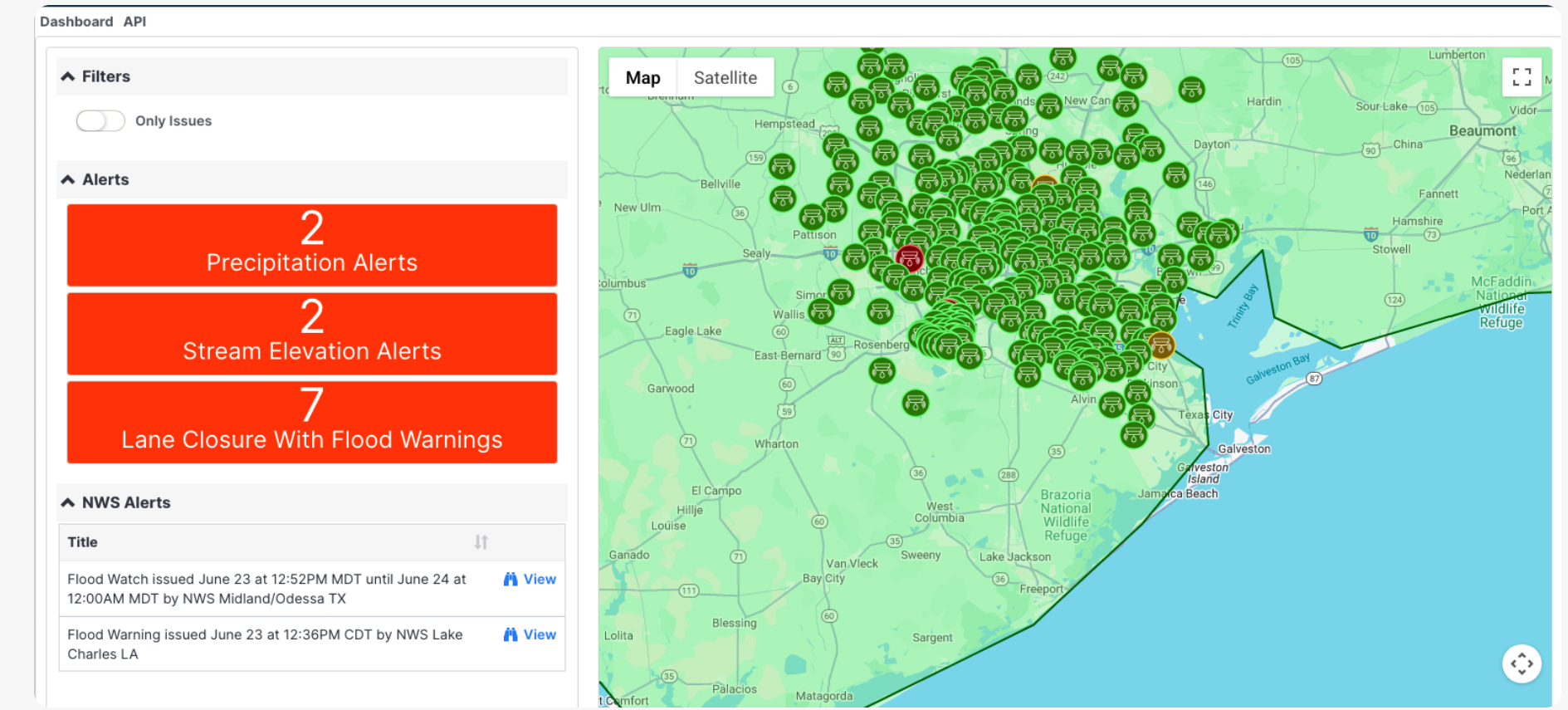


## Solution:

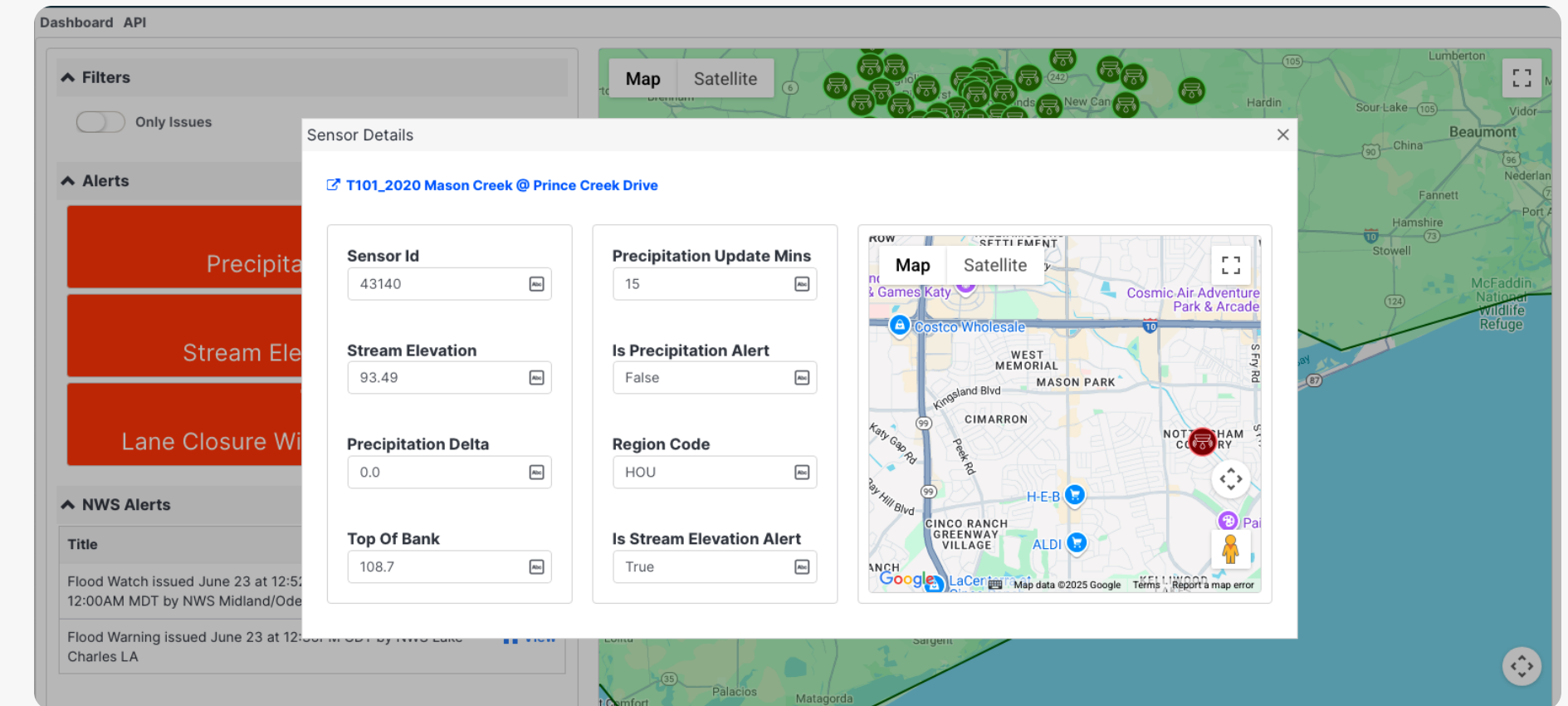
Using the Vantiq platform, a transportation technology provider built a real-time weather monitoring application that delivers precise, location-aware forecasts and alerts. As vehicles request updates through Vantiq's API, the system ingests data from live weather feeds and field sensors to generate personalized forecasts based on the driver's exact position and heading.

## Why Vantiq?

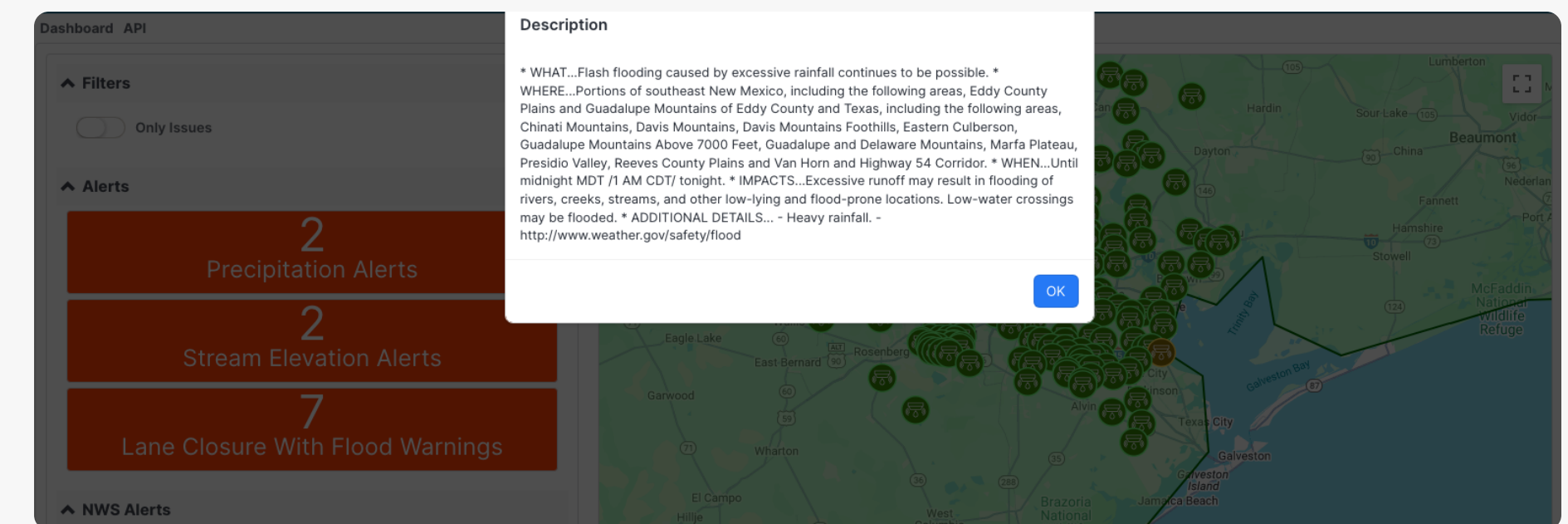
Vantiq's real-time ingestion and processing capabilities make it uniquely suited to power dynamic, in-motion alerting systems that evolve as drivers move.



Weather alerts dashboard



Individual sensor details



Real-time notifications on weather changes

# Real-time AI lane closure detection system in the world

Drivers and traffic systems often learn about lane closures too late—causing congestion, confusion and delayed emergency response. Real-time awareness is critical but difficult to coordinate across planned and unplanned events.

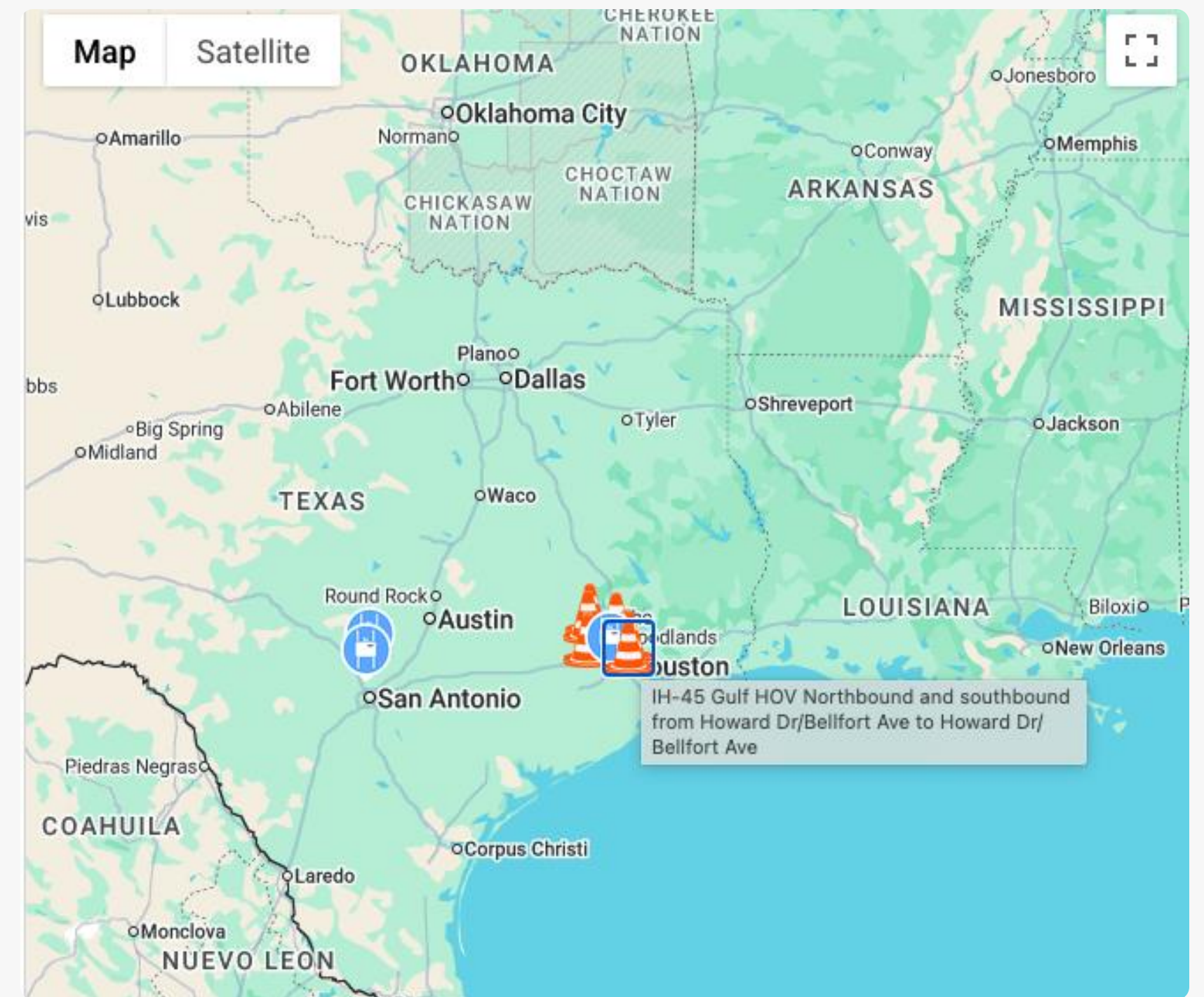


## Solution:

Using the Vantiq platform, a transportation authority built a real-time system that analyzes live construction, collision and emergency data to detect closures instantly. The platform transmits alerts to roadside units, identifies queues caused by closures and provides drivers with accurate, up-to-the-second updates on where delays start and when they will clear.

## Why Vantiq?

Only Vantiq can fuse diverse closure signals with live traffic data to automate alerts and deliver accurate, up-to-the-second road intelligence.



Planned Construction site map

Planned Construction and Special Events	
Location	Direction
IH-69 Eastex Northbound Entrance Ramp from Mc Gowen	Northbound
IH-10 East Westbound Connector Ramp To IH-610 East Loop South Bound	Westbound
IH-10 East Westbound Connector Ramp To IH-45 North	Westbound
IH-10 East Westbound Mainlanes and Frontage Road at Kress St	Westbound
IH-45 North Northbound Frontage Road at Rankin Rd	Northbound
FM-2920 Eastbound at Roberts Cemetery Rd	Eastbound
IH-45 Gulf HOV Northbound and southbound from Howard Dr/Bellfort Ave to Howard Dr/Bellfort Ave	Northbound and southbound
SH-99 Lanier/Grand Pkwy Eastbound and westbound Frontage Road at Highland Knolls/Bay Hill	Eastbound and westbound
SH-99 Lanier/Grand Pkwy - West Northbound Connector Ramp To US 290 Northwest	Northbound
SH-99 Lanier/Grand Pkwy Eastbound and westbound Frontage Road at Highland Knolls/Bay Hill	Eastbound and westbound

Planned Construction dashboard

# Intelligent speed advisory system for dangerous curves

Fixed speed limits don't account for weather, vehicle type or real-time conditions—putting drivers at risk on dangerous curves and making safety recommendations unreliable.



## Solution:

Using the Vantiq platform, a transportation agency developed a real-time system that calculates safe speeds by combining live weather data, vehicle type and road conditions. The system automatically recalculates when conditions change and sends updated advisories to roadside units, so connected vehicles receive accurate speed guidance as they approach the curve.

## Why Vantiq?

Vantiq's real-time architecture processes high-frequency sensor and API inputs to generate actionable speed guidance for every vehicle, every time.



Curve Speed Warning for Hwy 6 to US-290

Planned Construction/Lane Closures CurveSpeed RSU

### Curve Speed Warning

Safe Speed and NWS Alerts

Site	VehicleType	WeatherCondition	SafeSpeed (mph)	Distance to Geofence Beginning (ft)	NWS Alerts
Hwy 6 to US-290	Car	Not Icy	60	393	
Hwy 6 to US-290	Car	Icy	52	477	
Hwy 6 to US-290	Truck	Not Icy	38	592	
Hwy 6 to US-290	Truck	Icy	23	681	

RSM Message

Weather conditions

# Smart wrong-way driver detection system for traffic authorities

Wrong-way drivers entering freeways through off-ramps pose a major safety risk. Detecting these events quickly—and knowing whether the driver self-corrected—is critical for saving lives.

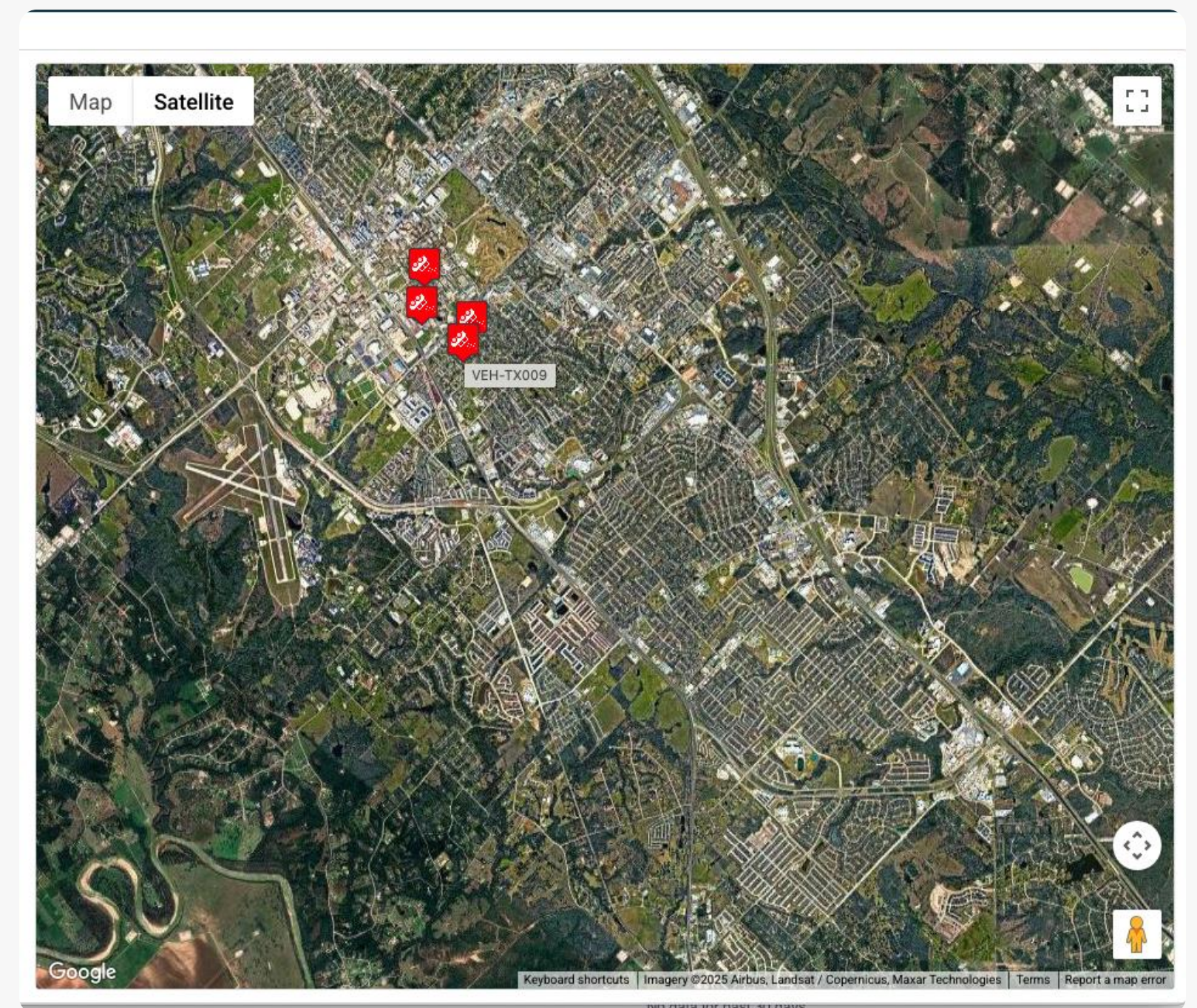


## Solution:

Using the Vantiq platform, a traffic authority created a real-time system that fuses radar, camera and sensor data to identify wrong-way entries the moment they occur. The system alerts local teams who can verify incidents, dispatch emergency services and cancel alerts automatically if the driver corrects course, improving both speed and accuracy of response.

## Why Vantiq?

Vantiq’s real-time event engine supports multi-sensor detection, rapid alerting and smart filtering to reduce false alarms and accelerate response.



Wrong way driving vehicle detection dashboard

Dashboard Sensors WWVehicleDetectionLog API

### Vehicles driving in wrong direction

Timestamp	DeviceType	DeviceId	VehicleId	Speed	Heading	Snapshot
2025-06-23 12:26:12	Sensor	RAMP-SENSOR-02	VEH-HOU-002	40	0	<a href="#">View</a>
2025-06-23 12:26:16	Radar	RAD-09	VEH-TX009	-14	270	<a href="#">View</a>
2025-06-23 12:26:12	Sensor	RAMP-SENSOR-05	VEH-HOU-005	35	0	<a href="#">View</a>
2025-06-23 12:26:16	Radar	RAD-02	VEH-TX002	-10	270	<a href="#">View</a>
2025-06-23 12:26:16	Radar	RAD-04	VEH-TX004	-12	0	<a href="#">View</a>
2025-06-23 12:26:16	Radar	RAD-06	VEH-TX006	-15	270	<a href="#">View</a>

Individual Sensor detection