

Turn Existing CCTV Into Real-Time Restaurant Intelligence

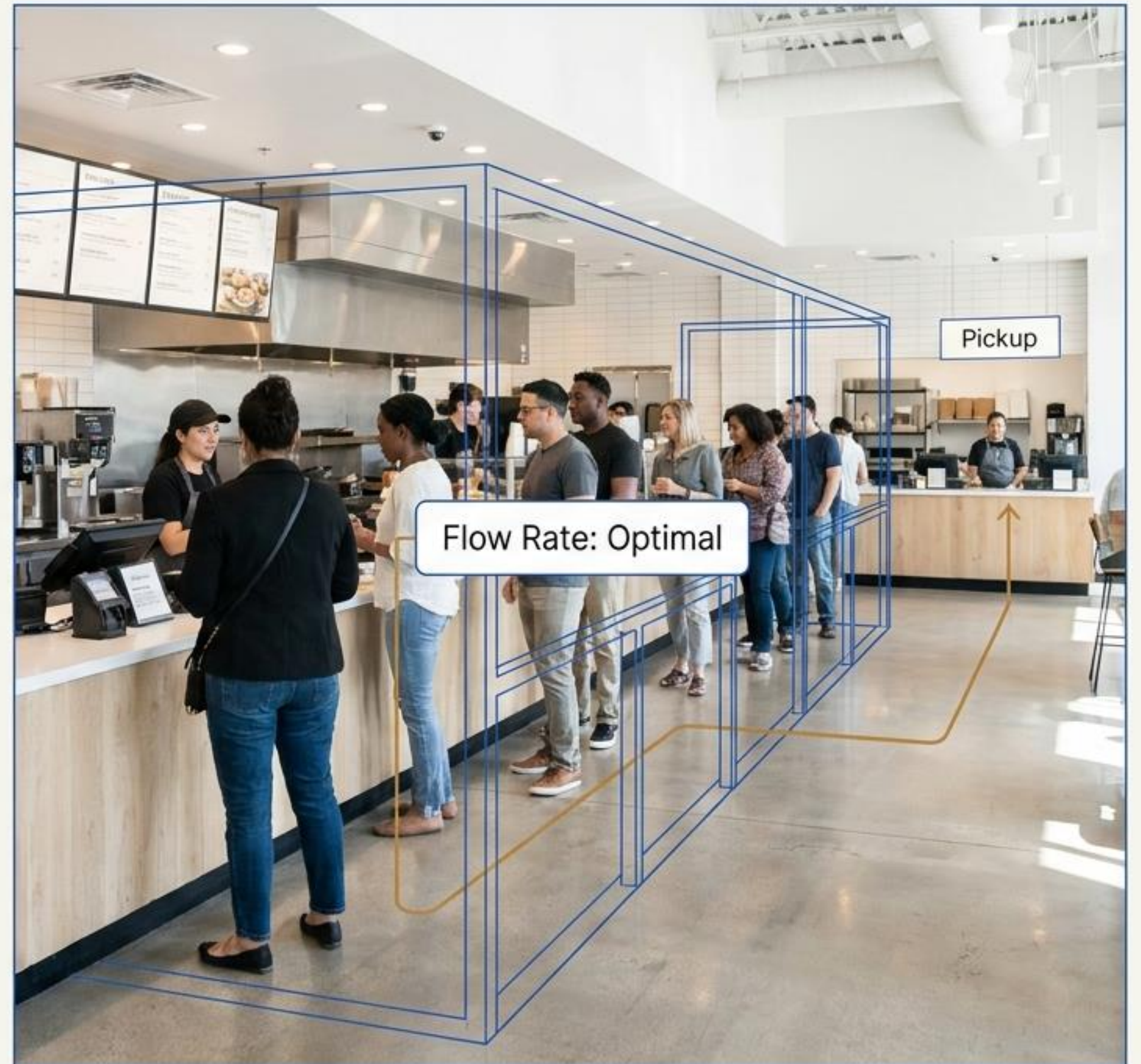
Upgrade existing camera infrastructure into a proactive operational layer.

Capabilities Snapshot

Real-time analytics for queue length, table occupancy, kitchen safety, hygiene SOPs, ANPR, and restricted zones.

Target Scope

Purpose-built for quick-service restaurants, cafes, cloud kitchens, and dine-in groups.



The Operations Blind Spot

Food-service runs on speed, hygiene, and discipline, but managers cannot continuously watch every camera across entries, counters, kitchens, and back-of-house.

Legacy CCTV (The Blind Spot)



Reactive: Manual video review only after disputes, theft, or safety incidents.

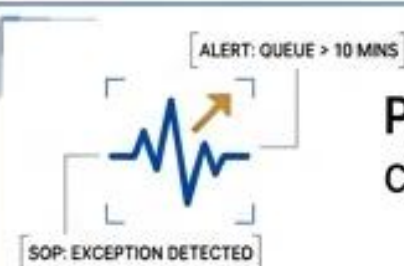


Siloed: Footage trapped in local NVRs.



Slow: Unnoticed peak-hour queues and delivery pickup delays directly bleed revenue.

Camsense AI (The Intelligence Layer)



Proactive: Real-time alerts for queue congestion and SOP exceptions.



Aggregated: Dashboard metrics and searchable event logs across all outlets.



Fast: Immediate visibility into cash counter, kitchen, and storage area exceptions.

From Passive Cameras to Active Operations



1. Connect (Existing Infrastructure)

Connect compatible CCTV, IP, NVR, or RTSP feeds. No need to replace the full camera system.

2. Process (Camsense Edge AI)

Feed video into the Edge AI server. Configure custom zones (kitchen, storage, counters) and set up no-code AI rules.

3. Act (Command Workflows)

Detect visible exceptions in real time. Trigger dashboard alerts, capture evidence clips, and escalate reports.

The 24-Camera Intelligent Blueprint



Entrance & Waiting (3 Cameras):
Footfall, crowd, VIP/watchlist workflows.

Ordering & Billing (4 Cameras):
Queue, wait-time, service visibility, disputes.

Pickup & Delivery (3 Cameras):
Congestion, rider movement, handover evidence.

Dining Area (4 Cameras):
Occupancy, crowd density,
customer-flow trends.

Kitchen & Prep (5 Cameras):
PPE/hygiene support, safety, SOP
visibility.

BOH & Exterior (5 Cameras):
Restricted access, ANPR-ready logs,
vendor movement.

Adaptable blueprint: Cloud kitchens shift focus to prep/packing; cafes shift to dining/counters.



Accelerate Front-of-House Service

Speed Intelligence

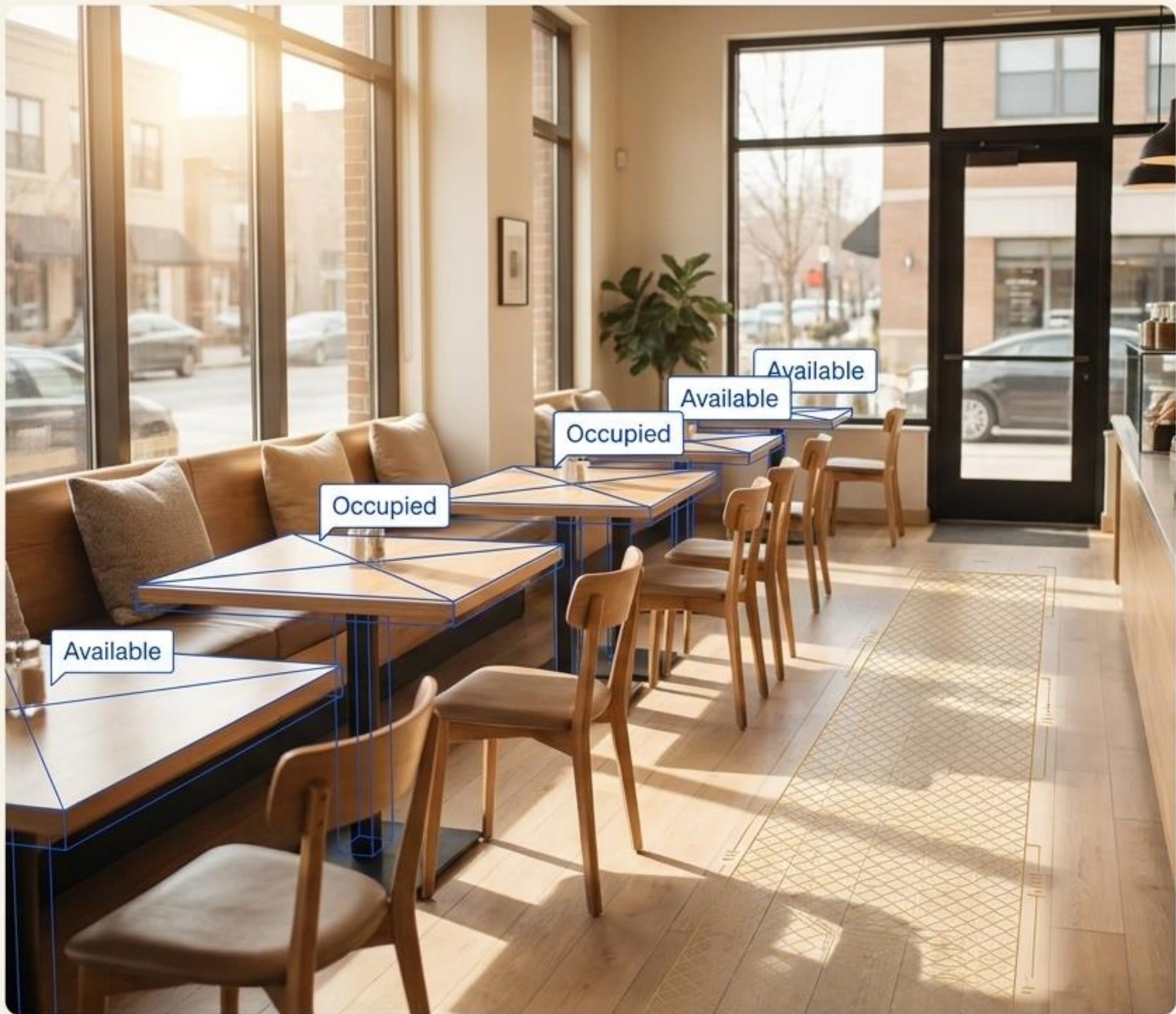
Trigger queue alerts at ordering counters, POS, kiosks, and pickup windows.

Congestion Visibility

Monitor pickup/delivery rider crowd alerts near handover counters to inform rapid staffing decisions.

Trend Reporting

Generate peak-hour and day-part reports for breakfast, lunch, evening, and weekend operations to optimize staffing plans.



Optimize Dining and Customer Flow

Module 1

Seating Analytics: Track table occupancy trends for dine-in formats to maximize seating turnover.

Module 2

Crowd Density Alerts: Monitor congestion in waiting areas, outdoor seating, and promotional zones.

Module 3

Layout Optimization: Analyze dwell-time and customer-flow trends to improve store layouts, signage placement, and cleaning schedules.

Module 4

Management Review: Deliver daily and weekly aggregated customer-experience reports.

Enforce Kitchen Hygiene and Safety SOPs



PPE & Hygiene

Scope visible items such as caps, masks, gloves, aprons, or uniforms based on camera view.

Operational Discipline

Alert on kitchen line crowding, unsafe movement, blocked walkways, and restricted-area breaches.

Safety Support

Provide fire and smoke visual alerts as a complementary layer to statutory alarm systems.

Coaching & Evidence

Automatically capture video evidence clips for hygiene review, training, and SOP coaching.

Secure the Back-of-House and Perimeter



Loss Prevention & Security

- Restricted access alerts for cash counters, cold storage, dry stores, and manager offices.
- Object removal and unattended-object alerts.
- Loitering alerts and after-hours intrusion modes for cloud kitchens.



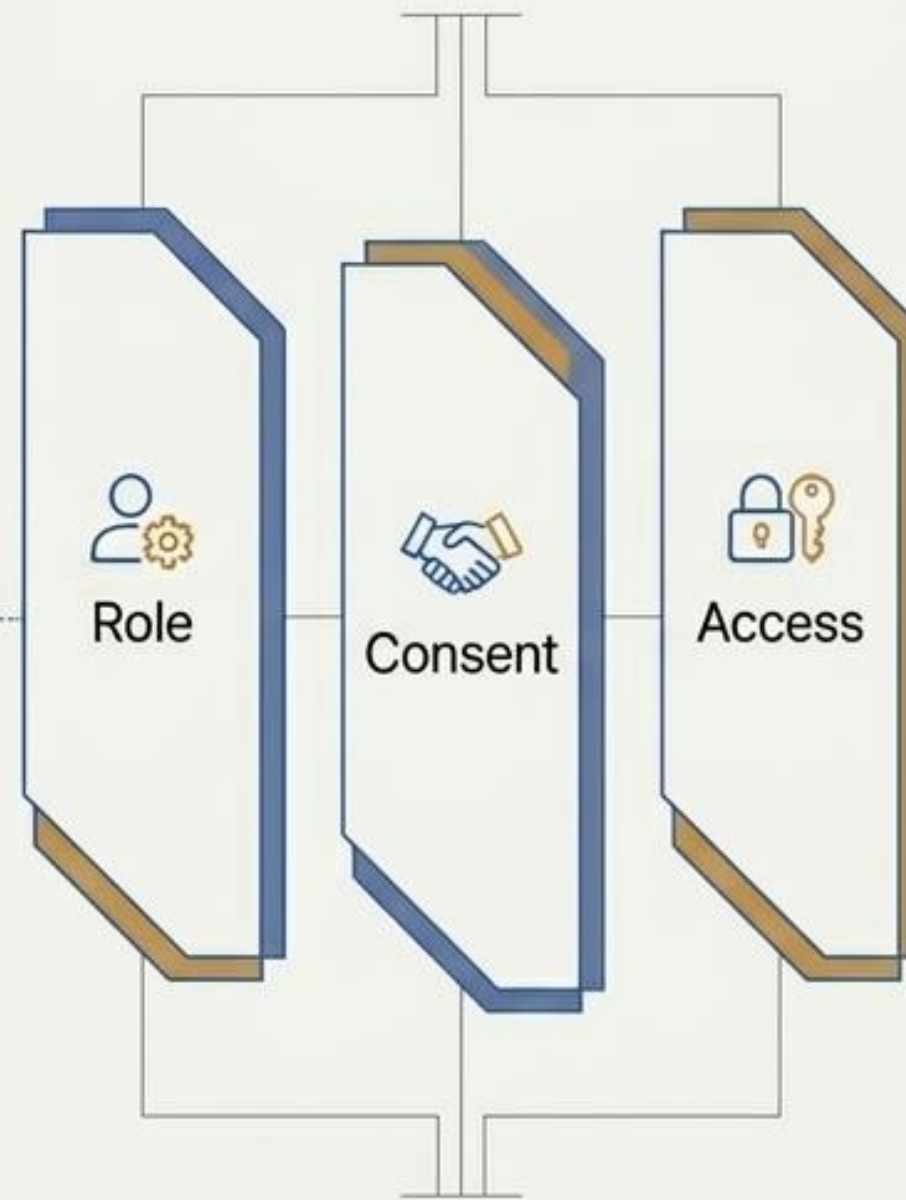
Vehicles & Logistics

- ANPR (Automatic Number Plate Recognition) for drive-thru, parking, and delivery logs.
- Categorization of delivery riders, vendors, and staff vehicles.
- Alerts for pickup/drop congestion and unauthorized parking near entrances.

Responsible Identity Intelligence



Authorization Framework



Approved Workflows

- Staff entry/exit logs and shift presence verification.
- Authorized role verification (store manager, shift supervisor, chef, cashier).
- Vendor, delivery partner, and contractor recognition.
- Known offender or banned visitor watchlist alerts.



Strict Governance Check: Requires consent/enrollment governance, transparent notices, Role-Based Access Control (RBAC), secure retention, and legal/HR approval.

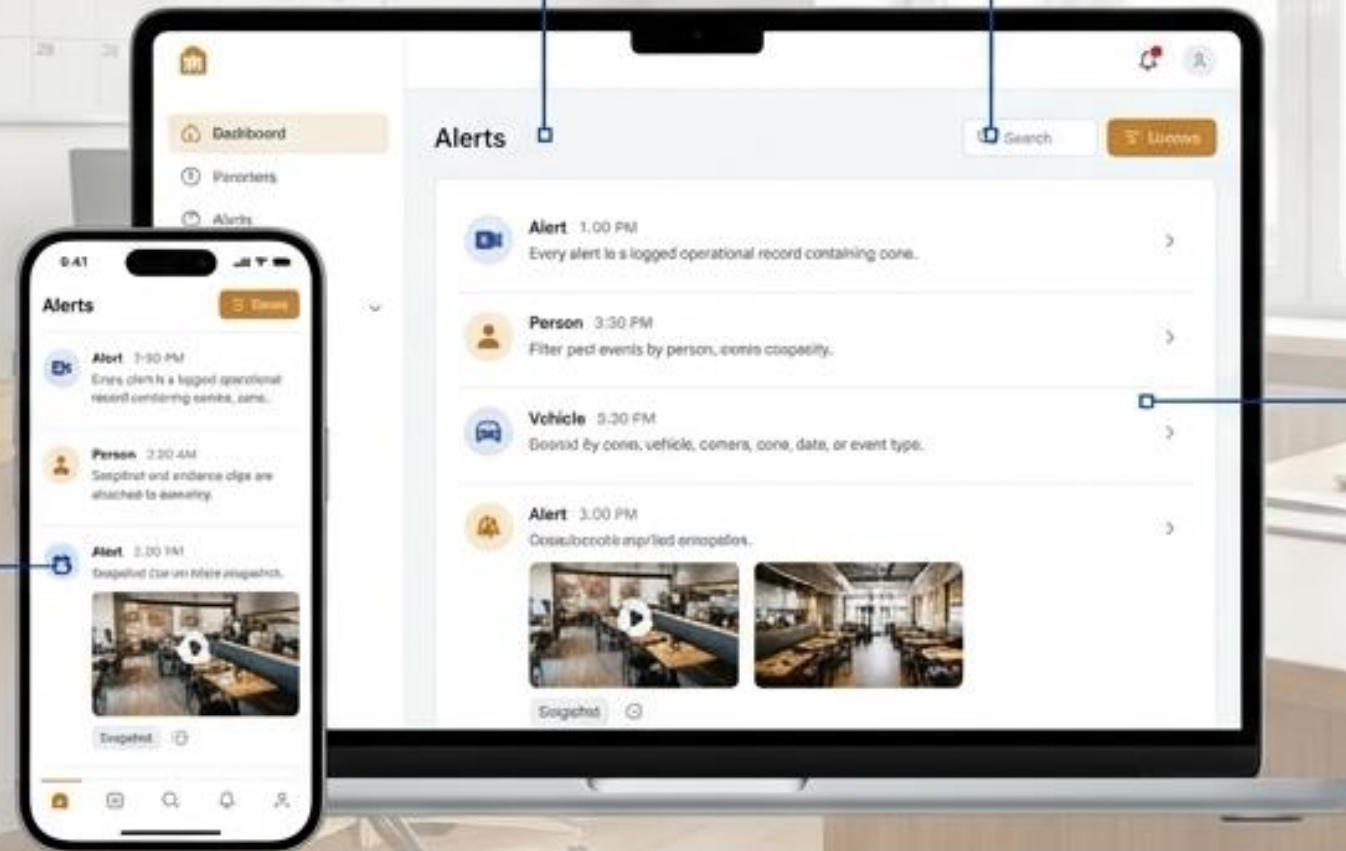
The Operations Command Center

Traceable Records: Every alert is a logged operational record containing camera, zone, event type, timestamp, and severity.

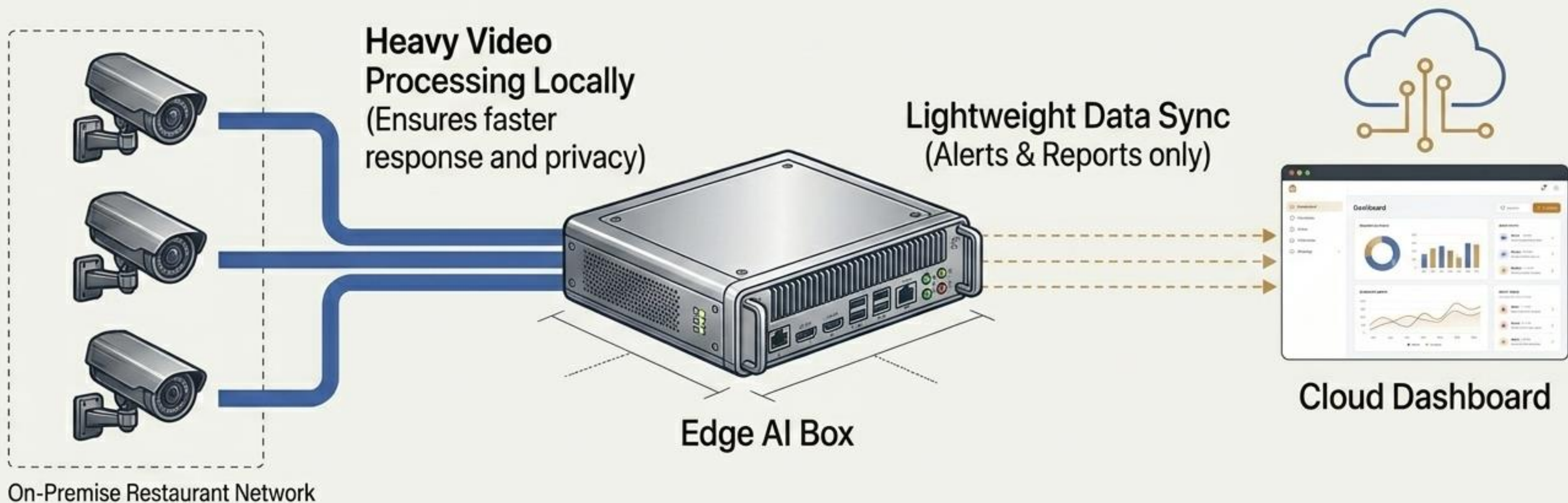
Searchable History: Filter past events by person, vehicle, camera, zone, date, or event type.

Instant Evidence: Snapshot and evidence clips are attached to alerts for fast review by authorized users.

Role-Based Access (RBAC): Tailored daily/weekly reports and permissions for store managers, operations heads, security, and franchise owners.



Edge-First Deployment Architecture



Local Processing:

Edge/on-premise AI boxes process selected heavy video streams locally, ensuring privacy.

Low Bandwidth Dependency:

Internet is primarily needed only for sync, lightweight notifications, and remote support.

Hardware Efficiency:

Existing compatible cameras are reused. Sizing scales based on camera count and resolution.

Privacy and Compliance Framework



Purpose-Built

Use AI exclusively for declared safety, security, customer-flow, and operations purposes.



No-Go Zones

Strict exclusion of private/sensitive spaces, including washrooms, changing rooms, and staff rest areas.



Identity Protection

Preference for aggregated and anonymized queue, footfall, and table-occupancy analytics where personal identity is not required.

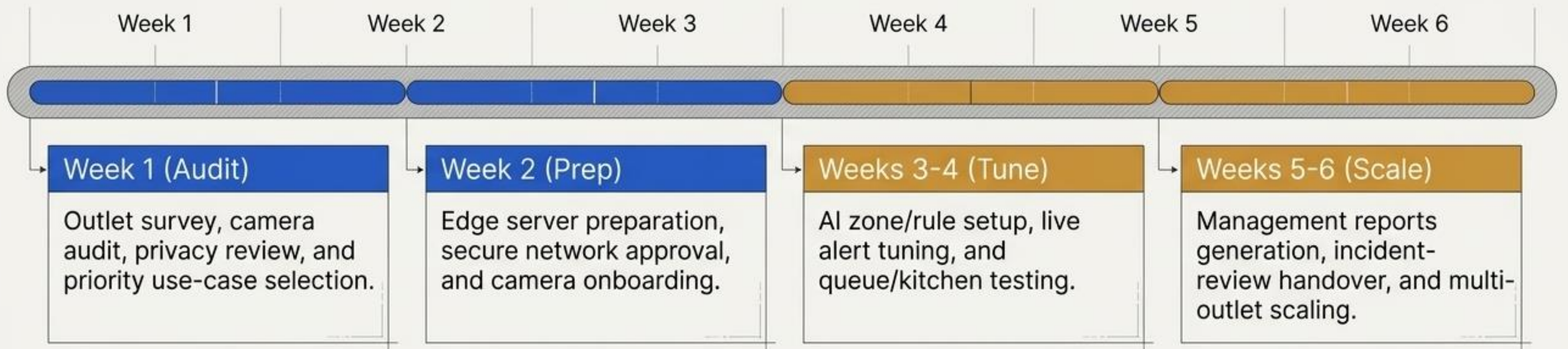


Data Security

Enforced via Role-Based Access Control (RBAC), immutable audit logs, secure connectivity, and strict retention policies.



The 30-Day Pilot and Commercial Model



Ownership-Friendly Commercials: One-time software license based on scoped cameras + annual AMC (from Year 2). No heavy default SaaS fees. Optional edge hardware provided at actuals.

Measurable Impact Across the Operation



1. Faster Service

Better queue and counter visibility translates directly to protected peak-hour revenue and improved customer experience.



2. Safer Operations

Visible kitchen SOPs, PPE enforcement, and stockroom alerts build robust staff accountability and food-safety discipline.



3. Scalable Governance

Reduced manual CCTV review time and centralized reporting empower multi-city restaurant chains and franchise operators.

Next Steps: Share your outlet layout and camera details. Start with the 8-15 priority cameras (entrance, counter, pickup, kitchen, stockroom) where missed events affect revenue the most.