Blaize AI Platform

Purpose-Built Platform to Enable AI in the Real World

August 2025

Investor Presentation






Disclaimer

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This Presentation contains forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") that are based on beliefs and assumptions and on information currently available to Blaize, including statements regarding the industry in which Blaize operates, market opportunities, and product offerings. In some cases, you can identify forward-looking statements by the following words: "may," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing," "target," "seek" or the negative or plural of these words, or other similar expressions that are predictions or indicate future events or prospects, although not all forward-looking statements contain these words. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this document, including but not limited to: (i) changes in domestic and foreign business, market, financial, political and legal conditions; (ii) the ability to maintain compliance with stock exchange listing standards ; (iii) failure to realize the anticipated benefits of the business combination of Blaize and Burtech Acquisition Corp., which may be affected by, among other things, competition, the ability of the combined company to grow and manage growth profitably, maintain relationships with customers and suppliers and retain its management and key employees; (iv) the ability of the Company to successfully market its products and services ; (v) the ability of the Company to successfully deploy its technologies across customer settings; (vi) changes in applicable law or regulations; (vii) the outcome of any legal proceedings that have been or may be instituted against Blaize; (viii) the effects of competition on Blaize's future business; (ix) the ability of the combined company to issue equity or equity-linked securities or obtain debt financing; and (x) those factors discussed under the heading "Risk Factors" in our Annual Report on Form 10K filed with the Securities and Exchange Commission (SEC) on April 14 2025 and other documents filed by Blaize from time to time with the SEC. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue relianceon forward-looking statements, and Blaize assumes no obligation to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law, including the securities laws of the United States and the rules and regulations of the SEC. Blaize does not give any assurance that it will achieve its expectations.

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H1 2025 Highlights

Blaize is at an inflection point in the business, with meaningful contracts in hand and ready to accelerate revenue

Blaize Powers the AI Infrastructure for the Physical World

Blaize is at the forefront of the edge AI shift – delivering intelligent, energy-efficient AI platforms that accelerate real-world actions at the edge, in the cloud, and beyond

Significant Contracts in Hand

***$176 million** of new signed contracts with global partners will drive meaningful revenue ramp over next 12-24 months*

Blaize Hybrid AI and Inference are Positioned to Disrupt $112B TAM

Fundamental shift from GPU-only to hybrid AI architecture for higher performance, lower TCO, more deployable solutions

Positioned for Accelerating Growth

*Execution phase of significant contracts with robust **$725+ million** pipeline of potential opportunities*

Attractive Financial Model with Scale

Increasing gross margins from the mid term with favorable operating leverage at scale

$56M PO for South Asia Smart Infrastructure

$56M Secured: Blaize Powers a National Smart Infrastructure in South Asia at Scale

250K+ AI-Powered Cameras
Real World AI In Action

AI Systems Delivered | Deployment Began Q2 2025 Across 250K+ Smart Surveillance Systems

Achievements*

- $56M purchase order secured for large-scale edge AI deployment
- $6 million in initial revenue to be recognized across Q2 and Q3 of fiscal 2025.
- 250K+ AI-powered surveillance systems to be deployed in South Asia
- Validates Blaize's scale, credibility, and differentiated hybrid AI architecture
- Highlights demand for sovereign-ready, real-time AI across public infrastructure

Use Cases Activated

Traffic Management & Incident Detection

License Plate Recognition (LPR)

Speed & Behavioral Analytics

Multimodal Sensor Fusion (VIS/IR/OGI/LiDAR)

Deployment Timeline → Q2 2025 → Through 2026

Ongoing Multi-Phase Rollout Starting in Q2'2025

* Source: Blaize press release dateed 2025-06-30

Blaize + Starshine: $120M Hybrid AI Platform

Hybrid AI Platform
Strategic Entry Across Asia

$120M Contract | Hybrid AI Deployed | AI Expansion Across Asia's Tier 1 Industries

Hybrid AI Project Rollout*

- $120M multi-phase contract for Hybrid AI platform infrastructure
- Hybrid AI compute cluster (Blaize GSP + GPUs) → TCO Advantage
- Strategic alliance: Blaize delivers inference innovation, Starshine unlocks APAC scale with platform and reach.
- Deploying hybrid AI servers to cut data center costs—scaling into smart cities, finance, agriculture, industrial automation, and critical industry across APAC.

Hybrid AI rollout focused on TCO efficiency

- Hybrid AI with Blaize accelerators lower data center Capex and Opex costs—now running smart city video surveillance and retail security analytics.

AI expansion into Asia's high-growth verticals

- Scaling into high-growth sectors, agriculture, finance, energy, and industrial automation — unlocking multi-country AI revenue across Asia.

Enabling Asia Real World AI Expansion

India – Smart Irrigation
India's smart irrigation market is projected to grow to $506.6M by 2033 - 14.9% CAGR[1].

Thailand – Smart Agriculture
Thailand's AgriTech sector is projected to grow to $113.96M by 2029[2]

Japan – Industrial Automation
$30B in 2024, growing to $45B by 2033[3], driven by AI across manufacturing

South Korea – Smart Manufacturing
Predictive maintenance market expected to jump from $300M in 2023 to $2.2B by 2030[4]

China – Smart City
Projected to hit $ 550B by 2030[5]

* Source: Blaize press release dateed 2025-07-17

1 – India – Smart Irrigation
2 – Thailand – Smart Agriculture
3 – Japan – Industrial Automation
4 – South Korea – Smart Manufacturing
5 – China – Smart City

Blaize Enables Scalable, Efficient AI Infrastructure

Global Presence and Commercial Projects with Strategic Partnerships

Company Snapshot

HQ: El Dorado Hills, California

Team: 200+ across U.S., UAE, UK, and India

Product: Custom silicon (GSP), edge-native SDKs, AI platform

Customer Deployments: North and South America, GCC, Asia

What We Do

- Build a **hybrid AI platform** engineered to support edge-to-cloud intelligence at scale
- Serve **high-impact sectors** like smart city, defense, retail, manufacturing, healthcare, and automotive
- Deliver efficient, scalable AI designed for complex, **multimodal workloads** across industries

Our Mission

Powering intelligent systems to operate smarter—with scalable, efficient AI infrastructure

Our Vision

Enabling AI to drive efficiency, autonomy, and scale across every industry

Our Differentiation

- Multi modal
- Modular and interoperable
- Hybrid ready

Strategic Investors

DENSO · SAMSUNG · BVA BESS VENTURES & ADVISORY · wavemaker PARTNERS · FRANKLIN TEMPLETON INVESTMENTS · Ava Investors · Mercedes-Benz · TEMASEK · Rizvi Traverse

Strategic Customers & Partners

alwaysAI · ACVEDIA · orionVM · KAIST 1971 · kt · SUPERMICRO · TURBO FEDERAL ACCELERATING MISSION SUCCESS · VANTIQ · videonetics · VSaaS.ai · VSBLTY

Blaize Corporate Highlights

Fueled Brand Growth for Hybrid AI Momentum

- NASDAQ-listed since Jan 14, 2025 — fueling next-gen AI infrastructure
- At the forefront of the AI shift with ultra-efficient platforms from edge to cloud
- Targeting $112B TAM with disruptive Hybrid AI and inference
- Secured $176M in Asia contracts to power sovereign AI and smart infrastructure at scale

Recent Media Coverage

Bloomberg: The Exciting Rise of AI and the Pioneering Role of Blaize in Edge Computing

MarketWatch: Blaize Holdings Gets $120M AI Infrastructure Contract

Stock Titan: BZAI Financial Outlook: Edge AI Pioneer Projects $140M Revenue, Partners With Mercedes-Benz

Yahoo Finance: Blaize Poised to Lead the Physical AI Revolution

Blaize Global Commercial Projects and Strategic Partnerships

- **Advanced Maritime AI**: Collaboration with **Abu Dhabi Maritime Academy** to power sovereign, intelligent infrastructure
- **Hybrid AI Rollout:** $120M **hybrid AI** deployment for sovereign AI and smart infrastructure across Asia.
- **South Asia Smart City:** $56M Smart Infrastructure Deployment in South Asia.
- **Korea Smart City:** Selected by **CBIST** to develop Digital Innovation Hub, expanding AI-powered smart city solutions across South Korea.
- **AI Biomedical:** Joint R&D with **KAIST**, Korea's top science institute to advance edge AI for biomedical, neuromorphic, and sustainable energy applications.
- **AI Defense Program:** $249M national security AI deployment with **Turbo Federal**, targeting the U.S. Department of Defense's Chief Digital and Artificial Intelligence Office **(CDAO).**
- **AI Security:** Scalable video analytics deployment opportunity on existing VMS infrastructure.
- **Global Broadcast Partnership:** Edge AI platform for real-time video and compute in **global telecom and broadcast networks** with **Broadsat**
- **Digital Twin Lab:** Large-scale AI-enabled safety and security deployment with **VSIBILTY**
- **Smart Mining:** Underground mining safety and productivity with **Becker Mining Systems** and **alwaysAI.**

All projects are announced and featured across media.

Blaize Breaks Barriers to Enable AI in the Real World at Scale

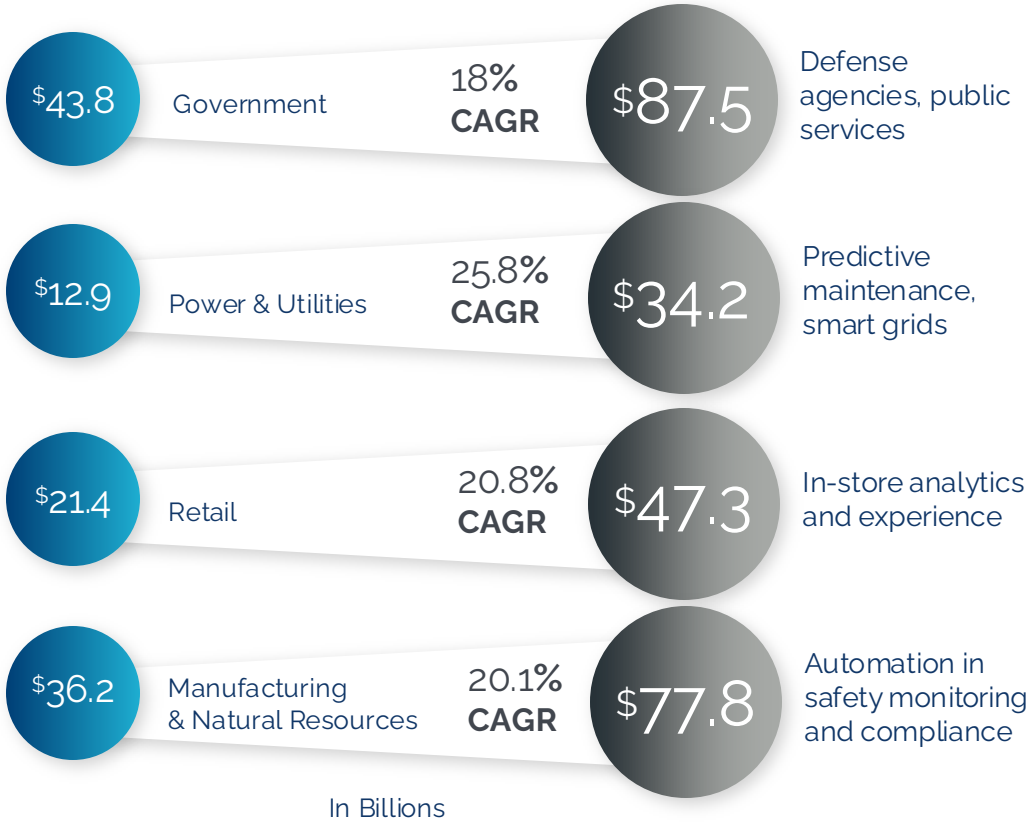
Traction in Large and Growing Verticals[1]

$112B+

*2024 Global AI Services Forecast by Industry**

$245B+

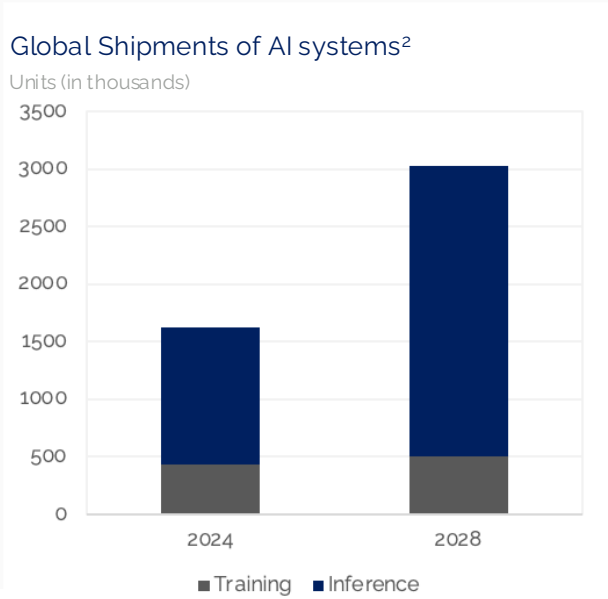
2028 Global AI Services Forecast by Industry



The Global Shift to Hybrid AI

- $112B+ vertical TAM: Defense, smart city, retail, industrial, energy
- $176M Blaize contract secured: Validated global contracts across mission-critical sectors
- Hybrid + multimodal AI: Key enablers of real-world, edge-to-cloud intelligence

Inference Leads AI Deployment: 4–6 inference for every training system | CAGR[2]: 27% vs. 13%



By 2025, growth in AI Inference requirements will fast outpace the growth in AI training requirements.

—Gartner

1. Source : Gartner (Forecast Analysis: Artificial Intelligence Services, Worldwide, 2024 – 2028, By: Colleen Graham)
2. Source : Gartner (Forecast Analysis: AI-Optimized Servers, Worldwide, 2023 -2028, By Adrian O'Connell)

Blaize Executive Team and Board Members

Highly Experienced Leadership Team and Seasoned Board of Directors

Leadership

Dinakar Munagala
CEO
intel.

Harminder Sehmi
CFO
vodafone YAHOO!

Doug Burns
Chief People Officer
FIGURE

Val Cook
Chief Software Architect
intel.

Kim Evans
General Counsel
intel.

Santiago Fernandez-Gomez
VP, Platform Engineering
AMD

Satyaki Koneru
CTO
intel. NVIDIA.

Joseph Sulistyo
SVP, Corporate Marketing
cisco

Tiffany Tan
Chief of Staff
intel.

Alexander Tinsley
SVP, Sales
intel.

Ke Yin
Chief Scientist & VP of Engineering
intel.

Dmitry Zakharchenko
Chief Software Officer
intel. motorola

Board of Directors

Lane Bess
Board Chair
paloalto zscaler

Dinakar Munagala
Board and CEO
intel.

Tony Cannestra
Board
DENSO

George de Urioste
Board
roambee HeartBeam

Ed Frank
Board

Yoshiaki Fujimori
Board
TOSHIBA GE

Juergen Hambrecht
Board
DAIMLER BASF

blaize

Blaize AI Platform | Enabling Actionable Events Across Industries

Purpose-Built Hybrid AI Inference Platform

- Field-validated architecture
- Multi-modal ready
- Ease Change of Management
- No Heavy IT Required

AI BLAIZE

Industry Verticals

Smart City	Smart Defense	Smart Retail	Smart Manufacturing	Smart Industrial
				

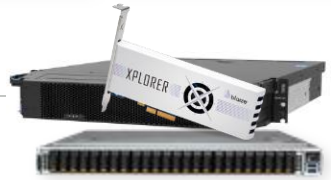
Integrated Partner

alwaysAI · CVEDIA · milestone · THRIVE LOGIC · videonetics · VSaaS.ai · VSBLTY · orionVM · Lenovo · SUPERMICRO

AI Infrastructure

Far Edge | Near Edge | On-Prem | Cloud Edge | Regional AI Cloud | Hyperscaler Cloud

Purpose-Built Systems



Optional Edge to Cloud Hybrid

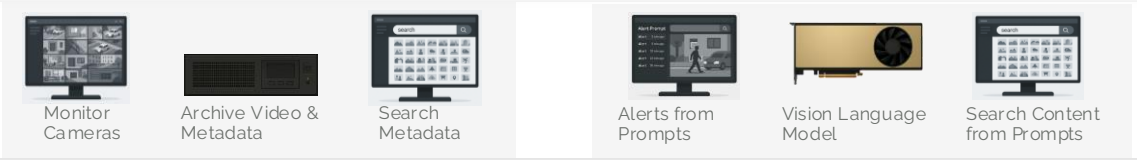
blaize

Blaize AI Platform | Building Blocks

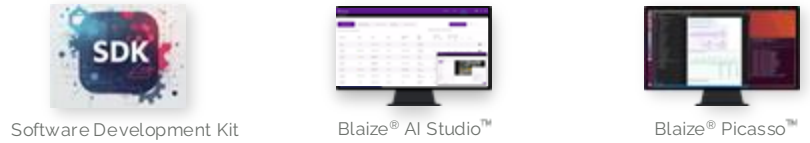
Full stack, Fully integrated Infrastructure

Application Layer
Real world industry Verticals

AI Processing Layer
Live feeds, Archiving, Configuration, VLM, AI at the Edge



Software Layer
Blaize Software Suite



Systems & Platforms
Blaize SFF and rack mount

Accelerators & Modules
Blaize Hardware form factors

Core Layer
Blaize Graph Streaming Processor (GSP)

Core capabilities

- Plug-and-play application onboarding.
- Real-time incident visibility and response.
- Self-managed topology (campus, city, facility).
- Rapid deployment with no-code AI application testing and rollout.

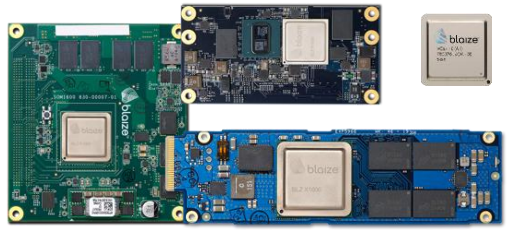
Blaize can scale from a single site to regional or national infrastructure—**smart cities, campuses, facilities, and beyond**.

Blaize AI Hardware and Software Computing Solutions

Full-stack hardware and software platform to enable AI from edge to cloud

Blaize Graph-Native Architecture Processor

Blaize revolutionary Graph Streaming Processor (GSP®) architecture built to be fully programmable and efficient for AI applications



Blaize Accelerators

SOC, embedded and accelerator platforms built for maximum system level performance and efficiency

Blaize Software – SDK, AI Studio & Picasso

Comprehensive software portfolio – easily build, optimize and productize complete AI applications

Blaize Systems

A range of systems from short form deep edge devices to rack mount servers.

A unified AI platform delivering intelligence across Edge, Cloud, and Hybrid environments

Blaize AI Hardware | Processors, Accelerators, and Systems

High-Efficiency, Low-Latency AI Compute for Physical World Intelligence

Blaize® Xplorer® P1600 SOC/Accelerator

Blaize® SOC and Accelerator chip with GSP® inside enabling AI inference

Blaize® Pathfinder® P1600 Embedded SoM

Programmable embedded small form factor SoM ideal for rugged and extreme environments

Blaize® Xplorer ® X600M M.2 Accelerator

Small Form Factor M.2 enabling IPCs and custom products to integrate AI inference

Blaize® Xplorer ® X1600E EDSFF Accelerator

Plug-in EDSFF enabling servers and custom products to integrate AI inference

Blaize® Xplorer ® X1600P/X1600P-Q PCIe Accelerator

Plug-in PCIe enabling IPCs and servers to integrate AI inference

Blaize Systems – Short Form Factor and Rack Mount Servers

Ruggedized System

Compact NUCs

Workstation

Edge System

Edge System

Rack Mount 2U Server

Rack Mount 1U Server

Blaize AI Hardware | Short Form Factor & Rack Mount Systems

High-Efficiency, Low-Latency AI Compute for Physical World Intelligence

Ruggedized System

Power tiny form factor systems at the edge, ideal for environments where space is limited, providing low power AI inferencing at the edge.

Fits:
Blaize® Xplorer® X1600E EDSFF
Blaize® Xplore[r]® X1600P Accelerator

Compact NUCs

Compact and rugged for deployment of multi-modal workloads at the edge, flexible IO make this edge server suitable for multiple applications.

Fits:
Blaize® Xplorer® X600M M.2 Accelerator

Workstation

Enable more capability at the edge in workstation deployments ideal for office and retail environments diving AI inferencing at the edge.

Fits:
Blaize® Xplorer® X1600P Accelerator

Edge System

Unleash the full potential of low power multi-modal hybrid AI Inferencing for edge deployments scalable to fit a verity of use case and workloads.

Fits:
Blaize® Pathfinder® P1600 Embedded SoM

Rack Mount Server

Scale hybrid AI from edge to cloud deployments with 1U & 2U Server options for low power high density compute,

Fits:
Blaize® Xplorer® X1600E EDSFF
Blaize® Xplorer® X1600P/X1600P-Q PCIe Accelerator

Blaize Software | Swiftly Deploys AI for Real-Time Insights

Supporting the entire development workflow from concept to application deployment

Blaize® Software Development Kit

Scalable algorithms on Blaize platforms

Blaize® Picasso™

Optimizes AI models for video analytics

Blaize® AI Studio™

AI Orchestration and Low Code/No Code Development for end-to-end MLOPs

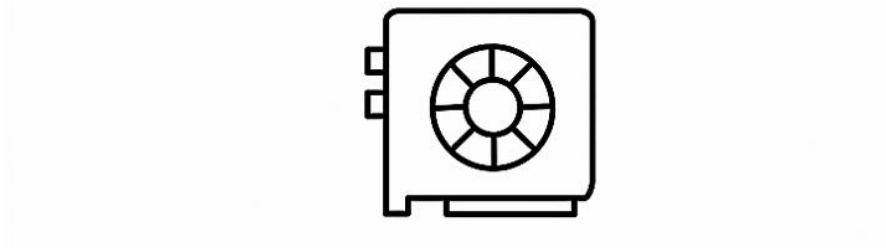
Differentiation

Blaize is Built for Hybrid AI

Actionable intelligence — faster, leaner, and built for the world

Most of the market is stuck on high-power options only, expensive integrations, or cloud-reliant stacks

Monolithic (GPU only) AI System



- High TCO and power drain
- Costly integration
- Time to decision gap
- Oversized for inference
- Limited edge readiness

Hybrid (GPU + Blaize) AI System

- 2-3x better performance
- Edge-to-cloud inference
- Cost, compute, power optimized

Delivers efficient AI with modular design and seamless interoperability, built to scale from edge to cloud to enterprise.

Multi-modal. Modular. Hybrid-ready.

Competitive Edge with Blaize Hybrid Solution

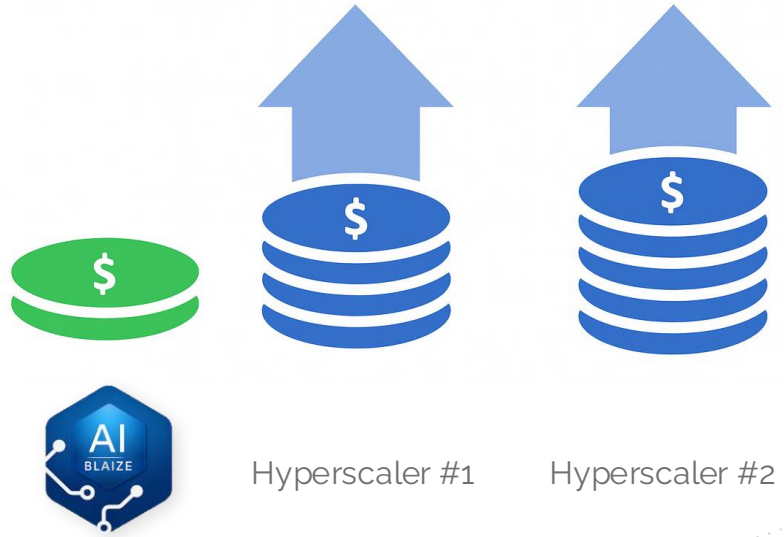
AI at a fraction of the cost of Hyperscaler solutions

AI Scalability
- Cloud to edge enabled AI as a service allows for dynamic infrastructure scaling

Efficient Architecture
- Hyperconverged Infrastructure means greater performance, cost savings, and resilience

Fast Edge AI ROI
- From smart city to construction, the Blaize AI Hybrid Platform enables highly efficient and cost-effective solutions

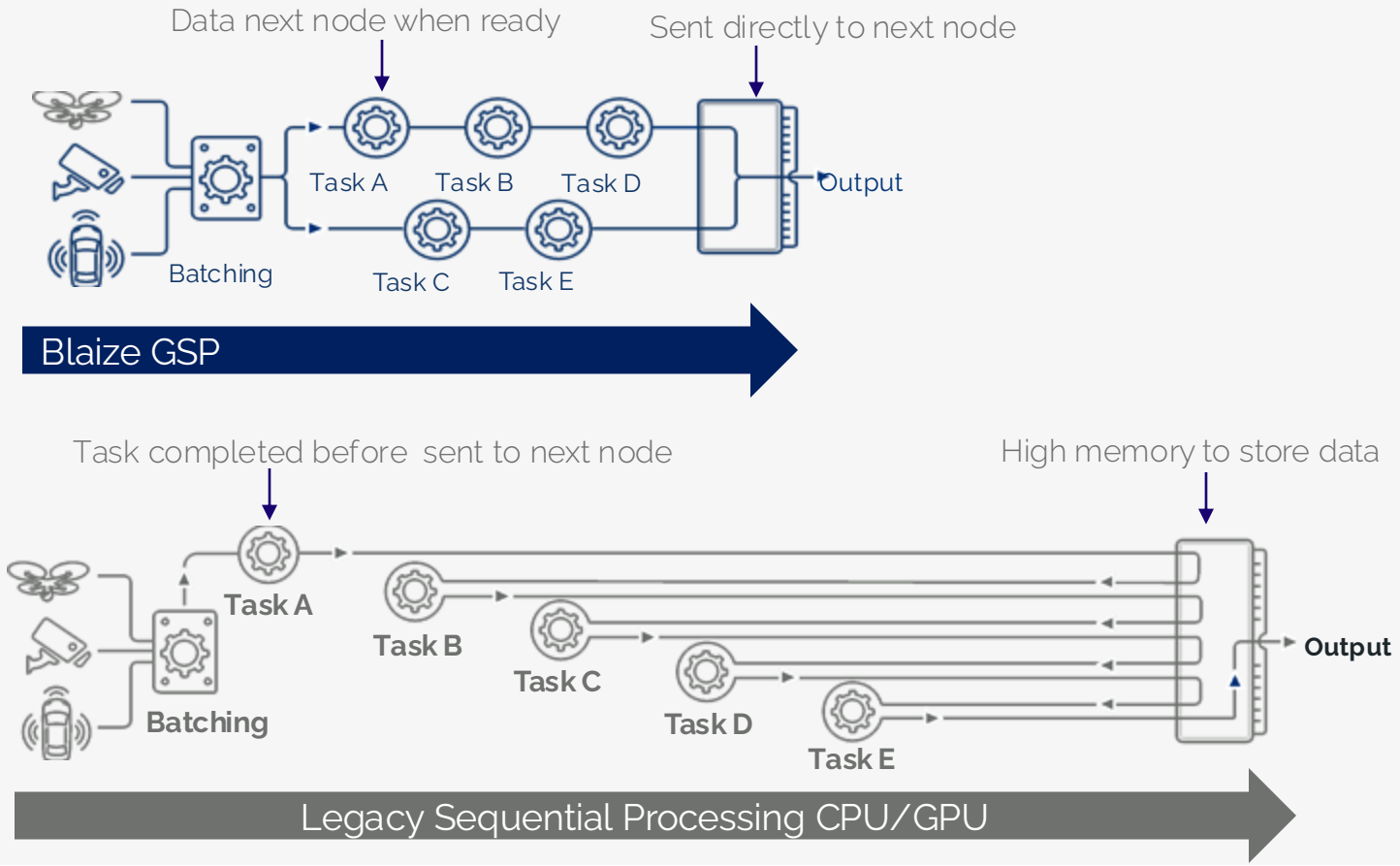
Quick and Effortless Deployment
- Eliminate the need for lengthy business cycles



Blaize Architecture vs Traditional CPU/GPU Architecture

Blaize GSP (Graph Streaming Processor) optimizes scheduling

Blaize GSP vs. Traditional CPU/GPU Architecture



Resulting Differences

- Higher efficiency and performance
- Lower power consumption

- Lower efficiency and performance
- Higher power consumption

Blaize Video Analytics Framework

Modular Capabilities for AI-Driven Smart Verticals

Human Related

- People Counting
- Intrusion Detection
- Perimeter Protection
- Face recognition
- Pose Anonymization
- Fall Detection

Behavior Detection

- Queue Analysis
- Tailgating
- Dwell Time
- Occupancy Analysis
- Path Sequencing
- Action Recognition

Security & Safety Related

- Crowd Forming
- Loitering Detection
- Watchlist Recognition
- Unusual Object
- Weapon Detection
- Object Removal

The Blaize PyAct™ Framework

The Blaize PyAct framework provides three key capabilities within an easy-to-use environment that enables rich video analytic applications

Smart Analytics

Specialized and sophisticated composite analytics

Efficient Task Management

Without having to batch video input

Full-Scene Understanding

Approach to event detection

Blaize AI Adaptive Inferencing

Performance when and where you need it

- Run multiple different detectors per region
- Different datasets (classifications) per region
- Balance accuracy and performance
  - Skip inference where not needed
  - improve accuracy on hard to detect areas
  - Use faster (more performant) models in easy to detect regions
- Regions are flexible to the needs of the input
- Accuracy requirements adapt on demand via specified events

Smart Verticals

with Blaize AI Platform

Smart City | Blaize Transforms Urban Mobility with Smart Traffic AI

Smart Traffic – Coverage Gap

Limited Edge AI Deployment at Intersections

Traffic incidents cost U.S. society nearly $340 billion in 2019—more than $1,000 per person and 1.6% of GDP. When quality-of-life impacts are included, societal harm reaches $1.37 trillion.[1]

Over-Reliance on Legacy Traffic Systems

Major U.S. cities average about 11 cameras per 1,000 residents, some cities exeed 120 per 1000 people.[2]

Smart Traffic – Use Case Gap

No Violation Detection

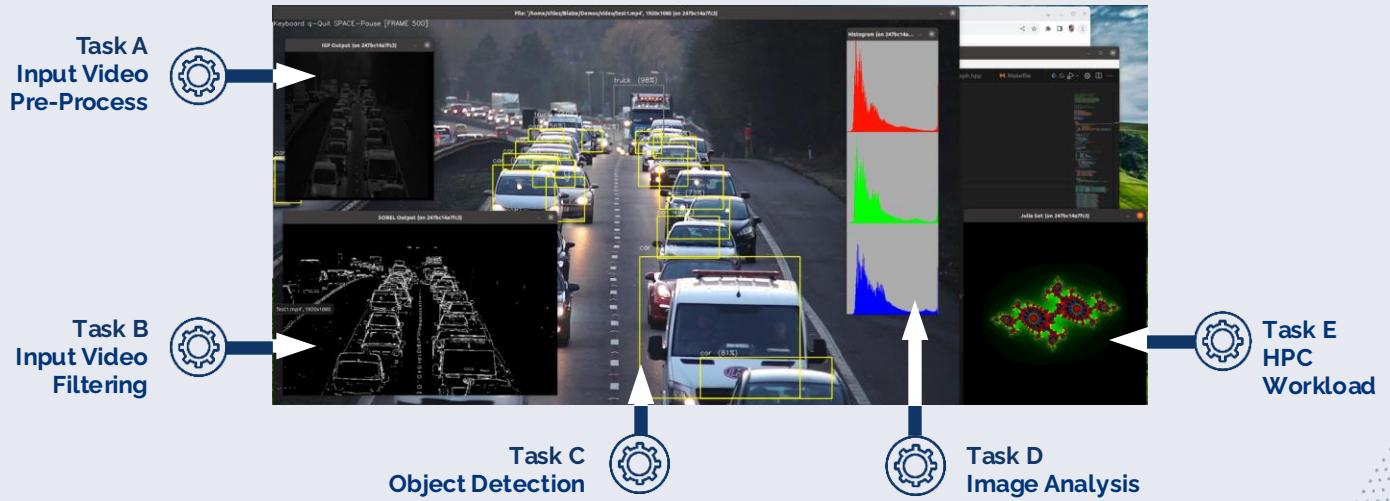
Red-light running and illegal turns go undetected. Vision AI can help reduce the 700+ U.S. traffic deaths tied to violations each year.

Missing Predictive Analytics

Congestion builds before help arrives. Predictive AI could prevent delays in urban traffic disruptions.

> *The road to safer, smarter cities doesn't run through the cloud — it runs through real-time AI at the edge.*
>
> — Urban Infrastructure Analyst, 2024 Mobility Report

Simultaneous Parallel Task



Challenges

Disconnected Systems

Siloed camera, analytics, and control systems limit automation.

Cloud Latency

Cloud-based AI creates latency and const barriers to city-wide scale.

Blaize Solutions

Real-Time Control

Blaize delivers high-density, low-latency AI at intersections.

Adaptive Intelligence

Enables instant traffic alerts, vehicle ID, and dynamic flow.

1. Source: National Highway Traffic Safety Administration, Jan 10, 2023
2. Source: Ventas De Segurida April 2, 2024

Smart Defense | Tactical Superiority Through AI Inference

Tactical Defense – Coverage Gap

Limited Onboard AI

Low percentage of ISR drones and field units include embedded AI. Most rely on off-site or delayed processing.

Sensor Fusion Underutilized

EO, IR, and RF sensors often work in silos. Real-time fusion is key to fast, coordinated battlefield intelligence

Tactical Defense – Use Case Gap

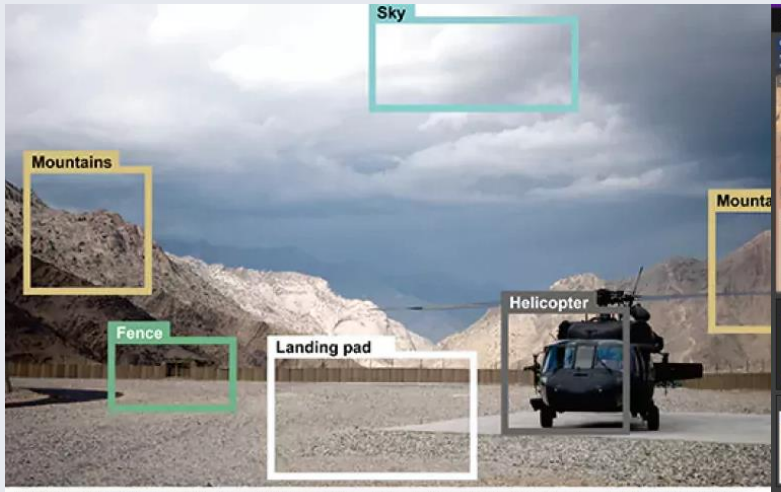
No Blue Force Visual Tracking

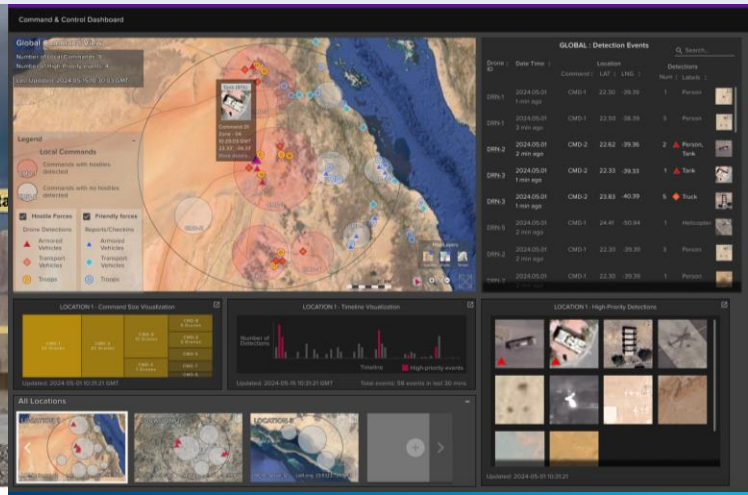
Many units lack real-time ally/asset detection—putting situational awareness and safety at risk.

No Low-SWaP Inference

UAVs and mobile systems lack power-efficient AI. Blaize enables enhancced performance-per-watt than legacy GPUs

> *Tactical decisions can't wait for the cloud. Mission success now depends on inference at the edge.*
>
> — U.S. DoD AI Readiness Review, 2025





Challenges

Isolated Platforms

AI is fragmented across drones, ISR, and field devices.

High-SWaP Barriers

Traditional AI requires too much power and heat for tactical ops.

Blaize Solutions

Real-Time Control

Blaize powers ultra-low-SWaP inference across defense platforms.

Field Adaptability

Supports local AI learning, multi-sensor fusion, and ISR flexibility.

Smart Airport | Real-time Monitoring and Intelligent Threat Detection

Coverage Gap

Limited Edge AI Deployment

Over 3 million passengers travel through U.S. airports daily, even without widespread use of real-time, AI-powered crowd and security analytics.[1]

Over-Reliance on Legacy CCTV + Manual Ops

Baggage mishandling cost the airline industry approximately $5 billion in 2024, with about $100 incurred per lost or delayed bag.[2]

Use Case Gap

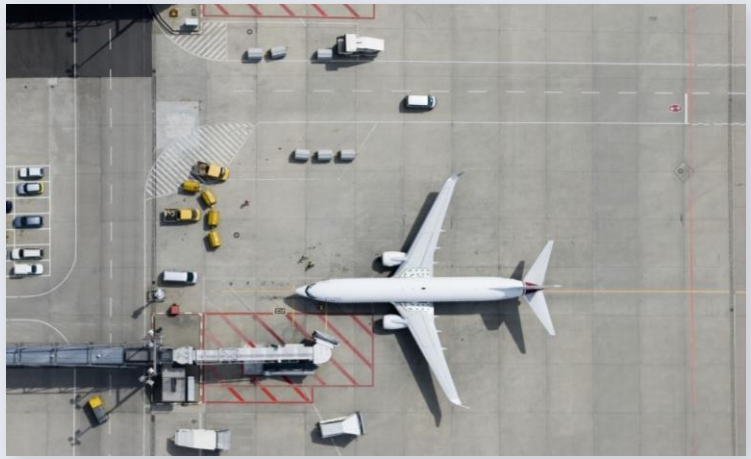
No Unified Incident Detection

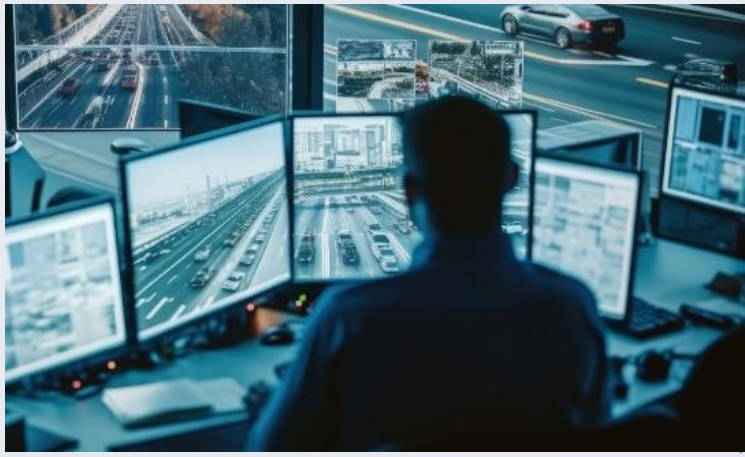
Today's systems lack real-time detection for intrusions, baggage mishandling, PPE violations, or crowding in terminals.

Missing Predictive Analytics

Without early AI signals, delays and incidents escalate. Predictive AI can help avoid operational losses due to disruptions.

> *Airport AI must operate at the edge—in real time—where every second counts.*
>
> — Urban Infrastructure Analyst, 2024 Mobility Report





Challenges

Disconnected Systems

Siloed video, access, and sensor systems limit unified awareness.

Cloud Latency

Cloud-based analytics introduce latency—costly for real-time airport operations

Blaize Solutions

Real-time Control

Edge-deployed AI for incident detection, zone control and auto-escalation

Adaptive Intelligence

Identifies human behavior, hazards, and movement patterns across terminals.

1. Source: Federal Aviation Administration, June 2025
2. Source: SITA, June 12, 2025

Smart Oil & Gas | Industrial-Scale Safety Monitoring with Edge AI

Smart Oil & Gas – Coverage Gap

Sensor and Network

>60% of oil & gas pipeline leaks occur in remote, unmanned areas (World Economic Forum, 2023).

Only a small portion of remote installations have real-time sensor coverage, leaving critical blind spots.

System Vulnerabilities

Fragmented OT systems lead to average breach detection time of 207 days in industrial sectors (IBM X-Force, 2024).

Smart Oil and Gas – Use Case Gap

Remote monitoring issues

In 2022, over $3.5B in environmental damage was linked to delayed leak detection in pipelines (EPA/DOE Joint Study).

Data and Security Vulnerabilities

UAVs and mobile units face compute, bandwidth, and power constraints that prevent on-site analytics and secure monitoring.

> *DeepSeek has generated a very interesting algorithm and software. It is helping us to increase efficiency.*
>
> — Amin Nasser, CEO, Saudi Aramco

Closing the Safety Gap with Real-Time Intelligence at Scale

Challenges

Manual Detection

Gas leak events in remote zones go undetected for hours (3x escalated risks).

Legacy Analytics

Legacy analytics cannot process multi-modal video + gas data on site.

Blaize Solutions

Always-on AI

Enables real-time gas leak, flame, and perimeter breach detection.

Multimodal AI

Delivers sub-second alerts

Offers 10x performance-per-watt enabling 24/7 analytics

Smart Retail | Industrial-Scale Safety Monitoring with Edge AI

Smart Retail (QSR) – Coverage Gap

Drive Thru Dominance

Drive-thru sales account for over 70% of QSR revenue, yet many establishments lack real-time AI analytics to optimize this channel (QSR Magazine, 2024).

Kiosk Adoption

The number of restaurant kiosks surged 43% from 2021 to 2023, reaching nearly 350,000 installations worldwide, indicating a shift towards digital ordering (Deliverect, 2024).

Smart Retail (QSR) – Use Case Gap

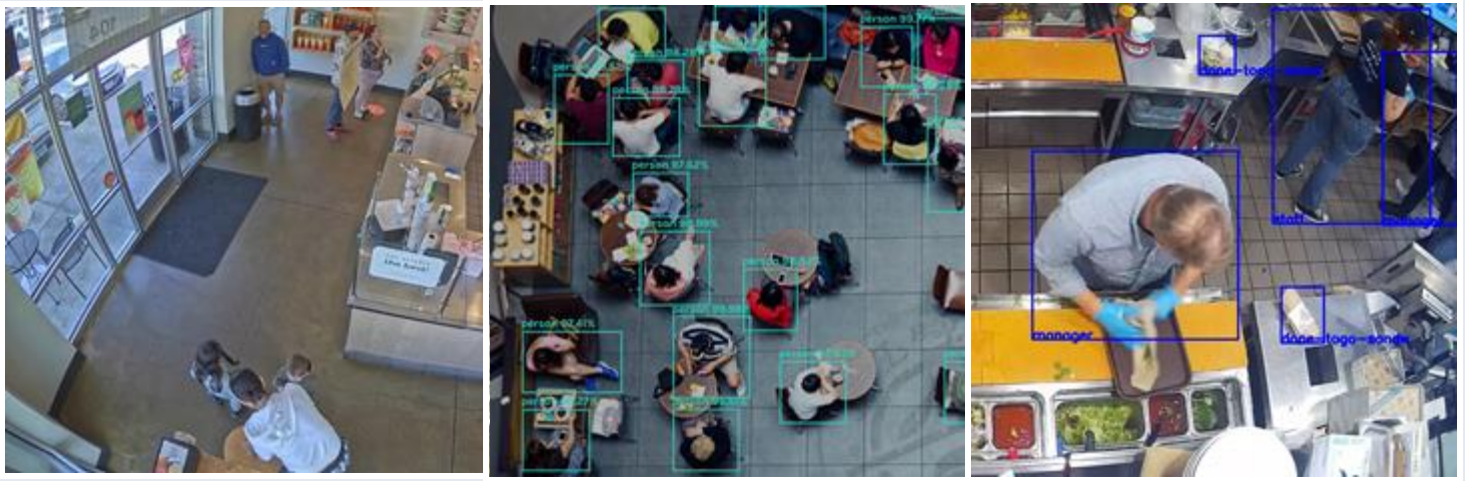
Operational Blindspot

Many QSRs lack AI-driven insights into kitchen performance, order flow, and drive-thru efficiency, leading to service delays and lost revenue.

Front-of-House Monitoring

Areas such as dining cleanliness, kiosk engagement, and customer flow often go unmonitored, impacting brand perception and customer experience.

> *70% of QSR revenue flows through the drive-thru — yet most restaurants still can't see where they're losing time, orders, or customers.*
>
> — Retail AI Vision Study, 2024



Challenges

Siloed Operations

POS, cameras, and analytics don't talk to each other.

Cloud Burden

Cloud-based AI is too slow and costly for drive-thru or kitchen ops.

Blaize Solutions

Unified Vision

Blaize brings real-time intelligence to every store zone.

Operational Insight

One platform for queue timing, crew activity, and kiosk usage.

*QSR – Quick Service Restaurant

Smart School | Enabling Safer Schools with Real-Time Vision AI

Safe School – Coverage Gap

Schools Lack Real Time AI

Over 70% of public schools use basic CCTV with no intelligent threat or behavior monitoring (National Center for Education Statistics, 2022).

Existing Cameras Underused

Fewer than 10% of school cameras are AI-enabled for detection of weapons, loitering, or unusual behavior (National Center for Education Statistics, 2022)

Safe School – Use Case Gap

No Threat Recognition

Few systems flag weapons or violence in real-time. In 2023, the U.S. recorded over 300 school shootings (K-12 School Shooting Database) —AI can intervene earlier.

Behavioral & Access Monitoring Gaps

AI isn't tracking loitering, aggression, or unauthorized entries—critical for prevention and staff response.

> *Schools spent over $3.1 billion last year on security, but without real-time AI, we're still reacting after it's too late.*
>
> — Education Security Brief, 2023

Challenges

Reactive Security

Most systems lack real-time alerts or centralized intelligence.

Privacy Constraints

Cloud-based AI is blocked by privacy and compliance barriers.

Blaize Solutions

On Prem Safety

Blaize ensures privacy-compliant, instant threat detection.

Smarter Campuses

Activates existing camera networks for proactive school safety.

Smart Healthcare | Real-Time Health Intelligence, Powered by Hybrid AI

Smart Healthcare – Coverage Gap

Limited AI Integration

A limited number of healthcare facilities currently leverage AI-driven solutions for real-time patient monitoring and diagnostics.

Legacy System Dependence

The healthcare industry heavily relies on manual patient monitoring and siloed electronic medical record (EMR) systems, resulting in operational inefficiencies and potential patient risk.

Smart Healthcare – Use Case Gap

Real-time Anomaly Detection

Many healthcare providers lack immediate AI-driven insights into patient health deterioration, missing opportunities for early intervention.

Predictive Patient Care

Current systems rarely leverage predictive AI to anticipate patient needs or prevent medical emergencies proactively.

> *"Only 18% of healthcare organizations report widespread implementation of AI solutions, indicating significant gaps in leveraging AI's full potential in patient monitoring and diagnostics."*
>
> — HIMSS AI in Healthcare Survey, 2024

Challenges

Privacy and Regulatory Compliance

Strict healthcare data regulations limit cloud-based AI implementations.

Siloed Healthcare Data

Inconsistent interoperability among medical devices, patient records, and diagnostic tools

Blaize Solutions

Hybrid AI – Edge to Cloud

Blaize delivers privacy-compliant, low-latency AI inferencing at the healthcare edge.

Real-time Patient Monitoring

Immediate AI-driven analytics for patient vitals, anomaly detection, and predictive health alerts

Smart Manufacturing | Precision Manufacturing — from Edge to Cloud

Smart Manufacturing – Coverage Gap

Limited Predictive AI Deployment

A limited number of factories utilize predictive maintenance AI, leaving critical machinery downtime risks unaddressed.

Heavy Reliance on Legacy Automation

Factories still widely depend on traditional automation with minimal AI-driven quality control and efficiency insights.

Smart Manufacturing – Use Case Gap

Predictive Maintenance Shortfall

Most factories detect equipment issues reactively, missing significant operational savings achievable via predictive AI.

Quality Assurance Inefficiencies

Many manufacturing plants lack real-time AI quality inspection, resulting in higher rates of defective products and rework.

> *"Manufacturers report an average of 800 hours of downtime annually due to unplanned maintenance, highlighting the urgency and opportunity for predictive AI-driven solutions."*
>
> — Deloitte Smart Factory Study, 2023

Challenges

Integration Complexity

Factories struggle with integrating AI systems alongside legacy automation and robotics.

Latency and Bandwidth

Cloud-dependent AI introduces latency, unsuitable for real-time factory operations.

Blaize Solutions

Low-Latency Hybrid AI

Blaize solutions support real-time predictive maintenance and defect detection directly on the production line.

Multimodal Manufacturing Intelligence

Blaize provides comprehensive analytics across IoT sensors, machinery data, and visual inspection, optimizing production efficiency.

Smart Automotive | Driving Smarter Decisions with Hybrid AI Insights

Smart Automotive – Coverage Gap

Underutilized Vehicle Data

Not all automotive manufacturers currently use comprehensive onboard AI analytics for predictive vehicle maintenance and driver safety.

Legacy Vehicle Systems

Many automotive operations rely on limited, non-AI sensor systems with minimal real-time analytical capabilities.

Smart Automotive – Use Case Gap

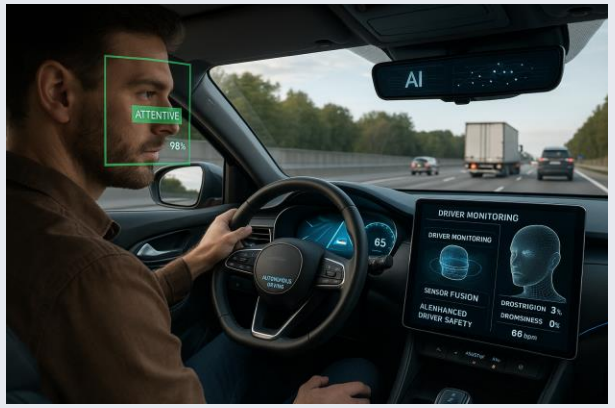
Predictive Vehicle Maintenance

Automotive operations often lack predictive AI solutions, resulting in higher maintenance costs and reduced fleet efficiency.

Driver Safety and Autonomous Assistance:

Current systems rarely leverage real-time AI for driver behavior monitoring, anomaly detection, or supporting autonomous vehicle systems.

> *"Less than one-third of automotive companies currently integrate real-time predictive analytics into their vehicle maintenance processes, resulting in increased operational costs and reduced fleet performance."*
>
> — Gartner Automotive Industry Insights, 2024



Challenges

High Data Volume

Massive amounts of real-time data generated by vehicle sensors strain legacy systems.

Power and Compute Constraints

Vehicles have strict power and processing constraints, limiting traditional AI deployment.

Blaize Solutions

Edge and Hybrid AI Performance

Blaize provides powerful yet energy-efficient AI inference solutions suitable for vehicles and fleets.

Real-time Analytics

Onboard AI for predictive maintenance, driver monitoring, and sensor fusion to support safer, smarter automotive operations.

Thank You