acuvate®
… where Acumen drives Innovation

Revolutionize Workplace Safety With Acuvate's AI-Powered HSSE (Health, Safety, Security & Environment) Solutions

Advanced AI-Machine Vision & Machine Learning for Real-Time Hazard Detection and Compliance
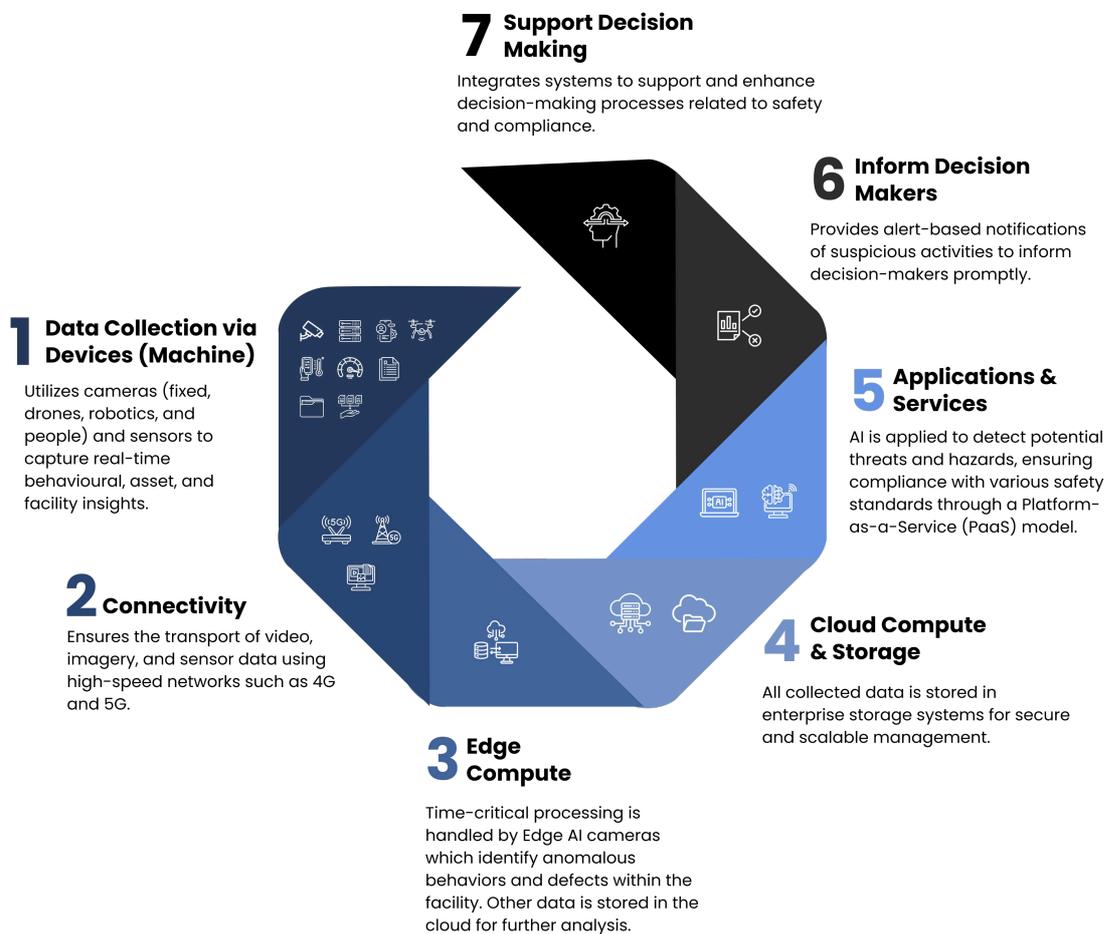
Ensuring Safety in High-Risk Environments

In industries where operational hazards are high, ensuring the safety of your workforce is critical. Acuvate's HSSE solutions combine AI-Machine Vision (AI-MV), AI-Machine Learning (AI-ML), and Edge Computing to monitor workplace conditions in real-time, detect unsafe behaviors, and automate compliance enforcement.

From PPE monitoring and zone protection to emission detection and energy stability, our intelligent solutions help organizations prevent accidents before they happen—improving safety outcomes, operational efficiency, and regulatory compliance.

Lowering Number of HSSE Incidents: How It Works

7 Support Decision Making
Integrates systems to support and enhance decision-making processes related to safety and compliance.

6 Inform Decision Makers
Provides alert-based notifications of suspicious activities to inform decision-makers promptly.

1 Data Collection via Devices (Machine)
Utilizes cameras (fixed, drones, robotics, and people) and sensors to capture real-time behavioural, asset, and facility insights.

5 Applications & Services
AI is applied to detect potential threats and hazards, ensuring compliance with various safety standards through a Platform-as-a-Service (PaaS) model.

2 Connectivity
Ensures the transport of video, imagery, and sensor data using high-speed networks such as 4G and 5G.

4 Cloud Compute & Storage
All collected data is stored in enterprise storage systems for secure and scalable management.

3 Edge Compute
Time-critical processing is handled by Edge AI cameras which identify anomalous behaviors and defects within the facility. Other data is stored in the cloud for further analysis.

Key Differentiators

Real-Time Hazard Detection
Instantly identify safety threats using AI-Machine Vision and intelligent video analytics.

Automated Compliance Monitoring
Continuously track adherence to safety standards like OSHA and ISO with minimal manual intervention.

Centralized Data Management with AcuPrism
Store and analyze safety compliance data on Acuvate's unified enterprise data platform.

Enhanced Operational Efficiency
Reduce incident-related downtime and avoid costly disruptions through proactive safety measures.

Industry-Specific Use Cases

Zone Protection
Define and monitor no-go areas. Alert staff via personal tags when entering restricted zones (e.g., slippery or high-voltage areas).

PPE Compliance
Detect PPE violations (helmets, vests, boots, glasses) using CCTV feeds and real-time AI-MV.

Lifting Goods Safety
Prevent staff from walking under suspended loads using real-time detection and alerting mechanisms.

Emission Monitoring
Analyze sensor data with AI-ML to detect harmful emissions early and trigger automated containment actions.

Energy Provisioning Stability
Predict energy requirements and usage using AI models to prevent power failures in production zones.

Tailored Deployments
Our team co-develops custom solutions for unique business environments and evolving HSSE requirements.

Expected Benefits

Benefit	Impact
Worker Safety	Improve staff safety by up to 45% via AI-led alerts
Compliance & Cost Savings	Reduce penalties and downtime; save 2,500+ person-days/year
Productivity	Minimize work disruptions, boost morale and efficiency

Why Acuvate?

18+ Years of Innovation

50–60% Faster Time-to-Market via Inhouse Accelerators

400+ Experts, including 80+ ML/AI specialists

Microsoft Gold Partner, Azure, GCP, & Databricks alliances

100+ Digital Transformation Programs Delivered

24/7 Global Support Infrastructure

Don't Wait for an Incident to Occur

Book a Free Demo to explore how Acuvate's HSSE Solutions can transform your safety, compliance, and operations.

Contact us