![Radisys engagedigital.ai logo]
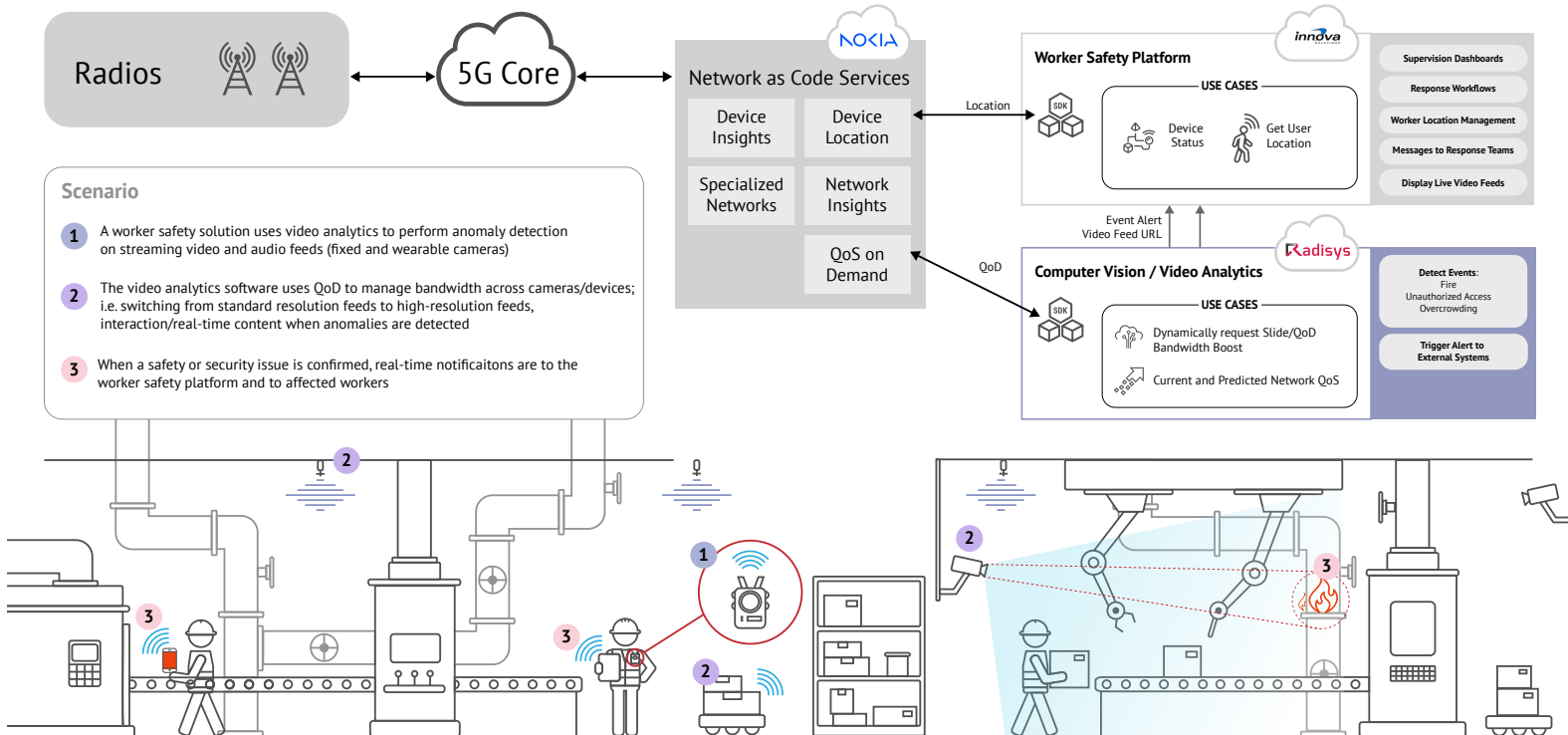
# Radisys Engage Digital Platform:

## Innovating Smart Safety Solutions with 5G Network APIs

Modern facilities face increasingly complex safety challenges that demand swift response. Operating in isolation, legacy video surveillance tools struggle with network congestion during emergencies and lack automated quality adjustment when it matters most. Today's organizations need solutions that not only spot and react to incidents in real time but also optimize network resources while maintaining high-quality video during critical moments.

### Transforming Industrial Safety with Intelligent Technology

The Radisys Engage Digital Platform (EDP) is revolutionizing industrial safety and surveillance by leveraging innovative 5G network APIs and Computer Vision analytics. In collaboration with Orange, Nokia, and Innova Solutions, Radisys demonstrated advanced monitoring and incidence response solutions that unite real-time computer vision-based video analytics with intelligent bandwidth optimization capabilities using Quality on Demand and Location CAMARA Network APIs. Leveraging programmable network APIs is reshaping safety and security practices in industrial and commercial settings, showcasing the transformative power of smart systems in many industries such as manufacturing, oil & gas, mining, utilities, warehousing, and transportation.

**Radisys**    **innova** SOLUTIONS    **NOKIA**



### Scenario

1. A worker safety solution uses video analytics to perform anomaly detection on streaming video and audio feeds (fixed and wearable cameras)

2. The video analytics software uses QoD to manage bandwidth across cameras/devices; i.e. switching from standard resolution feeds to high-resolution feeds, interaction/real-time content when anomalies are detected

3. When a safety or security issue is confirmed, real-time notificaitons are to the worker safety platform and to affected workers

## Programmable Video Analytics Meets Programmable 5G Network Innovation

Radisys' Engage Digital Platform removes complexities in creating and scaling industry 4.0 applications by integrating programmable communications and AI-powered programmable video analytics with programmable network resource management through advanced 5G Network APIs (based on Camara Project, Camara Project – Linux Foundation Project). Although there are numerous areas where these capabilities can be deployed, one such example is in fire detection and response, where every second counts in preventing potential disasters.

The system's fire detection capabilities showcase the platform's comprehensive approach to safety. When an incident is identified, the platform initiates a coordinated sequence of responses. AI validation algorithms confirm the threat while leveraging the Quality on Demand (QoD) API to increase bandwidth allocation for affected cameras, ensuring security teams have optimal video quality during emergencies.

The solution immediately dispatches alerts across multiple channels, mobilizing rapid response teams with accurate location of the device using the location API. Comprehensive video documentation is captured throughout the incident for subsequent analysis and training. Once the situation is resolved, network resources automatically revert to standard configurations, maintaining efficient bandwidth utilization across the facility.

As a result, the interval between incidence and action shortens dramatically through automated escalation procedures. In critical moments, automatic video quality boost provides security teams crystal-clear visibility of unfolding events, while dynamic resource allocation maintains peak performance and bandwidth utilization across the network.

## From Fire Safety to Complete Facility Protection

Beyond fire prevention, the EDP's advanced media analytics capability delivers comprehensive protection and automation across end-to-end digital operations. With hundreds of pre-built video analytics modules, EDP can safeguard restricted access points, evaluate occupancy levels, and track personnel and equipment throughout facilities. Each function leverages advanced AI media analytics processing and intelligent network resource allocation.

The platform's programmable communication and media analytics capability, cloud-native architecture, and built-in AI models enable service providers to provide solutions for unique operating environments quickly.
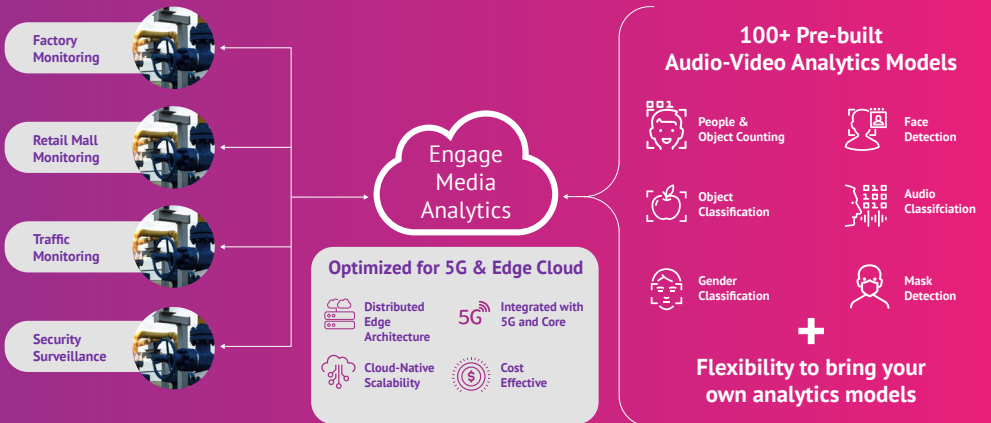
## Opening New Possibilities for Connected Safety

The Radisys innovation heralds a new era in facility protection. As organizations embrace more sophisticated connected technologies, the fusion of programmable video analytics with programmable 5G networks (public or private) will enable increasingly refined approaches to comprehensive risk management. Through its pioneering work, Radisys has created a blueprint for advancing industrial automation strategies, opening new possibilities for connected operations.

ENGAGE MEDIA ANALYTICS

## Monetize 5G & Edge Cloud Investments

✓ **Integrated Programmable Audio-Video Analytics & Communications**

✓ **Intuitive Low-Code-No-Code Visual Design Tool**

✓ **Open & Extensible Platform**

✓ **Data Privacy & Control**

Factory Monitoring

Retail Mall Monitoring

Traffic Monitoring

Security Surveillance

Engage Media Analytics

**Optimized for 5G & Edge Cloud**

Distributed Edge Architecture

Integrated with 5G and Core

Cloud-Native Scalability

Cost Effective

**100+ Pre-built Audio-Video Analytics Models**

People & Object Counting

Face Detection

Object Classification

Audio Classifciation

Gender Classification

Mask Detection

**+**

**Flexibility to bring your own analytics models**