



Mi-Eye



Unlocking the Full Potential of your  
Surveillance system for Enhanced Decision -  
Making through End-to-End Video Analytics



The surge in demand for video analytics solutions can be attributed to multiple factors, including the increasing emphasis on security and safety, the imperative for businesses and government agencies to enhance operational efficiency, improved network infrastructure & the growing availability of video data.

A prominent challenge that has propelled the adoption of video analytics solutions the world over is the sheer magnitude of video data generated in contemporary times. The enormous volume of this data often poses difficulties in terms of processing and analysis, thereby resulting in missed opportunities and operational inefficiencies.

**The global size of the video analytics market will rise over the forecasted period at a Compound Annual Growth Rate (CAGR) of 23% from USD4.5 Bn in 2020 to USD 35.6 Bn in 2030.**

**Strategic Market Research**

**Video analytics can help Reduce False Alarms by up to 90%, resulting in Faster Response Times and Reduced Costs for security operations.**

**Frost and Sullivan**



Take the Next Step Towards Transformation

**Cutting-edge Video Analytics Solution from NEC**

# NEC Mi-Eye

**AI and Machine Learning based video analytics solution, designed to extract real-time valuable insights from video streams. Empowers decision-makers with data-driven choices that drive enhanced efficiency, productivity, and profitability.**

Critical actionable insights along with alarms enable businesses and government agencies to promptly take the most appropriate actions for proactive incident and threat management, saving lives, and ensuring safe working and living environments.

The powerful video analytics further empowers businesses to delve deep into employee and customer behaviours, understand patterns, and make informed intelligent decisions for long-term strategic planning that optimize operations and costs, and bolster security as well as their financial performance.





# Gaining video-based Immersive Insights into your most critical business areas

## Customer Behaviour

Gain insights into customer engagement with your products and services, and pinpoint opportunities for enhancement and improvements

## Operational Efficiency

Diligent workflow monitoring to detect operational bottlenecks, and implement process optimizations to enhance efficiency and drive cost savings



## Security and Safety

Real-time on-premise threat detection and post-incident investigation to develop robust response mechanisms that proactively identify and mitigate potential security threats, safeguarding assets and preserving employee safety

# How NEC Mi-Eye Works

## Detect

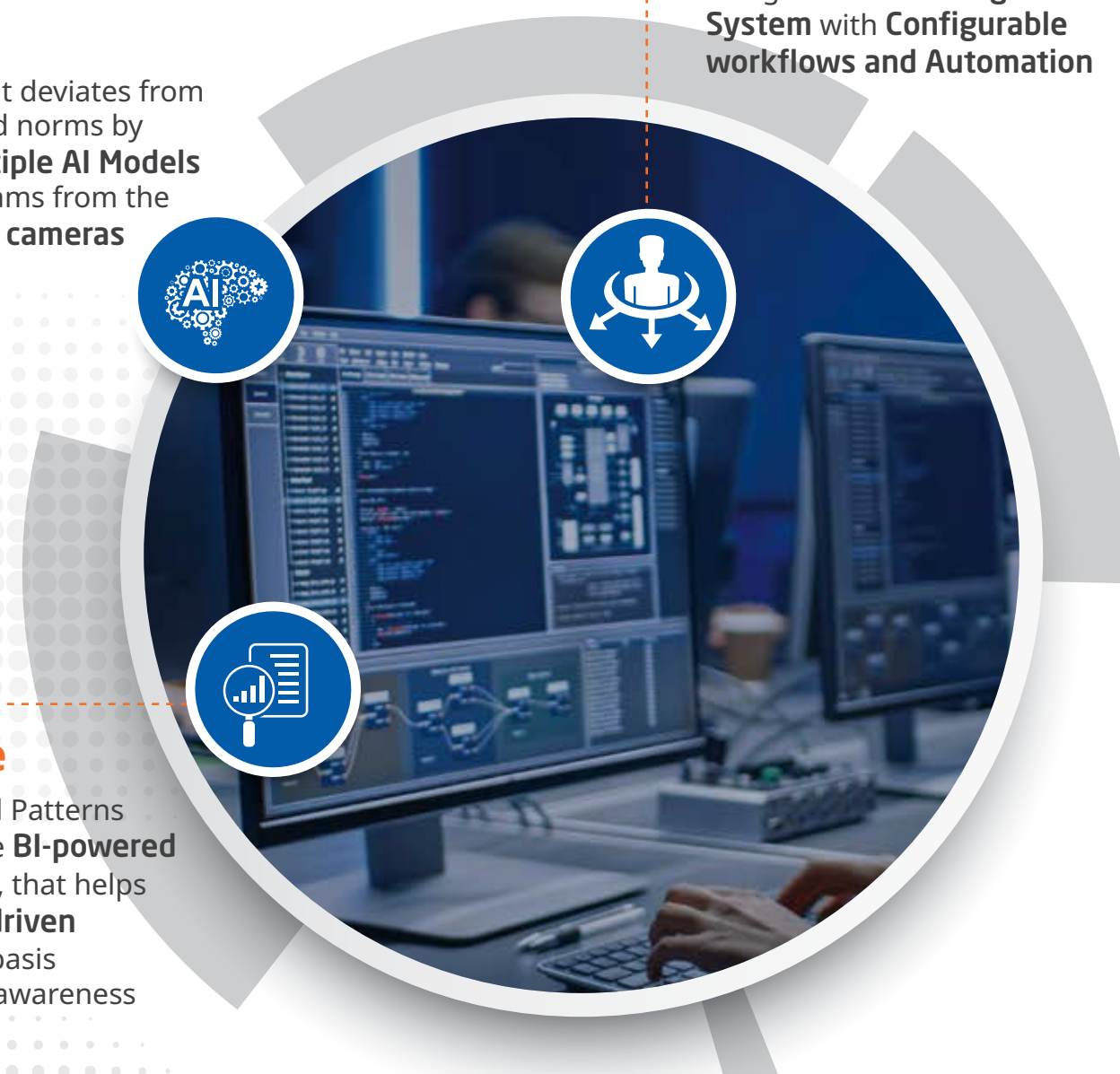
behaviour that deviates from the prescribed norms by applying **Multiple AI Models** on video streams from the existing **CCTV cameras**

## Analyze

behavioural Patterns through the **BI-powered Dashboard**, that helps take **Data-driven Decisions** basis situational awareness

## Respond

to incidents in **Real-time** using **Incident Management System** with **Configurable workflows** and **Automation**



## Real-Time Analytics

Receive real-time alerts and notifications, enabling quick and effective responses to potential security threats or operational issues



## Predictive Analytics

Leverage comprehensive insights into trends and patterns, empowering decision-makers to adopt a proactive approach in optimizing workflows and enhancing customer experiences



## Data Privacy and Security

Paramount focus on data privacy and security, guaranteeing robust protection and confidentiality of all enterprise and government data through strong SSL security and other advanced encryption and decryption methods



## High Performance and Scalability

Highly resilient flexible solution that allows you to expand seamlessly in alignment with your evolving needs (both on-premise and hybrid models supported)



# NEC Mi-Eye Dashboard Capabilities

## Heat Map

Creates visual representations of data density or activity levels, allowing users to quickly identify areas of interest or concern.

## Health Monitoring/Diagnostic

Provides real-time monitoring and analysis of infrastructure, applications, and services of connected surveillance systems, to identify and resolve issues quickly.

## User Management

Allows administrators to control user access, permissions, and authentication, ensuring the security and privacy of the system.

## Hotlist and Search

Creates and manages hotlists for automatic number plate recognition and search for specific vehicles, enabling efficient law enforcement and traffic management.

## Report Management

Generates, customizes, and shares reports on key performance indicators and other data, providing insights into the system's performance and trends.

## Dashboard/Frontend for IVA Engine

Interacts with the Intelligent Video Analytics engine, enabling real-time video analysis for various applications, such as security, retail, and traffic management.

## Live Monitoring of the Camera Feed

Views the camera feed in real-time, providing live surveillance of a location for security and safety purposes.

## Alert Management

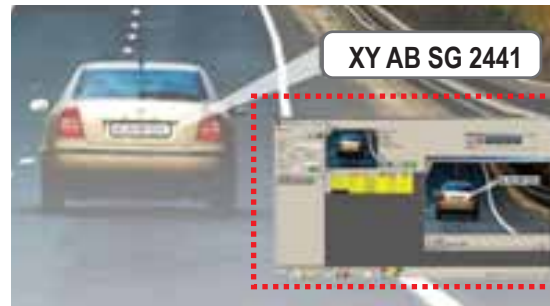
Sends notifications when an event or anomaly is detected, allowing quick responses to potential issues, incidents, and threats.

## Video Summarization Support

Provides a condensed version of video footage, highlighting key events or anomalies from supported filters, enabling quick review and analysis of video data. Works with offline videos as well.



# Vehicle Detection



## Automated Number Plate Recognition (ANPR)

ANPR is an Image Processing/Computer Vision based technology which uses number (license) plate to identify the vehicle. Optical Character Recognition (OCR) recognizes the characters and converts the alphanumeric characters into text format after detection.

## Microservice-based Analytics runs on the Intelligent Video Analytics Platform

Leveraging the Best Artificial Intelligence-based Techniques and Sophisticated Software Algorithms



Advanced image processing and pattern recognition algorithms



Real-time processing of moving vehicle images



Easy integration with other related subsystems



Accurate and fast plate recognition

### The ANPR Process

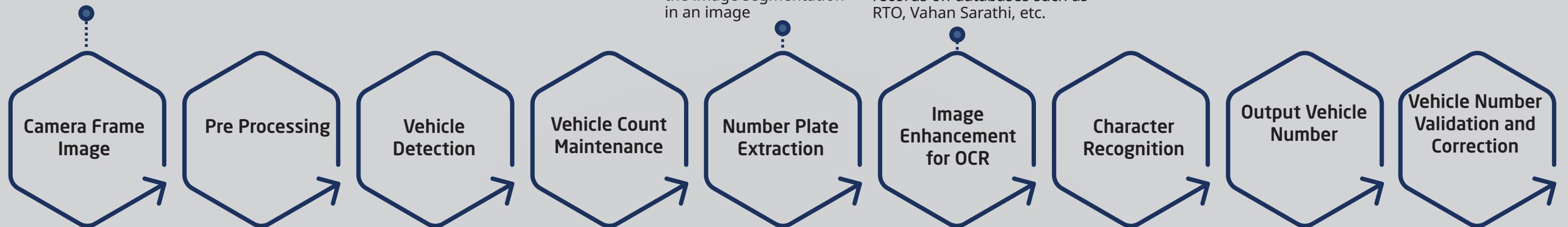
Reliably detects, tracks, and analyzes all categories of vehicles including two, three or four-wheelers, their type, count and most importantly the registration number plates



System detects the vehicle and captures the vehicle's image

Vehicle number plate region is extracted using the image segmentation in an image

The recognized text is sent back. The resulting data is then compared with the records on databases such as RTO, Vahan Sarathi, etc.

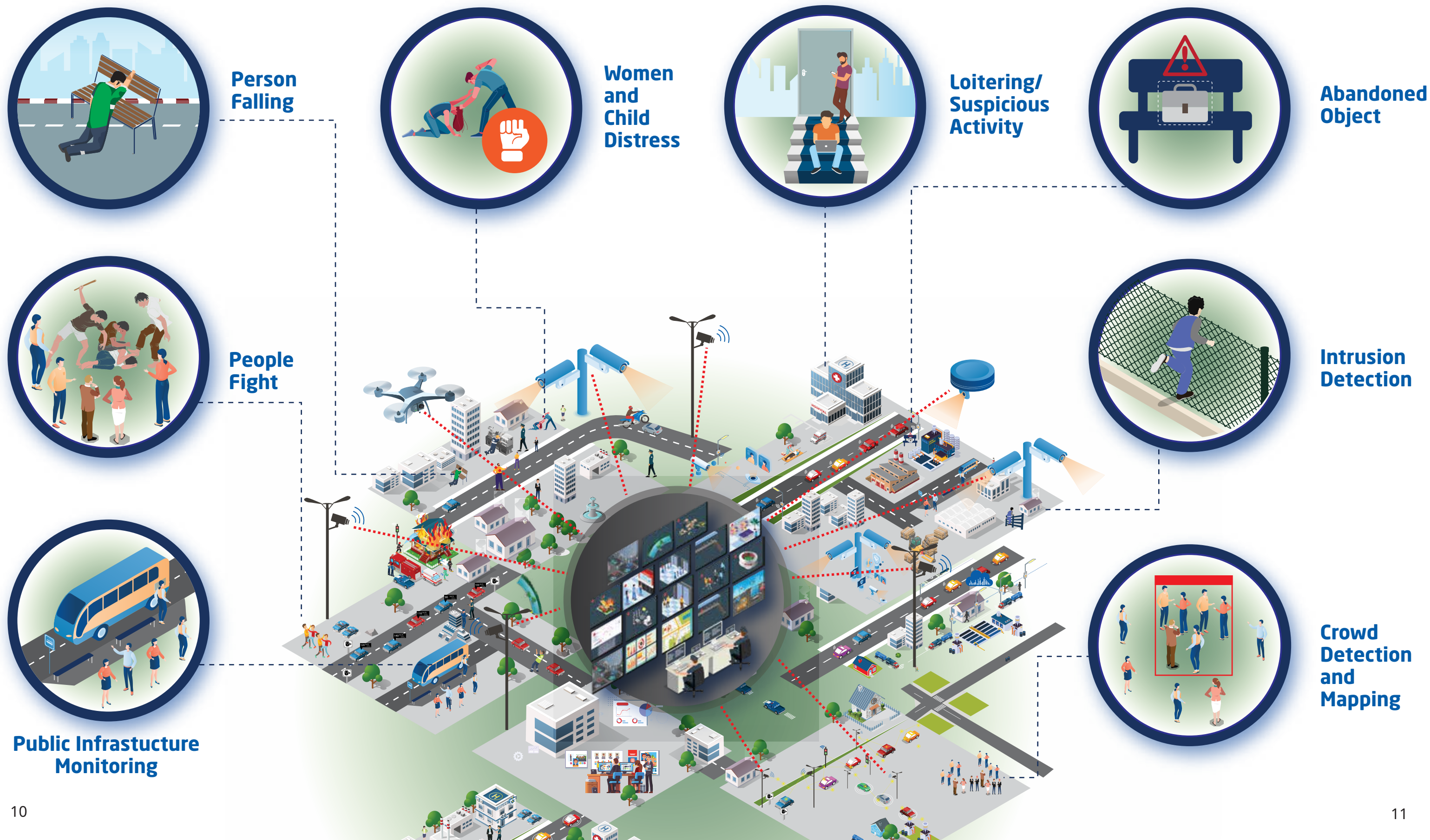




# City Surveillance and Citizen Safety

## Building Communities that Thrive on Safety and Prosperity

NEC Mi-Eye enables government bodies and law enforcing agencies to embrace the power of Intelligent Video Analytics to detect threats promptly, respond effectively, and ensure peace of mind to the city residents, businesses, and visitors.





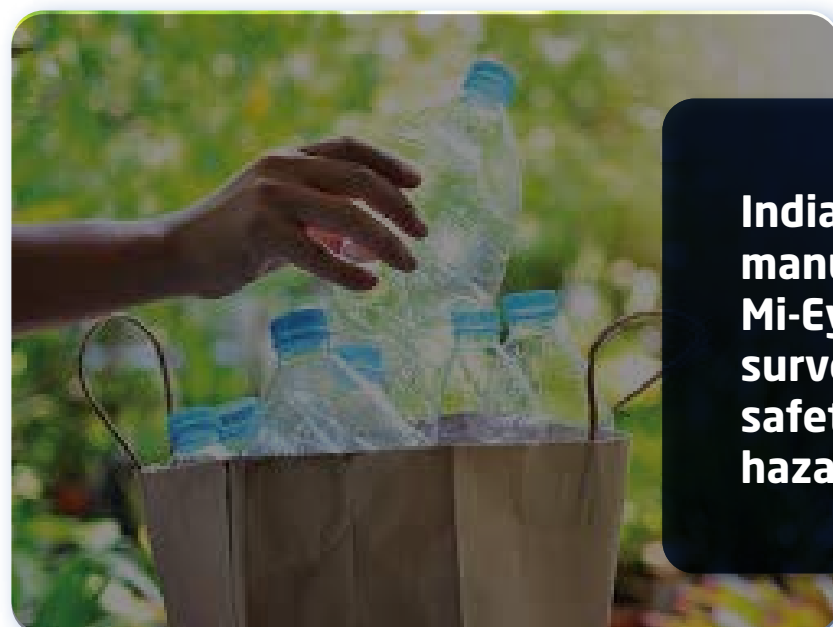
# Unlocking Infinite Possibilities: NEC Mi-Eye Adapts to the Enterprise Safety Vision

## Transforming the Future of Enterprise Intelligence

In today's rapidly evolving business landscape, NEC Mi-Eye is revolutionizing how enterprises harness the potential of video data. In addition to safety of people and facility, it brings immense value through data-driven decision-making, customer insights and behaviour analysis, operational efficiency, and compliance.



# Success Snapshot



**Indian PET-recycled RPSF manufacturer deploys NEC Mi-Eye for real-time factory surveillance to ensure worker safety, specially in hazardous areas**



## Key Challenges

- Real-time visibility of operational metrics, according to role definition
- Better manpower utilization to reduce operational costs
- Worker safety and compliance



## Solution

Revolutionized facility surveillance with **NEC Mi-Eye** powered Cameras for **Real-Time Monitoring**



## Impact



**Hazardous area monitoring**



**Worker safety & compliance**



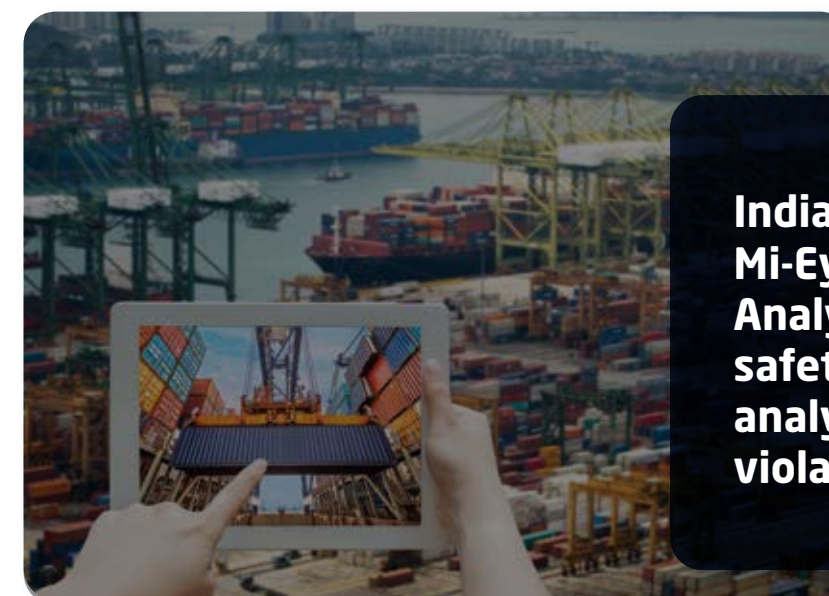
**Real-time visibility of operational metrics**



**Improved risk management - people intrusion, movement near conveyer belts and other hazardous zones**



**Cost and productivity optimization**



**Indian ports leverage NEC Mi-Eye Intelligent Video Analytics to ensure people safety and derive insights and analytics about frequent violations**



## Key Challenges

- **Gate Entry/Exit:** Managing truck entry, over speeding, controlling accidents via third party trucks
- **Operational Area:** Movement of trucks and people tracked manually, high incident rate without proper records
- **Wharf Area:** No visibility into pedestrian movement



## Solution

Elevated facility surveillance through **Real-Time Monitoring** with **NEC Mi-Eye** powered cameras

- Real-time violation detection and area-specific announcement through PA system
- Control room operator, safety supervisor alerted immediately on dashboard and handheld
- GIS map indicating the exact spot of violation
- Incident violation tracking from start to closure with appropriate action reporting



## Impact Real-time Monitoring across the Terminal



**Vehicle congestion**



**Vehicle stoppage**



**Pedestrian detection**



**Vehicle wrong lane**



**People safety**



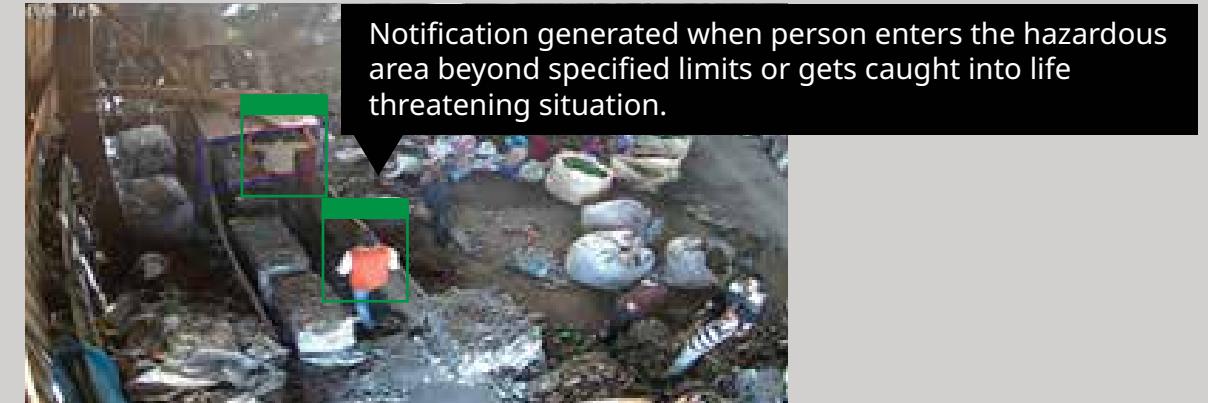
**Intrusion detection**



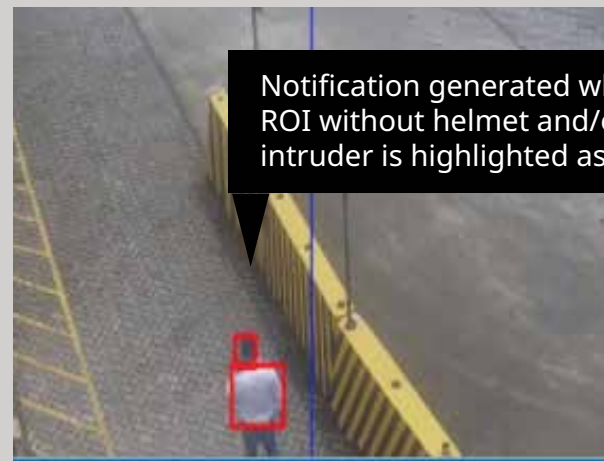
# Live View of NEC Mi-Eye Use Cases for Real-time Facility Surveillance

## Hazardous Area Monitoring

- Restricted Area Violation



## People Safety



- Safety Violations
- Identify Non-construction Staff

## Vehicle Congestion

- Traffic Violations



## Pedestrian Detection

- Restricted Area Monitoring
- Off-time Security
- Theft Prevention

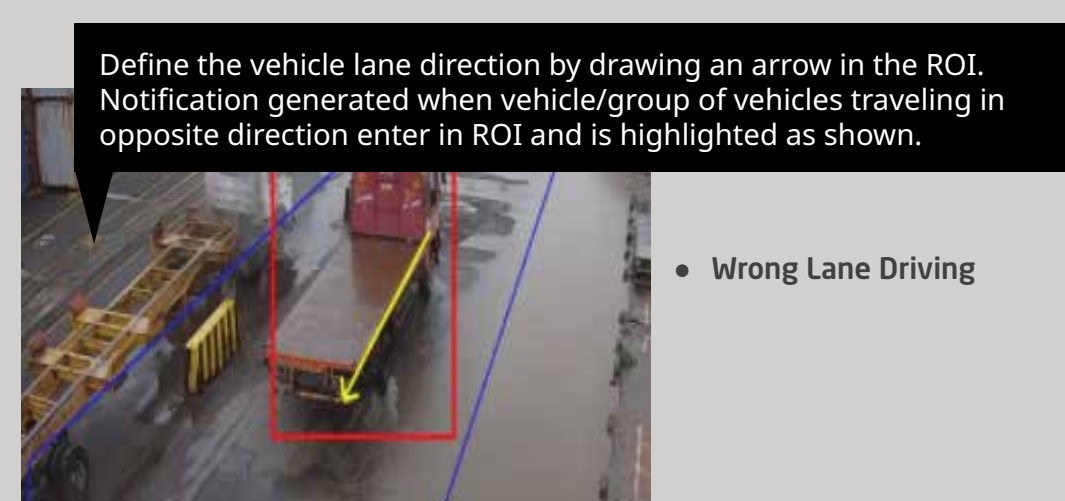


## Vehicle Stoppage



- No Parking Violations
- Suspicious Vehicle Activity

## Vehicle Wrong Lane



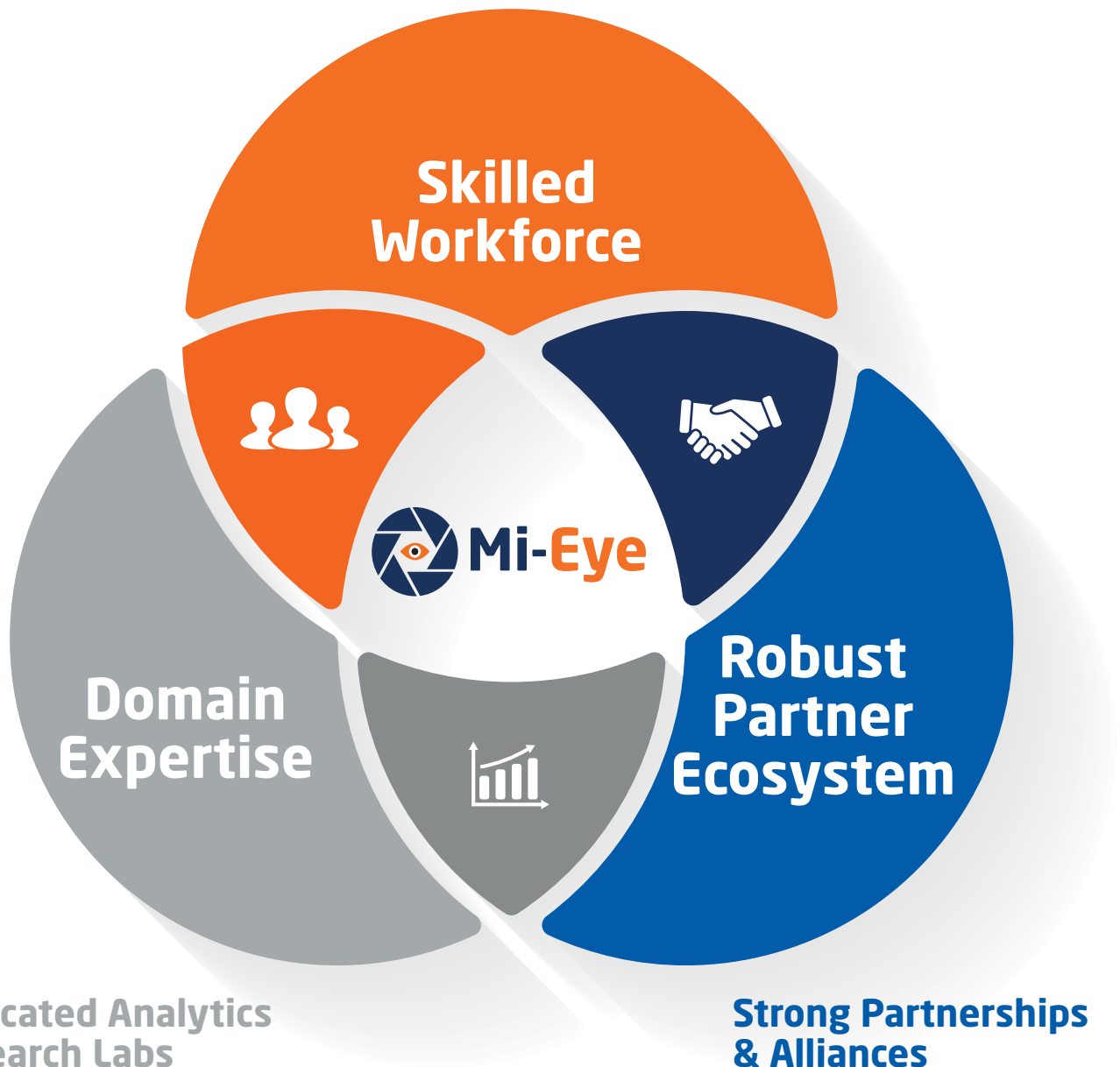
- Wrong Lane Driving



# The NEC Mi-Eye Advantage

## In-house Business and Domain Experts

- Data Stewards
- Data Scientists
- Big Data Engineers
- Architects
- Consultants & Data Analysts



## Dedicated Analytics Research Labs

- 30+ Man-years of Domain Expertise
- Myriad of Successful Analytics Projects
- Expertise in Designing and Deploying Solutions

## Strong Partnerships & Alliances

across Data Platforms and Analytics Solutions



# Why NEC

NEC is a leader in the integration of IT and network technologies and brings more than 120 years of expertise in technological innovation to provide solutions for empowering people, businesses, and society.

We possess deep expertise in the design and implementation of NEC Mi-Eye, NEC's Intelligent Video Analytics Solution with Japanese brilliance that helps businesses unlock the full potential of their video footage and gain a competitive edge in their industry.







# Mi-Eye

**Unlocking the Full Potential of  
your Surveillance system for  
Enhanced Decision - Making  
through End-to-End Video  
Analytics**

NEC

**1899**  
Established

**160+**  
Countries

**106K**  
Employees

**49K+**  
Patents

For further queries & demonstration, please contact

📍 NEC Corporation India Pvt. Ltd., 19th Floor, Tower C, Advant Navis Business Park, Plot 7, Sector 142, Noida, Uttar Pradesh 201305

🌐 [in.nec.com](http://in.nec.com) ✉ [marketing@in.nec.com](mailto:marketing@in.nec.com)

NEC © Copyright 2024. All Rights Reserved.