DEEPNORTH

Microsoft
Silver Partner

Video Analytics for the Public Enterprise.

Deep North enables federal, state and local governments, universities, schools and regulated industries to make the most of their CCTV investments. By using the Deep North AI platform, public sector customers can leverage existing CCTV video for a range of uses that decrease costs and that enable more effective delivery of citizen services.

Governments, universities, schools and regulated industries use Deep North for 3 primary uses:

- Enhanced operations and maintenance of public buildings, stadiums and airports.
- Parking management; and,
- Public safety.

Ideal Uses

Buildings
Public officials can know exactly how buildings are being used with real time information and reporting on occupancy, crowd density, pedestrian flows and dwell time.

Smart Cities/Pedestrian Flows
Public officials can know exactly how public areas are being used to aid with urban planning, capacity analysis, and public safety with real time information.

Parking Management
Receive real time analysis of parking utilization, notifications of over-parked vehicles, and historical reporting plus public safety alerts.

Stadiums
Track crowd density, people movement, parking and pedestrians and receive real time notifications of maintenance needs and public safety issues.

How does it work?

Public customers use video feeds from their existing CCTV infrastructure. This video is processed by the Deep North AI platform to provide customers with reports on building utilization, pedestrian flow, and parking utilization in near real time. Customers can also receive real time notifications of public safety and maintenance concerns. Today less than 2% of video is viewed and analyzed. By automating with Deep North, customers can analyze 100% of video in real time (a 50X improvement) and gain a historical record.

What can be mesured?

Age, Gender, Emotions People Demographics	**Parking Management** Vehicle Analysis	**Occupancy** Count People and Vehicles Entering and Exiting	**Repeat Visitors** How often do visitors return?
Queue How long are your customers waiting in line?	**Dwell** Time visitors spend in stores and zones	**Walk By** Traffic Walk by & Capture Thru Store entrance	**Heat Maps** Visual representation Of Zone Data
Engagement How do shoppers engage and with what product?	**Journey** Understanding the customer's journey in the store	**Conversions** Purchase and wait time analysis at chekout	**Alerts** Maintenance & Secuirty Alerts

By Using the Deep North Analytics Platform, public customers will realize the following benefits:

Cost Saving and Operational Efficiency

Deep North helps public customers to leverage tight budgets by automating efficiencies in operation and maintenance of public buildings, parking and pedestrian management, and safety in public spaces.

Improved Decision Support

Deep North helps public officials in decision support through real time notifications and comprehensive reporting on facility operations, the number of people in a public space, and unusual uses of public spaces.

Improved Citizen Experience

Deep North helps public officials improve citizen experience in public spaces by delivering real time analytics for pedestrian, traffic and parking flow and crowd management.

Enhanced Revenue

Deep North helps public officials to maximize revenue from public concessions when consistent with public policy. Examples are public sports stadiums, airports, parks, and retail operations located within public facilities.

Citizen Privacy

Deep North's Public Solutions are designed for object recognition – observing and counting objects, not for facial recognition – establishing personal identity. They do not establish personal identity without citizen consent and are GDPRU compliant.

When observing people, the Deep North platform assigns a unique identifier to each person, and uses that identifier to map pedestrian flows across multiple cameras in a public venue. The unique identifiers are only kept for a period of 30 days or as otherwise established by policy of the governing unit. Unlike law enforcement software, Deep North's public solutions focus on macro and meta data used for operations and public safety, not personal identity.

Enterprise Ready

Deep North delivers to the enterprise. A public customer can either view reporting for one specific project, or many public buildings and projects simultaneously at once. For multiple building projects, Deep North offers a dashboard capability to centralize data flows from multiple facilities in a command center model. Deep North delivers its solutions in either an "on premises" or Microsoft Azure cloud based hosted model, or in a hybrid model with video processing on premises, and processing of meta data in the Microsoft Azure Cloud. (See technical specifications)

Pricing

Pricing is set as a monthly subscription service based on a "per camera" charge, plus services for planning, implementation and ongoing support. Public customers can also negotiate enterprise pricing for multiple projects and buildings.

Technology

Our team of computer-vision engineers and mathematicians focuses on building Deep-Learning algorithms and advance cloud architecture. The result: A truly innovative and intelligent platform for analysing human behaviour in the physical world.

- Motion and Object Detection
- Object Tracking
- Cross Camera Tracking
- Action and Gesture Detection
- Demographics of People in the Physical World