CASE STUDY

Namchi, the 'Sky-High City' becomes 'Smart City' with Videonetics AI powered Unified Solution

ORGANISATION
Namchi Smart City Limited

SYSTEM INTEGRATOR
Astrikos Consulting Pvt. Ltd

LOCATION
Namchi, Sikkim, India

INDUSTRY SEGMENT
Smart/Safe Cities

SOLUTION
- Intelligent VMS
- AI & DL powered Video Analytics

THE CHALLENGE

Situated at an altitude of 5500 feet above sea level, Namchi (**means *Sky High)*** is one of the famous and biggest tourist destinations in Sikkim, a state of northeast India. Surrounded with spectacular view of the mountains, emerald and green forest, Namchi is well-known for its old monasteries, sacred temples, and annual festivals such as Namchi Mahotsav.

Namchi was selected to be part of the Smart Cities Mission, an ambitious programme of Govt. of India. Under this programme, the city aspires to be a 'world-class' tourist destination and simultaneously maintain ecological balance with a vibrant community, offering an enriched quality of life supported by a robust local economy.

In recent years, the city infrastructure has also shown rapid growth and welcoming thousands of tourists each year. Hence, making the city vulnerable to threats driven by overcrowding, chaotic traffic, haphazard parking in addition to other law & order issues.

In the first phase of the project, the Namchi Smart City Limited wanted to cover its citizens as well as tourists with a robust surveillance system with proper traffic management without disrupting the normal day to day activities.

THE SOLUTION

After thorough assessment of the requirements and consequent discussions with the officials of Namchi Smart City Limited, Videonetics designed modular and scalable unified solution, based on its Intelligent VMS and AI & DL powered Video Analytics, aimed to ensure continuous monitoring, efficient traffic monitoring, quicker response times and faster access to evidence in case of investigations and law & order management.

Eyeing on every corner of the city

A group of over 120 IP Cameras have been installed at the important locations to monitor the entry and exit points connecting to the city, public ways, transport hubs, tourist attractions, markets, streets, traffic junctions to name a few. Now, security operators can easily view and manage citywide deployed IP cameras with intuitive interface of Videonetics Intelligent VMS, having complete situational awareness and can respond smartly to critical situations. Moreover, the smart navigation feature of Intelligent VMS allows simultaneously viewing of the live and the recorded videos in the same interface, which helps in prompt investigation of past activities without taking their eye off from the current incidents.

Parking and Directional Analytics

Namchi being a hilly terrain, has narrow roads with limited scope of turning it into broader ones, the authorities used to manage the traffic by declaring some of the roads as one-way carriage. Frequently, the city faced chaotic traffic congestion and accidents, due to unauthorized parking and wrong-way driving. To address such concerns, Videonetics Artificial Intelligence powered video analytics including No Parking Detection and Wrong-Way Movement Detection, were deployed to detect such situations. Operators are notified as soon as any vehicle is parked in a restricted zone and if any vehicle moves in the wrong direction.

The Videonetics unified solution empowers command control operators to receive real-time insights from the city and upon recognition or prediction of unusual behaviour, they receive an immediate alert and notify the authorities.

Centralized view of the city

Videonetics Intelligent VMS and Video Analytics application are seamlessly integrated with Namchi Operations Center (NOC), an Integrated Command Control Center (ICCC), to simplify the response coordination between stakeholders and speeding up incident resolution. Working in conjunction with city administration, control room operators can switch from camera to camera using dynamic maps, empowers them to obtain critical event information as well as manage emergency situations by alerting respective stakeholders for quick action. And when necessary, Videonetics unified solution makes it possible to share forensic videos across departments, facilitating more collaborative and successful response efforts.

Namchi adapting to 'New Normal' with COVID-19 War Room

As the coronavirus pandemic evolves with different waves, Namchi smart city officials decided to transform ICCC to COVID-19 War Room by seamlessly integrating with Crisis Control Response and Mitigation System (C2RMS), an operational intelligence platform from Astrikos Consulting and Videonetics unified solution. By having this powerful and distinctive integrated solution, operators monitor violation of COVID-19 guidelines such as social distancing, crowd formation, people gathered without masks, predicting gathering and so on from the command control center and provide actionable alerts to authority or on-ground officials, for effective enforcement and decision making.

In parallel, C2RMS proactively monitors and assess the spread, deeply conducts preparedness assessment, and delivers real-time insights on capacity management of hospitals such as status of hospital beds, oxygen, PPE Kits etc, to the authorities.

THE RESULT

The sagacious collaboration between Videonetics, Astrikos Consulting and Namchi Smart City Ltd, has become an exemplary model for other cities.

Videonetics Unified Solution has exceeded city administration's expectations in terms of its intuitive functionalities, identifying suspicious activities and ensuring smooth traffic movements. And the solution's open architecture allows the seamless addition of more cameras and integration with other security systems as the city continues to grow and identify more needs. It signifies future development potential with maximum impact on people.

Furthermore, the integrated solution has been extremely helpful for the city authority in aggregating and visualizing the video data collected over time, to deliver critical statistical information such as directional traffic data, traffic flow insights, hotspots of public gathering etc. Eventually, increasing the situational awareness, standardizing response protocol and implementing SoPs at city level and enhancing collaboration across various departments/bodies emphasizing "the citizens come first" mindset of Namchi city.

> *"The integration between Videonetics unified solution, ICCC and C2RMS is integral to the success of the deployment. Securing Namchi was a very fulfilling project to be part of and we are gratified to partner with Videonetics for this project. The minute level of details that Videonetics brings to the project is admirable and we look forward to collaborating with them in near future"* expressed, **Dr Chinmay Hegde, CEO & MD of Astrikos Consulting Pvt. Ltd.**

Making the world a safer, smarter, happier place.

Videonetics's Unified Video Computing Platform (UVCP™) helps you make sense of surveillance, by providing you with an end-to-end solution for a wide range of applications. The platform is powered by our Artificial Intelligence and Deep Learning engine, which is trained on humongous data sets, making our solutions incredibly robust and smart. All our products and solutions are integrated yet modular, ONVIF compliant, OS and hardware agnostic, scalable and interoperable.

Videonetics has been ranked among the top video management software providers, and among the fastest growing technology companies, in Asia Pacific. And we remain driven by innovation, and committed to making the world a safer, smarter, happier place.

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