



## Ho Chi Minh City Project

**Ho Chi Minh City, Vietnam. Tri Nam Group - Incident Management helps reduce fatalities.**

### Mission

With a dense and mix traffic, especially with a large number of motorbikes, traffic accidents are the largest contributing factor to fatalities in Vietnam.

Ho Chi Minh City Council had already invested in a large network of Pan-Tilt-Zoom (PTZ) cameras to monitor traffic but wanted to enhance the system capabilities by adding analytics to go beyond traditional surveillance.

The City Council have been trying to identify incidents in real-time in order to optimize response time and efficiency of the police, ambulance and even fire departments dealing

with traffic incidents and accidents. A better response time and understanding of the events through the live and recorded videos are paramount to reduce the impact of incidents for the Tri Nam Group, Citilog's local partner, with more than 10 years of experience developing ITS products and solutions for the Vietnamese market, helped the City Council designing and then implementing the required solution.

### Solution

Understanding the City Council needs and requirements for analytics and after several months of thorough testing,

Tri Nam Group proposed Citilog's solutions primarily to target automatic detection of traffic accidents and illegal parking. Since Ho Chi Minh City traffic command and control centre was already using some Axis Communications PTZ cameras (P5624-E), it was a very easy implementation of the Citilog Edge solution, which did not require any additional hardware since the analytics is running directly in the cameras.

The addition of the analytics is therefore an added value to a previous investment, which doesn't require anything but a software installation and configuration.

# “Citilog Incident Management system helps in identifying incidents and illegal parking in real-time, thus helps the City Council in reducing fatalities rate by 30%.”

Mr. Pham Ha Duy, Head of ITS Department, Tri Nam Group

The first phase of the project sees 20 previously existing PTZ cameras now enhanced with automatic incident detection for stop vehicles and illegal parking detection.

Additionally, detection of fallen object was in consideration, since a fallen object in a busy traffic is common in Ho Chi Minh City which potentially causes incidents to motorcyclists.

## Results

Citilog Incident Management system reports incidents and illegal parking in specific critical points in the city in real-time so that appropriate actions are being taken in a fast and efficient way to activate the relevant authorities and eventually ease the traffic and cater to affected parties.

With the strong capability in the ITS domain and understanding of traffic software solutions, Tri Nam Group had successfully addressed the end customer needs by implementing Citilog's Incident Management solution on an existing pool of Axis cameras.

In addition to reliably delivering the required features, the project demonstrated the benefit of edge computing, which allows to increase the abilities and outputs of a surveillance system the City Council had already previously invested in.

Mr. Pham Ha Duy (Head of ITS Department) is very impressed and contented with Citilog solutions: “Thanks to Citilog Incident Management and with our experience in software solutions, we managed to implement a reliable system for detecting incidents and illegal parking with an accuracy

of more than 94%, which meets the requirements and expectations of the City Council.” “This allows the City Council to leverage on existing PTZ cameras to better manage incidents and illegal parking in real-time, thus providing a safer city in Ho Chi Minh City.”

Another attractive feature of the technology was the ability to implement the operator interfaces in Vietnamese language, making it simple for the operators to adjust to and operate the new tool.

| Ngày                  | Camera | Làn đường | Loại sự cố |
|-----------------------|--------|-----------|------------|
| 4/30/2020 11:53:31 AM | 5      | 100       | Tai nạn/Sự |
| 4/30/2020 9:45:19 AM  | 6      | 100       | Tai nạn/Sự |
| 4/30/2020 9:23:14 AM  | 6      | 100       | Tai nạn/Sự |
| 4/30/2020 7:55:34 AM  | 5      | 100       | Tai nạn/Sự |
| 4/30/2020 6:31:44 AM  | 5      | 100       | Tai nạn/Sự |
| 4/30/2020 6:13:03 AM  | 6      | 100       | Dừng đỗ    |
| 4/30/2020 4:43:37 AM  | 5      | 100       | Dừng đỗ    |
| 4/30/2020 1:46:59 AM  | 16     | 100       | Dừng đỗ    |
| 4/29/2020 11:57:08 PM | 16     | 100       | Dừng đỗ    |
| 4/29/2020 11:00:32 PM | 18     | 100       | Dừng đỗ    |
| 4/29/2020 10:29:53 PM | 5      | 100       | Tai nạn/Sự |
| 4/29/2020 9:40:24 PM  | 6      | 100       | Tai nạn/Sự |
| 4/29/2020 9:05:41 PM  | 6      | 100       | Tai nạn/Sự |
| 4/29/2020 7:28:01 PM  | 6      | 4         | Dừng đỗ    |
| 4/29/2020 6:39:48 PM  | 11     | 2         | Dừng đỗ    |
| 4/29/2020 1:50:02 PM  | 5      | 100       | Tai nạn/Sự |
| 4/29/2020 1:04:38 PM  | 6      | 100       | Tai nạn/Sự |
| 4/29/2020 10:15:39 AM | 6      | 100       | Tai nạn/Sự |
| 4/29/2020 7:36:57 AM  | 16     | 100       | Tai nạn/Sự |
| 4/29/2020 1:17:57 AM  | 9      | 4         | Dừng đỗ    |
| 4/29/2020 12:49:48 AM | 16     | 4         | Tai nạn/Sự |
| 4/29/2020 12:02:00 AM | 16     | 1         | Dừng đỗ    |

| Ngày                 | Camera         | Làn đường | Loại sự cố | Thời lượng | SRV/SOL |
|----------------------|----------------|-----------|------------|------------|---------|
| 5/18/2020 9:18:36 PM | Hoàng Văn Th.  | 100       | Tai nạn/Sự | 00:01:00   | SRV/SOL |
| 5/18/2020 9:18:36 PM | Hoàng Văn Th.  | 100       | Tai nạn/Sự | 00:01:01   | SRV/SOL |
| 5/18/2020 9:18:36 PM | Cong Hoa - Ho. | 100       | Tai nạn/Sự | 00:01:02   | SRV/SOL |
| 5/18/2020 9:18:36 PM | Cong Hoa - Ho. | 100       | Tai nạn/Sự | 00:01:02   | SRV/SOL |
| 5/18/2020 9:18:36 PM | Cong Hoa - Ho. | 100       | Tai nạn/Sự | 00:01:02   | SRV/SOL |
| 5/18/2020 9:18:36 PM | Cong Hoa - Ho. | 100       | Tai nạn/Sự | 00:01:01   | SRV/SOL |