HELPING A FRENCH PUBLIC SAFETY AGENCY USE ANALYTICS TO DRIVE EFFECTIVE POLICE SOLUTIONS

Created in 2010, the Service des technologies et des systèmes d’information de la sécurité intérieure (ST(SI)2) addresses the combined needs of the French Gendarmerie and the National Police Force. Responsible for information systems, networks, advanced technologies, and operational support, the agency is tasked with supporting the information, communications and technology needs for both policing forces. In particular, ST(SI)2 oversees and addresses the technology demands of policing critical environments, such as large-scale public events, where security matters are a priority.

Affiliated with the French Ministry of Interior, ST(SI)2 is familiar with the government’s view that analytics—that is, the mining and management of data insights—is an important means to enhance public safety and support policing efforts. In particular, protecting the public at densely populated events using real-time video is of interest to the agency as a means to improve information accuracy, decision making and enhance the performance of the operational teams. Backed by the national police force, ST(SI)2 approached Accenture to pilot its video analytic service platform at a major event to evaluate the potential benefits of employing this police technology.

Business challenge
The Grande Braderie de Lille is a traditional antiques and bric-a-brac street market held in Northern France in early September each year. The event receives national media coverage and takes place over two days. In a town that with a normal population of 230,000 inhabitants, the event can see an influx more than two and a half million people—a considerable challenge from both a logistics and security perspective for the local public safety agencies. Activities are channeled into one of three zones: areas, often favorable locations, where traders are licensed to sell, trading areas where licenses are not required and restricted areas (known as the “red zones”) where trading is prohibited.

Unsurprisingly, there are multiple public safety issues with an event of this size and scope:

• Keeping people and vehicles moving, both within the city center and in the outskirts of Lille
• Managing citizens with “difficult” behaviors (such as being drunk, disruptive, or inconsiderate in their car parking)
• Assisting people with unexpected emergencies, such as being lost or needing medical attention
• Helping to generally maintain law and order (preventing damage to goods or resolving issues in the retail outlets and restaurants).

How Accenture helped
Working with a mobile CCTV unit deployed by the Direction Centrale des Compagnies Républicaines de Sécurité (DCCRS), Accenture introduced its video analytic service platform—a surveillance tool with data analytics capabilities that aimed to complement and enhance existing safety measures at this extensive public event.

Once the French national police had installed eight mobile video cameras in strategic locations, Accenture used
portable servers to set up its video analytics service platform and began configuring the most appropriate parameters to achieve the desired data results. In a matter of hours, and without any negative impact on police officer duties, the video analytics service platform was fully operational from the mobile unit.

Using information supplied by Compagnie Républicaine de Sécurité (CRS) police officers, the single-user platform combined video analytics with advanced analytics—such as simulation models and machine learning—and was customized to reflect a number of different scenarios at the event. A command and control application notified police officers when security was compromised via a series of alarm warnings. In this way, the police could identify unwelcome zone behaviors or incidences and gain meaningful insights through CCTV real-time footage. For instance, a bag that may have been left unattended or a trader who had started selling goods in a restricted zone was quickly flagged by the video analytics service platform and a pop-up warning of the issue was visually displayed.

By adding a layer of analytics insights to the standard CCTV footage, police officers were able to detect and assess far more incidents, providing a better service to citizens and improving safety throughout the event. What is more, the portable system connected to existing external policing systems to create greater intelligence.

How it worked

In an attempt to measure the pilot’s success, an assessment was carried out from the beginning of the trade fair on Saturday morning until it closed at the end of the first day. The video analytic service platform parameter settings were then adjusted in readiness for the second day of the pilot. The first day focused on the use of detection tools and alarms to create alerts for vehicles, objects or people in the restricted red zones as well as “people counting” to get a clear sense of the number of visitors. The second day extended the scope of the platform’s capabilities to focus on facial recognition and abandoned object detection.

Many alarms were initiated by the platform and saw an effective and coordinated response that brought real benefits to the role of public safety officials:

- **Citizen assistance:** 502 people (versus 450 in 2013) were supported by multiple aid stations in various areas and 154 were sent to hospital by emergency services (versus 120 in 2013). Three adults and 13 children who had been lost were returned to their families.
- **Maintaining people flow:** security contraventions were more easily identified and swiftly dealt with, helping to identify traders who had begun to set up their stall in a restricted zone, and remove offenders before any major congestion was caused.
- **New algorithms established:** tests were undertaken to aid future monitoring.

High performance delivered

The video analytic service platform pilot was deemed successful by all parties involved.

“With a simple interface and reliable alerts, the video analytic service platform proved itself to be highly effective in this extreme example of our operational work,” said a senior officer from Compagnie Républicaine de Sécurité, present during the pilot. “Maintaining public safety in a controlled and accountable way means that we can more easily gain the support and confidence of the public—an essential ingredient in an environment when you are seeing a tenfold increase in the normal population in a short space of time.”

By increasing operational support, enhancing the performance of its current system and gaining the opportunity for real-time decision making, STSI² has not only helped to improve public safety, but also progressed along its journey in delivering public service for the future.