INCREASING POLICING AND INVESTIGATION EFFICIENCY WITH BRIEFCAM VIDEO ANALYTICS

Taitung 臺東縣政府
County Government

THE GREEN BACKYARD OF TAIWAN

In Taiwan, Taitung County is known for its natural beauty. Referred to as "Taiwan's backyard," the region is long and narrow, surrounded by mountains and the sea. It is a densely populated area with over 200,000 residents and 16 townships and cities. The county has a strong a commercial presence, and, therefore, having robust security resources is a top priority for protecting resident, business, and visitor interests in the county.

The Taitung Police face complex security challenges and are tasked with investigating criminal cases such as theft, vandalism, and injury, as well as traffic accidents. The field units of the precinct rely heavily on access to crime scene monitors and analysis of the people and vehicles involved, in addition to interview notes and forensic evidence collection. Despite their importance, there is a dearth of required surveillance devices in this jurisdiction. While Taiwan's six "special municipalities" have access to first-tier forensic resources and a vast police public surveillance network; the cities of Taitung rely heavily on the community to contribute evidence captured by private surveillance devices. It is, therefore, necessary for the emerging generation of regional police officers to be proficient in reviewing and analyzing video evidence from various sources.

THE CHALLENGES OF CRIMINAL INVESTIGATION

Historically, the police's only recourse for investigating the high incidence of criminal behavior, such as burglary and violence, was manually reviewing public and civilian surveillance footage. Analyzing video second-by-second to identify the people and vehicles involved in each case, investigation progress was slow and inefficient, and the officers faced many challenges. Firstly, they were analyzing video of varying quality, and, in many cases, identification of gender, clothing, and other evidentiary characteristics was not possible with the naked eye. Officers could not easily discern how suspects were fleeing the scene or pinpoint escape vehicles and their routes.

Technically, the varying public and private surveillance resources – collected from different hardware and software brands and models – were not compatible with a single playback software, adding to the time and technology investments required to facilitate video investigation.

Beyond the challenges of the video analysis itself, the police struggled with the time and manpower required to review the evidence. Choosing between sending officers to the field to prevent crime and dedicating officers to reviewing video surveillance, law enforcement was working under pressure and investigating unproductively and unsuccessfully.

Even when the video investigation could be executed within its statute of limitations, secondary video review was still required to validate the original findings and further support them, demanding even more precious time and resources.

POLICING ENHANCED BY AI-DRIVEN TECHNOLOGY

To combat the operational challenges of conducting video investigation, the Taitung Police worked closely with systems integrator Chunghwa Telecom and Square Information Technology to implement a solution that would integrate seamlessly with their NX VMS and extensive camera network from different vendors. Their goal in the project was to empower law enforcement to productively pursue criminals and effectively protect the community. Integrated in July 2019, the BriefCam Video Analytics Platform enabled the police to streamline their efforts with deep learning-driven video review and proprietary VIDEO SYNOPSIS® technology. "BriefCam offers a user-friendly, intuitive, and visual tool that speeds up video investigation," noted the Public Security Section Chief of the Taitung County Police Bureau. "By integrating this solution, the officers can search video immediately and efficiently, based on a broad set of filters and save significant time in detecting key evidence."

Investigators are now able to pinpoint persons and objects of interest in video by filtering based on people classifications (male, female, child), clothing characteristics (color, hat, mask) as well as speed, direction or path of travel, and fully integrated face matching and license plate recognition. These advanced search analytics enable law enforcement to find targets with ease and speed and focus their investigation on the specific video and objects that relate to each case.

Most importantly, by enhancing their efforts with AI-powered video search and filtering, the police only require one person to operate the software and conduct video investigations – saving significantly on manpower and freeing up officers to actively serve the community through public safety and emergency responsiveness. Per the Police Section Chief, the technology has enabled the police to exert "half the effort" and achieve "twice the results."

These capabilities have made evidence collection more efficient but have also critically enabled investigators to build their cases effectively with tools to bookmark suspicious objects and video clips. The BriefCam software can ingest multiple surveillance video and image file types. Whereas, in the past, disparate file formats slowed down the video review and analysis process, BriefCam enables the police to work with many different file types and investigate with speed and precision.

PRODUCTIVE POLICING, DRIVEN BY VIDEO DATA

BriefCam has empowered the Taitung Police to better understand and analyze events and environments captured in surveillance video. Enabling video search based on extensive object filters, BriefCam helps the police pinpoint critical evidence and focus their investigations, saving time and maximizing efficiency, rapidly delivering detailed intelligence for analyzing and solving cases. As the public security chief explains, "BriefCam has transformed our police investigation into a truly intelligent process. Whether we are trying to understand the movement of the people or vehicles involved in a case or provide critical evidence to support our findings, the software helps us analyze and realize the full potential of video data at our disposal."

ABOUT BRIEFCAM

BriefCam® is the leading provider of video analytics software that enables people, companies, and communities to unlock the value of video surveillance content. Delivering accurate, flexible, and comprehensive solutions, BriefCam's video analytics platform provides valuable insights for accelerating investigations, increasing situational awareness, and enhancing operational intelligence. VIDEO SYNOPSIS® technology is a registered trademark of BriefCam, Ltd. For more information about BriefCam's video content analytics solutions, visit www.briefcam.com.