



How Software-Driven Tools Help Officers Work More Effectively

As law enforcement transitions from analog to digital environments, officers need tools that allow them to investigate crimes and gather evidence more efficiently and effectively. Today's powerful, rugged handheld, tablet and mobile computing devices and innovative software applications enable law enforcement officers to take full advantage of the latest technology and innovations.

Police have always relied on data to prevent and solve crimes. In the pre-digital age, push pins tracked crimes on a map, mugshot cards helped victims identify suspects and file folders held intelligence info about repeat offenders. With the digital revolution, police data collection has been changed—for the better.

Today law enforcement officers rely on innovative software, tracking systems and mobile tools that increase productivity and help them serve communities more effectively. Officers put these tools to use investigating crime scenes, interviewing witnesses, documenting the scene, collecting physical and forensic evidence, and performing custodial investigations.

Advanced police technology includes three main components: edge computing tools that leverage artificial intelligence (AI) and machine learning to collect critical data; predictive policing analytics tools that extract insights and patterns from data to help agencies solve and prevent crimes; and mobile technology that makes the information accessible to law enforcement officers when and where they need it.

Advanced Software Systems

Today's police agencies use multiple software applications to support their missions, such as computer-aided dispatch (CAD) and record management systems (RMS) to automate routine tasks for improved productivity. Emerging technologies such as data analytics software and AI can increase the value of those applications.

In addition to CAD and RMS data, police commonly collect voice, video and text data using software applications on dashboard cameras, body-worn cameras and other mobility devices. They also rely on national sources of data such as the Criminal Justice Information Services (CJIS) database.

Advanced analytics systems can identify crime trends and provide insights that help agencies better understand the communities they serve. For example, analyzing crime incident data can show police leadership potential locations to send police officers to better manage limited resources. Adding in non-traditional sources of information, such as social media, weather, IoT and community data, can provide valuable insights that predict potential crime situations and support resource deployment and crime investigations. And with AI tools such as facial recognition that maps biometric data to a database of known faces, officers can take crime investigation to a new level.

AI's Emerging Role

AI is making waves in every industry. In police work, it's looked upon as an emerging technology that will help officers make decisions and perform tasks faster. What many officers don't know is that they are already using AI in software apps they use every day.

License plate recognition (LPR) systems, for example, use AI to learn where a plate has been in the past and whether a vehicle was at the scene of a crime, to show travel patterns, and to reveal vehicles associated with each other.

Police officers use CAD systems to receive and retrieve information from department RMS. When they analyze this data, they use AI to spot crime trends and patterns. Digital video recorders also use AI. Body-worn and in-car video cameras both rely on AI. The technology allows law enforcement to analyze video footage faster and identify relevant information, as well as redact identifying information before releasing video footage to the public.

Speech recognition tools also use AI to increase the quality and speed of reporting. This software uses machine learning to understand the speaker's voice. Using this tool prevents human errors in reporting, such as misidentifying the speaker's voice from witness testimonies, interrogations and other audio-visual materials.

AI has shown its usefulness in policing. But while AI provides important insights within policing software, the technology must be part of a total framework that collects and analyzes data, then delivers it to officers in the field.



Rugged Mobile Tools: Confidently Gather Data at the Edge

Mobile computing solutions let law enforcement officers access data in the field, improving productivity and situational awareness, and contributing to more-informed decision-making. Access to critical information when and where they need it keeps officers aware of their surroundings and improves performance while keeping costs down.

Rugged mobile devices—laptops, handhelds and tablets—can be used to control robots and drones, receive and interpret information from software tools, record witness and suspect interviews, and collect evidence, whether in the squad car or on the street.

Rugged mobile devices are ideal for police work. Those tested and certified for MIL-STD-810G can withstand extremes in temperature, weather, humidity, altitude, vibration and accidental drops. They are also dust, fluid and shock resistant.

+ Enterprise-Grade Tech Meets Police Needs

When an Eaton County, Michigan, agency switched from Panasonic tablets to consumer-grade devices to save money, their devices broke down and over-heated in daily use. But when that agency upgraded to Panasonic Connect TOUGHBOOK® tablets, preloaded with critical software, officers had rugged mobile systems designed to withstand the rigors of policing. The devices proved to be cost-effective over time and contributed to increased officer productivity.

Mobile computers must offer ease of use. Any computer used by law enforcement to collect, store and send digital evidence also must be secure. These systems must have prompt anti-virus and malware updates, encrypt data for transmission, and maintain a secure chain of evidence.

Create the Future of Police Work Today with Panasonic

The future of optimized police work includes connecting officers in the field to command central with robust, resilient tools in the squad car or on foot that help improve police response, situational awareness and efficiency.

Panasonic Connect TOUGHBOOK devices meet the mission-critical challenges of public-safety information sharing with mobile solutions that include rugged laptops, tablets and smartphones tested to rigorous military standards; industry-leading software and hardware; and a comprehensive service offering of professional services to help agencies plan, test and deploy their technology.

Professional Services to Support Law Enforcement Pros

The Roswell (Georgia) Police Department deploys three different TOUGHBOOK models. Each is outfitted for a unique role, relying on the Panasonic ProServices team to build, install and support its mobile units, ensuring the tools have maximum operational uptime for officers.

Panasonic also configures and customizes TOUGHBOOK devices to handle data retrieval and analysis programs, run license plate numbers, scan photographs, or organize case details. Their robust processing power allows systems to run several demanding software programs at the same time.

Learn more about how Panasonic mobile solutions are raising the bar on information sharing to help officers stay vigilant while serving and protecting their communities.

For more information about how Panasonic can help law enforcement, explore the Panasonic [law enforcement page](#) or visit the [Resource Center](#).

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>The TOUGHBOOK Advantage

Panasonic offers four rugged mobile computing options ideal for the conditions officers face every day:

TOUGHBOOK 55: A 14-inch semi-rugged laptop that features an innovative modular design to switch out tools like optical drives, authentication readers and dedicated graphics, and up to 40-hours of battery life with an optional second battery.

TOUGHBOOK 33: A 12-inch, rugged 2-in-1 computer that is both a tablet and a PC, giving officers a portable tablet or a full laptop experience for heavy-duty data entry.

TOUGHBOOK G1: With this thin, powerful, rugged 10.1-inch tablet running Windows® 10 Pro 64-bit, officers can access CJIS databases, dispatch assignments and more. HD graphic performance helps capture and document images with clarity.

TOUGHBOOK N1: Officers can use this powerful, slim and rugged handheld to check drivers' licenses and for e-ticketing. Dual speakers offer noise and echo cancelling in loud environments such as a roadside stop. Includes voice capabilities and supports AT&T Enhanced Push-to-Talk (EPTT).