

Utilization of Modern Techniques in Enhancing Effective Policing in Tirunelveli Police Range, Tamil Nadu

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Abstract

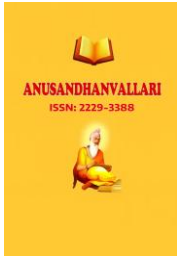
Technology today has a special place in everyone's life because it not only contributes to the growth of the individual but also to that of the nation and the entire planet. With new initiatives for nations to exchange information on criminals, suspects, and new policing methods, the police have achieved a significant level of technological superiority in pursuing their organizational goals, particularly as a means of crime control from a technical standpoint. Throughout history, humanity has reaped immense rewards from ongoing technological progress. New technologies bring with them tremendous benefits, including advances in the standard of living, increased human lifespan, and prosperity unimaginable in previous eras. At the same time, they pose critical questions for and about humanity, and also create significant potential dangers that must be addressed. The risks and benefits associated with the emergence of powerful new technologies need to be carefully weighed for a safe and stable future for the human race.

Keywords: Technology and Society, Technological Advancement, Police and Technology, Crime Control Technologies, Future of Technology.

Latest Technological Developments In Policing

The police in India need to foster a technological revolution making full use of the several technological innovations employed by police forces in other parts of the world. There are two general types of technological innovations that can be identified: information-based technologies (which can be identified as soft technology) and material-based technologies (which can be identified as hard technologies). Both types of technological innovation have been providing the unforeseen changes in the organization of police. A representative list of new technological tools which are used worldwide are discussed below, separating hard material based technological innovations from soft information based innovations. Although this list of new hard and soft technologies is not complete, but a sincere attempt has been made to capture the range of technological innovations currently being applied in police settings, both in this country and abroad.

Face Recognition System



The FRS (Face Recognition System) application is a tool used by the Tamil Nadu Police to identify individuals through facial recognition. It was developed by CDAC-Kolkata and launched on October 4, 2021. The application compares a person's photo with a database of over 5.30 lakh images on the Crime and Criminal Tracking Network System (CCTNS).

The face recognition technology enables the police to track and capture single or multiple images of faces of persons when they move through an area covered from all angles by the cameras. The faces that are captured by the surveillance cameras are compared with the suspects' photos in police files. The photos of wanted persons and others who are stored in the criminal database of various law-enforcement agencies will be identified by the facility. If the face of a person which appears in the surveillance camera matches with the visuals of the person in the police records, then the system will immediately give an automatic alert. According to police officials, the suspects cannot fool the system by varying one's facial expressions, altering posture, making changes to hairstyle, growing a beard or by wearing glasses.

Track KD app

This application is specifically designed for criminal profiling and tracking, providing a comprehensive profile of criminals, including their photos, addresses, and case details. With the use of the "Track KD" app, the Tamil Nadu Police can now follow repeat criminals across the state's 39 districts and nine commissionarates. According to state police, the App has digitalized the information on 30,000 habitual offenders from across all districts and commissionarates.

The police will be able to track the state of their bail, the expiration of the bond given, the progress of the cases, and the trial dates with the aid of the app.

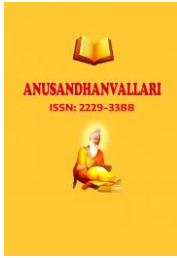
Additionally, the app will be able to track the criminal and the gang he belonged to, as well as the crime in which he participated. Also discussed will be the criminal's method of operation and the nature of the offence.

Senior police will be able to track the activities of habitual criminals in their particular jurisdictions with the use of the information in the app.

Police Technology Surveillance: CCTV

The use of closed-circuit television (CCTV) surveillance cameras is a method of formal surveillance that helps with crime prevention, the detection of offenders and crowd control or public order scenarios. CCTV surveillance assists in solving crimes by examining the movement of suspects and identifying suspicious activity occurring in real-time. Though not all CCTV systems are police-monitored, police-monitored CCTV cameras are designed to increase formal surveillance by making it easier for police to monitor suspicious activities and disturbances.

- CCTV with video content analysis
- Conducting follow-up investigations
- Targeting identified high-risk areas
- Implementing directed patrols in high-risk areas
- Implementing saturation patrols in high-risk areas



Kaaval Uthavi App

The Tamil Nadu Police has launched several apps for citizen safety and services, including the Kaaval Uthavi app and the Kavalan SOS app. The Kaaval Uthavi app allows citizens to send emergency alerts to the control room for immediate assistance, while the Kavalan SOS app, launched as part of the Tamil Nadu State Police Master Control Room initiative, focuses on women's safety. Additionally, there are apps for police verification, lost document reports, vehicle verification, and FIR/CSR status updates, according to the Tamil Nadu Police Citizen Portal.

There have been several instances of late when the Tamil Nadu police's app, Kavalan SOS, has come in handy for users during an emergency. Be it harassment on the road or intrusion at home by strangers, the police have responded to those who used the app. While the app was launched in May 2018, downloads shot up after the 2019 Hyderabad rape incident. The police have also conducted several awareness programmes in schools and colleges on the benefits of the app.

The Role Of Police Technology In Modern Policing

Technology plays a critical role in modern policing thanks to the plethora of technological advancements, and there is a history of policing and technology going hand in hand. Modern police technology has allowed police agencies to find innovative ways to leverage new technologies as tools in order to improve public safety and save lives.

Police Technology Surveillance: Police Drones

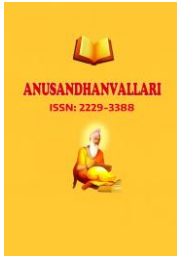
Unmanned aerial vehicles, or drones, have become increasingly common within policing. Drones provide law enforcement with an aerial view of an environment by live-streaming videos and images. The main benefit of this police technology is the gathering of important information about crimes as they unfold, and using the videos and images for collecting evidence.

Most Commonly Used Police Technology: GPS

GPS applications are continuing to expand into the public safety community, improving communication and making crime-solving easier for law enforcement. Officer tracking is one form of GPS that allows for better coordination of where officers and vehicles are. Using GPS, 911 dispatchers and police officers can pinpoint the exact location of a call, allowing officers to determine the safest and fastest route. Officers can also record their location at traffic stops and crash accidents, allowing for precise information to be exported to agency maps so they can proactively determine what measures need to be taken in order to prevent future accidents from occurring. GPS is one of the most commonly used police technologies and is extremely helpful for agency communication and coordination.

Modern Technology In Policing: Body-Worn Cameras And In Car Videos

Body-worn cameras have gained significant traction in modern policing. Many law enforcement agencies across the nation have adopted the use of body-worn cameras in an effort to increase transparency and visibility in interactions between law enforcement and civilians.



While increasing police accountability, body-worn cameras have the potential to also aid in officer training. When officers are faced with challenging situations, police departments now have that footage available, and it can be used to show officers in training. Departments can thus analyze civilian-police interactions and provide training material for new police officers.

Similarly to body-worn cameras, in-car videos, or dashcams, also provide law enforcement with transparency in regard to policing. Dash cams have been proven to enhance police officer safety while also reducing police department liability.

Advanced police technology: Biometrics and hand-held fingerprint scanners Biometrics and policing often go hand-in-hand. Police departments have used biometrics for decades, primarily by using fingerprints for identification purposes. Now, smaller and less expensive biometrics are available, allowing police officers to carry handheld scanners to instantly identify individuals with a criminal past. This being said, for obvious reasons, the use of biometrics is controversial due to privacy concerns. For this reason, the law enforcement industry has moved forward cautiously with the use of biometrics in modern policing.

What Are The Unintended Consequences Of Technology In Modern Policing?

While the role of technology has undoubtedly benefited law enforcement greatly, there have been adverse impacts on policing. Some of the major pushback regarding the previously mentioned technological advancements centers around privacy concerns. If police technology is being used wrongly or dishonestly by law enforcement or the government, it can cause social instability and severe backlash from the public. One of the most controversial pieces of police technology is body-worn cameras. The criticism towards body cameras is based on privacy concerns, and it's a sentiment shared by both parties—police officers and the general public.

Another unintended consequence of technology in modern policing is that officers need to pay attention to multiple devices at the same time. Adopting and using multiple devices at the same time can be extremely distracting to officers and can potentially put them in a dangerous situation.

Introducing new police technologies can be difficult for some police departments, and for individual officers. It's critically important for police departments across the nation to provide their officers with adequate training when a new technology is implemented into patrol and duty.

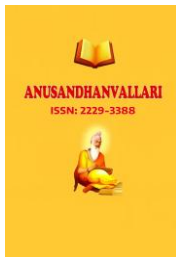
Role Of Technology In Police Department Operations

Police technology plays a crucial role in modernizing police department operations. The use of automated scheduling has alleviated the challenges and stresses that administrators face when trying to provide coverage for 24/7 policing operations. Certain software features have been proven to enhance agency operations and reduce operating costs.

If your police department is interested in modernizing its operations, reach out to our team to learn more about how in Time's software can improve your police operations and efficiency.

Conclusion

Technology remains a central focus in the organization and practices of policing. As a result of the technological advancements in the society at large has transformed the functioning of policing agencies by

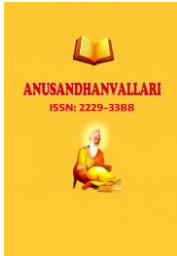


increasing use and dependence on technology. Modern society has expanded and become more interconnected, producing a new context within which law enforcement must operate. In part, these changes in addition to old challenges have motivated the adoption of new technology by police. These advancements have also facilitated international cooperation amongst law enforcement, with technologies enhancing the institutional autonomy needed for police agencies to cooperate across national borders. These technologies include not only advances in communication and transportation methods, but also pertain to the means of criminal identification which evolved into various forms that can be communicated among police of different jurisdictions. Technological advancements have not only provided police the tools by which to engage in collaboration, they have also provided an impetus for police collaboration by influencing the internationalization of crime.

Here is a sample **reference** section in APA style, based on the ideas and context in your passage. Since you haven't cited specific sources, I'll provide generic references which you can adapt or replace with actual sources:

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