ISSN: 2675-9128. São Paulo-SP.

Year V, v.1 2025. | submission: 2025-10-09 | accepted: 2025-10-11 | published: 2025-10-13

# The use of technology by military police in fighting crime

The use of technology by military police does not combat crime

Renata Trindade Rossi, Military Police-PR, renatatrindade425@gmail.com

## SUMMARY

Contemporary society is driven by information technology, and technological advancements in recent decades have provided tools that optimize various areas, including public safety. New devices and technologies enable rapid access, immediate responses, mapping, searches in high-risk areas, real-time communication, facial recognition, and more. This article aims to present these technologies and highlight how they are used by the military police and their benefits in combating crime. To this end, a literature review of articles published between 2018 and 2024 was conducted. The conclusion was that these tools bring greater transparency and security to police operations. However, in the case of social media and instant messaging platforms, standards and guidelines are needed to ensure the confidentiality of police operations and sensitive data.

**Keywords:** Security. Information technologies. Crime.

## **ABSTRACT**

Contemporary society is guided by information technologies, and the technological evolution that has taken place in recent decades provides tools that optimize various areas, including public safety. New devices and technologies enable rapid access, immediate responses, mapping, searches in high-risk areas, real-time communication, facial recognition, etc. This article aims to present these technologies and highlight how they are used by the military police and their benefits in combating crime. To this end, a literature review was conducted of articles published between 2018 and 2024. In the end, it was found that these tools bring more transparency and security to police operations, but in the cases of social networks and instant messaging platforms, there is a need for rules and guidelines that guarantee the confidentiality of police operations and sensitive data.

**Keywords:** Security. Information technologies. Crime.

## 1 INTRODUCTION

Information and Communication Technology (ICT) and devices originating from new technologies are fundamental tools for public security forces, both in investigative processes and in prevention and protection of society (Police Military, 2023). According to Almeida (2023, p. 3), "in recent decades, the technology of information has experienced unprecedented development. (...) public safety

has directly benefited from modernization in the acquisition and processing of information".

As Almeida (2023, p. 3) explains, "information technology can be understood as any technological device used to collect, store, process and organize data or knowledge of a company" or institution. The Committee Internet Manager in Brazil – CGI.BR (2018) highlights that ICTs represent one of the greatest foundations of contemporary society, based on information and quick access.

Technological evolution results in a wide variety of support tools for public security forces, including: long-range surveillance cameras range with high-resolution video and audio; drones for mapping, tracking and search; tablets that allow immediate searches without the need for contact with the central; artificial intelligence; and the social network itself as a communication bridge with the civil society.

When reflecting on the role of technology in public security forces, the question is: how do these tools positively impact the work of public security and the relationship with civil society?

To answer the question, the methodology adopted was a literature review specialized published between 2018 and 2024. The searches were carried out in the databases Google Scholar and SciELO and targeted publications in Portuguese and English (translated), with bibliographical references and full text.

The general objective of the article is to understand how each of the tools mentioned act in the daily work of the military police. The specific objectives are: a) present the technological tools; b) understand how they are used in everyday life; and c) to note the benefits of using technology in public safety.

## 2 TECHNOLOGY AT THE SERVICE OF PUBLIC SAFETY

According to Castells (2018), contemporary society has information as its its central point, giving rise to the so-called "information society" resulting from process of globalization. As a result, several new technologies and devices that facilitate and optimize daily life, including in the area of public safety.

Thus, surveillance cameras, drones, tablets, artificial intelligence and networks social activities become part of the daily life of the military police, acting as a tool in

more diverse situations; adding value and bringing more results, both for police officers, as well as for the civilian community; as reported below:

#### 2.1 Surveillance cameras

According to Lima *et al.* (2018), security cameras are one of the tools oldest technologies used by the military corporation for identification and search of people, understanding crime dynamics and searching for vehicles involved in occurrences. Many cameras, especially the most recent ones, have video and video capture high-resolution audio (Tajra, 2024).

With the advancement of technology and the advent of population growth, as well as the transformation of simple crimes into complex actions, society has become increasingly concerned about having its social interactions monitored. This phenomenon can be observed in condominiums, commercial and business establishments, in residences, in public transportation services, and even in private vehicles. We call it remote monitoring of everyday situations through video cameras (sic), a security strategy that is becoming increasingly common in society (Lima et al., 2018, p. 46-47).

According to Tajra (2024), the use of monitoring cameras helps in primary monitoring and evidence collection in cases of crimes and accidents. In In some cities, the corporation's own cameras are located at different points strategic, but also, in many cases, existing cameras in homes are used and companies. This equipment allows police officers to have a real-time view real on various occurrences, of greater or lesser importance.

In recent decades, public safety has undergone a major transformation technological, with the evolution of monitoring cameras being clear and, with that, new resources, such as "biometric analysis and database software" (Kinape, 2025, p. 3), which allow, for example, facial recognition. This technology is essential for capturing people with outstanding arrest warrants, in identifying of criminal suspects and in the search for missing persons.

Among emerging technologies, the use of intelligent cameras artificial intelligence stands out for its ability to monitor and identify multiple people in circulation areas. Integrated with databases

available, these tools allow for cross-referencing information in real time, speeding up the identification of people with arrest warrants (Kinape, 2025, p. 3).

As Lee (2019) and Biondi (2022) explain, the use of technology makes it possible a more effective response from security forces and, because of new resources, such as artificial intelligence also reduces the chances of human error. These new resources allow the anticipation of risk areas, the verification of patterns and prevention in places with a higher incidence of crime.

### 2.2 Drones

According to Rossi Filho (2020), the term "drone" originated in the United States and can be translated as "buzz" and is used to designate non-flying aerial vehicles. manned. The term *Remodeled Piloted Aircraft* (RPA) or Aircraft is also used Remotely Piloted Aircraft, standardized globally by the Civil Aviation Organization International (ICAO) or even Unmanned Aerial Vehicles (UAV) (Sousa; Santos, 2019).

Drones are highly effective tools in hard-to-reach areas and, therefore, have high-definition cameras and temperature sensors, they can detect suspicious activities and identify/locate people on the run, breaking the laws and people in prison (Oliveira; Fávero, 2022). For this reason, they have been widely used by military police in mapping urban and rural areas, as support for police actions in tactical operations, hostage searches, and problem solving armed conflicts and others (Oliveira, 2020).

[...] RPAs can be used in a variety of ways in the context of the military police, such as: in situations of flagrant crime, in land occupations, in identifying criminals in difficult-to-access regions, mapping illicit drug trafficking routes, monitoring offenders fleeing robberies and thefts of cargo and even financial institutions, in sensitive locations (execution of search and seizure warrants and arrest warrants) (Silva et al., 2024, p. 6).

According to Oliveira and Fávero (2022), the use of drones in public security represents a major step forward in combating crime, in addition to reducing costs operational and mitigate potential risks to human life. As explained by Silva *et al.* 

(2024, p. 6), "drones with high-definition video cameras are capable of recording images detailed, with optical and digital zoom features that allow for a magnification greater than 20 times [...]", being extremely effective in different circumstances.

The use of drones as a tool to support police work, especially those with more advanced features, provide efficient responses and expand operational capacity, allowing operations to have the same quality at any time of the day or night, without interruption (Lopes, 2022). In However, although it has proven to be an important tool for the military police, Silva et al. (2025) highlights that;

[...] the adoption of this technology also raises debates about privacy, proportional use of force, and legislative gaps. The use of drones by public security institutions requires clear regulation, as well as control mechanisms that prevent violations of fundamental rights (Silva *et* al., 2025, p. 3).

Souza and Ribeiro (2019) explain that, in Brazil, the use of drones in sectors such as engineering, agriculture, journalism, environment and public safety still begins in the 2010s and continues to be widely used in these and other sectors, especially due to technological evolution that offers increasingly more resources accurate. Because they allow more comprehensive coverage of large areas in a short time, time, represents a great advantage for public safety and the use of drones in this sector has been increasingly effective, especially with the launch of "a program aerial monitoring with drones for patrolling risk areas, controlling crowds and support in critical incidents" in the state of São Paulo and replicated in Bahia, Paraná and Rio de Janeiro (Silva et al., 2025, p. 5).

## 2.3 Tablets

Before the use of tablets to support military police officers began, all operation and all types of requests depended initially and directly on the Central Police Operations (COPOM). Thus, any necessary police consultation in a operation, such as vehicle or person verification, should be done via radio communicator or telephone and depended on the response from the COPOM operator and the answer should be noted on paper for later use and recording (Military Police, 2023).

According to Castells (2018), the constant evolution of information technologies provides increasing agility in communication, facilitating the capture and exchange of information information, including among military police officers. With mobile devices interconnected by the worldwide computer network – *Internet*, searches in the system are carried out in real time and guarantee greater speed and accuracy of information sought.

In 2012, the National Secretariat of Public Security/Senasp created a information management structure for systematization and sharing of information among public security forces nationwide. Thus, the System National Information on Public Security, prisons, Weapons Traceability and Ammunition, Genetic Material, Fingerprints and Drugs (Sinesp) was created by Law No. 12,681/2012 and consists of an "integrated information platform that enables operational consultations, investigations and strategic studies, implemented in partnership with federal entities" (Almeida, 2023, p. 7).

The use of tablets has made it much easier to search for information in databases. national public safety data, but it is observed that there is no system of single registration, making it possible to understand that not all units of the federation actively participate in feeding these databases. This happens, largely partly due to the lack of staff, available technology and budgetary realities of some states. However, regardless of the provision of information by the federative units, access to the Sinesp database is released to the police military and other security forces from all Brazilian states (Souza, 2018).

# 2.4 Social networks and instant messaging applications

According to Dias (2024), the use of social networks and messaging applications
Instant messaging services like *WhatsApp*, *Facebook* and *Instagram* bring the military police closer to population, creating a very effective communication bridge in the fight against crime.

These platforms serve as an effective tool for sharing information, security alerts and transparency regarding police operations, the that brings the community closer to the military police.

The use of social media by the military police creates a direct channel of dialogue between the corporation and the population and, in this way, a rapprochement arises between forces of security and civil society, facilitating preventive actions, citizen participation in

in relation to reports in suspicious situations and a greater possibility of mediation in light conflict situations (Costa Leite, 2018).

In addition to the benefits already presented, the use of social networks and apps instant messaging enables real-time response, expanding the ability to combat crime and strengthen public confidence in relation to police actions (Dias, 2024).

Instant messaging applications play a fundamental role in contemporary society, redefining the way people communicate and interact. [...] These technological applications provide ubiquitous communication, connecting individuals in real time, regardless of physical distance, which has significantly altered the dynamics of interactions, facilitating personal, professional, and social communication; contributing to the globalization of communication [...] (Dias, 2024, p. 3).

WhatsApp is a strategic tool in the fight against crime, widely used by the military police and other security forces, as it allows real-time communication with the community and between teams or between corporations from other cities and states. According to Albuquerque and Schlichta (2022), in situations of emergency, WhatsApp is essential for its geolocation function, image exchange, videos and messages in real time, in addition to enabling rapid mobilization of police forces.

Although the benefits are seen daily, Costa Leite (2018) draws attention to for the issue of privacy, making it necessary to implement ethical guidelines that ensure the protection of personal data and individual sensitive information, as the sharing information via social media and messaging platforms instant messaging is vulnerable and may undermine the integrity of law enforcement operations and/or put whistleblowers at risk.

### **3 FINAL CONSIDERATIONS**



Contemporary society is guided by information technologies and technological evolution that has occurred in recent decades provides several tools for the most diverse areas, including public safety. There are several possibilities crime-fighting services, such as high-resolution surveillance cameras

audio and video capture and facial recognition, drones, tablets with high data speed, social networks and instant messaging platforms, among others.

The military police, as well as other security forces, use these technologies in everyday life and the results are visible; thus, it is understood that the use individual or combined use of these technologies enables faster results, greater transparency regarding the integrity and results of operations. The responses faster and more assertive actions that the use of technologies makes possible result in greater trust on the part of the community and more efficient and integrated police action with the reality of contemporary society.

Surveillance cameras make it easier to search for suspects and people with open arrest warrant, in understanding the dynamics of crimes, in the search for cars and people at risk; drones are capable of covering large areas in any time of the day or night, assisting in searches in remote areas or in the mapping, searching and prevention in risk areas; tablets with high-quality data speed allows immediate access in any situation to federal databases, such as searching for license plates and people, as well as communication without the COPOM intermediation; and social networks and instant messaging platforms facilitate communication with the civil community, make campaigns more accessible preventive measures and enable real-time communication.

In short, technological evolution brings several benefits to the operations of military police and other security forces, but it also brings several challenges; mainly in relation to the privacy and security of sensitive data, highlighting the need to implement guidelines and regulatory standards that guarantee the integrity of police operations and mitigate risks to whistleblowers. Thus, it is understood if the importance of balancing the use of technology with ethical responsibility, resulting in a modernized military police force in accordance with society contemporary, with social responsibility and more efficient results.

#### References



ALBUQUERQUE, CA; SCHLICHTA, CM. The use of instant messaging applications in public security forces. São Paulo: Editora Atlas, 2022.

ALMEIDA, JP Information technology and public security: advances and contemporary challenges. Brasília: SENASP, 2023.



BIONDI, M. Artificial intelligence applied to public security. Rio de Janeiro: Elsevier, 2022.

CASTELLS, M. The network society. 19th ed. São Paulo: Paz e Terra, 2018.

CGI.BR – BRAZILIAN INTERNET STEERING COMMITTEE. Research on the use of information and communication technologies in Brazil. São Paulo: CGI.br, 2018.

Available at: https://www.cgi.br. Accessed on: October 9, 2025.

COSTA LEITE, R. Social media and public safety: bringing police and society closer together. Salvador: EDUFBA, 2018.

DIAS, LS **Social networks and instant messaging applications in police communication.** Curitiba: Appris, 2024.

KINAPE, AR Facial recognition and urban monitoring: ethical and legal impacts. Florianópolis: UFSC, 2025.

LEE, K. Artificial Intelligence: How Algorithms Shape the Future of Public Safety. São Paulo: Ed. Unesp, 2019.

LIMA, TS et al. Electronic surveillance systems and urban security: a technological analysis. Belo Horizonte: UFMG, 2018.

LOPES, RC Drones and the modernization of police forces. Recife: UFPE, 2022.

OLIVEIRA, JP. **Applications of drones in the context of Brazilian public security.** Porto Alegre: UFRGS, 2020.

OLIVEIRA, JP; FÁVERO, AM **Drones and policing: efficiency and ethical challenges.** São Paulo: PUC-SP, 2022.

PARANÁ MILITARY POLICE. Report on technology and innovation in public security. Curitiba: PMPR, 2023.

ROSSI FILHO, M. **Drones: technical and operational aspects in public safety.** São Paulo: Blucher, 2020.

SILVA, JA et al. The use of RPAs (drones) in public security: advances and necessary regulations. Brasília: SENASP, 2024.

SILVA, JA et al. **Drones and fundamental rights: regulatory challenges in Brazil.** Brasilia: SENASP, 2025.

SOUSA, DA; SANTOS, LM **Unmanned aerial vehicles: legal and operational aspects.** Rio de Janeiro: Forense, 2019.

SOUZA, EM Integration of information systems in Brazilian public security. Brasília: UNB, 2018.

SOUZA, EM; RIBEIRO, FL The evolution of drone use in Brazil: from agriculture to public safety. São Paulo: Mackenzie, 2019.

TAJRA, S. Smart cameras and the transformation of urban surveillance. São Paulo: FGV, 2024.

