ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 6| June 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

TECHNOLOGICAL ADVANCEMENT IN LAW ENFORCEMENT: ADAPTATION OF MODERN POLICE SERVICES IN CALASIAO, PANGASINAN

Jay-Jay G. Paris, RCrim
Central Ilocandia College of Science and Technology, Lingsat, City of San Fernando, La Union

INTRODUCTION

The rapid advancement of technology has significantly transformed various sectors, including law enforcement. Modern policing now heavily relies on digital tools and systems to enhance operational efficiency, crime prevention, and public safety. Technological advancements such as digital surveillance, data-driven policing, and automated communication systems have streamlined police work, allowing for faster response times, improved investigation techniques, and better community engagement.

In the Philippines, the Philippine National Police (PNP) has adopted various innovations to strengthen crime prevention and law enforcement efforts. Among these advancements, the PNP E-Sumbong program stands out as a vital tool in crime response. Operating under the tagline "Sumbong Mo, Aksyon Ko," E-Sumbong is designed to enhance the police force's complaint referral system by enabling citizens to report crimes and request assistance via text messages, phone calls, or social media platforms. This digital platform ensures that complaints and concerns are handled with urgency, increasing police accountability and reinforcing the importance of timely action in crime prevention.

As law enforcement agencies integrate these modern technologies, they also face challenges such as training officers to use new systems, addressing cybersecurity threats, and ensuring ethical considerations in data collection and surveillance. The municipality of Calasiao, Pangasinan, is no exception. Local police units in the area have adopted various technological tools to improve their services, yet challenges remain in optimizing these advancements for maximum efficiency and public trust.

This study aims to examine the integration of modern technology in police services in Calasiao, Pangasinan, with a particular focus on crime response systems such as PNP E-Sumbong. It seeks to assess how digital policing tools have improved law enforcement efficiency, crime prevention, and police-community relations. Additionally, it will explore the challenges police officers face in adapting to these technologies and evaluate the effectiveness of modernization efforts.

Technology is changing the way police officers work, enabling them to respond faster, improve public safety, and foster trust with the community. While tools like body-worn cameras, GPS tracking, and digital case management systems enhance policing efforts, they also bring challenges, such as the need for specialized training and addressing privacy concerns. This study will explore how law enforcement officers in Calasiao, Pangasinan, are adapting to these advancements and their impact on police operations. Understanding these technological shifts is essential for ensuring that modernization efforts benefit both law enforcement personnel and the community they serve.

METHODOLOGY

This study will employ a quantitative research design to analyze the extent of technological adaptation in the Philippine National Police. This method enables the systematic collection of numerical data, allowing for the identification of trends and statistical patterns (Creswell, 2018). By using surveys and structured questionnaires, data will be gathered from police officers in Calasiao, Pangasinan, regarding their adoption of modern technology in law enforcement operations.

The study will be conducted at the Calasiao Municipal Police Station, utilizing a total enumeration ensuring that all police officers using technological tools were included. A validated survey questionnaire served as the primary data collection tool, measuring the extent of technology adoption, challenges encountered, and the effectiveness of the PNP E-Sumbong program.

Data analysis was performed using descriptive statistical methods, including frequency distribution, percentage analysis, and mean computation. These methods provided an objective representation of technological adaptation trends and challenges. The study adhered to ethical research principles, ensuring voluntary participation and confidentiality. Participants provided informed consent, and all sources were properly cited to maintain academic integrity. By employing a quantitative approach, this study offers a structured, empirical assessment of technological advancements in Calasiao's law enforcement, contributing to evidence-based recommendations for improving police service efficiency.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 6| June 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

RESULTS

The survey responses from police officers in Calasiao, Pangasinan, revealed key trends in technological adaptation:

1. **Commonly Adopted Technologies**: The most frequently used tools were body-worn cameras and GPS tracking devices, both reported by 100% of respondents. The PNP E-Sumbong program was also widely acknowledged as a useful platform for crime reporting and community engagement.
2. **Perceived Benefits**: Respondents indicated that these technologies enhanced operational efficiency, particularly in surveillance, crime documentation, and incident response. The E-Sumbong platform, accessible via text, call, or social media, was noted for improving public accessibility and response time.
3. **Challenges Encountered**:
   - Lack of training on digital tools
   - Limited access to equipment and unstable internet connectivity
   - Concerns over data privacy and cybersecurity
   - Resistance to change among some personnel
4. **Utilization Gaps**: Although there is high awareness of digital tools such as electronic case management systems and automated reporting platforms, their usage remains inconsistent across the department.

DISCUSSION

The results affirm that while the Calasiao PNP has taken significant steps toward technological modernization, full integration remains a work in progress. The widespread use of body-worn cameras and the E-Sumbong system highlights a shift toward transparency and improved community interaction—both of which are central goals outlined in the introduction of this study.

However, despite this progress, several structural and operational challenges hinder optimal use. The lack of continuous training and technological infrastructure, such as stable internet or mobile devices, affects the consistency and effectiveness of implementation. Furthermore, digital platforms like case management systems are underutilized, signaling a need for internal capacity building and stronger policy enforcement.

These findings support the need for ongoing support from national and local authorities to enhance digital literacy, improve resource allocation, and establish clear guidelines for ethical and secure use of law enforcement technologies. Addressing these issues is crucial not only for operational efficiency but also for strengthening public trust in police services.

REFERENCES

1. *Babbie, E. R. (2020). The practice of social research (15th ed.). Cengage Learning.*
2. *Bolledo, J. (2021, June 4). PNP finally deploys body-worn cameras after years of delay. Rappler. https://www.rappler.com/nation/pnp-finally-deploys-body-worn-cameras-june-2021/*
3. *Bureau of Justice Assistance. (2021). Body-worn camera toolkit. U.S. Department of Justice. https://bja.ojp.gov/program/body-worn-cameras*
4. *Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.*
5. *Kinney, J. (2022). The role of GPS in modern law enforcement. Police1. https://www.police1.com/police-products/gps/articles/the-role-of-gps-in-modern-law-enforcement-hsC9Oml2FMaGu1E7/*
6. *Lapp, J. (2019, February 4). The pros and cons of technology in law enforcement. Law Enforcement Today. https://www.lawenforcementtoday.com/the-pros-and-cons-of-technology-in-law-enforcement/*
7. *Neuman, W. L. (2019). Social research methods: Qualitative and quantitative approaches (8th ed.). Pearson.*
8. *Philippine National Police. (2021). PNP E-Sumbong: Sumbong Mo, Aksyon Ko. https://pnp.gov.ph/e-sumbong/*
9. *Roberts, A. R., & Roberts, D. L. (2021). Technology in law enforcement: Innovations and applications. Oxford University Press.*
10. *Silverman, E. B. (2017). Policing in the information age: Technology and public safety. Springer.*