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FOREIGN EXPERIENCE IN THE APPLICATION OF ARTIFICIAL INTELLIGENCE IN LAW ENFORCEMENT ACTIVITIES

ABSTRACT

The rapid development of information technology has led to the global informatization of society and the use of artificial intelligence systems in many areas of human activity. The integration of artificial intelligence into law enforcement has the potential to revolutionize the field by streamlining operations, enhancing precision, minimizing human error and bias, supporting more objective decision-making, enabling smarter resource distribution, fostering better community engagement, and playing a significant role in crime prevention. It is noted that the use of artificial intelligence in law enforcement involves the use of algorithms, machine learning, and big data analysis to identify patterns, anomalies, and unusual behavior patterns that may indicate possible violations. Foreign experience shows that law enforcement agencies have increasingly begun to shift from prevention to prediction and prevention of crime. The study identifies the main trends, problems, and prospects for the implementation of artificial intelligence in law enforcement. Attention is drawn to numerous examples of the successful implementation of artificial intelligence in the activities of law enforcement agencies in the United States, the United Kingdom, Israel, France, Spain, and other countries. It is argued that the use of artificial intelligence and machine learning in law enforcement raises certain concerns. As these technologies develop, it is extremely important to recognize their potential benefits and problems and to use them in a way that respects individual rights and complements human decision-making processes. A balanced approach is crucial to ensure that the advantages of artificial intelligence are fully realized while minimizing risks of misuse. The findings of this study can serve as a foundation for shaping national policy on AI, guiding the creation of legal frameworks for its application, and facilitating the responsible integration of AI technologies into the operations of domestic law enforcement agencies.

Keywords: artificial intelligence, law enforcement agencies, law enforcement activities, crime prevention, crime prediction, informatization, information technologies, legal relations

JEL Classification: K10, K14

INTRODUCTION

Advancements in digital technologies have accelerated their integration into numerous aspects of everyday life, transforming how individuals, institutions, and society function. Accordingly, taking into account the above trends in combating crime and using the achievements of modern computer technologies, including artificial intelligence and machine learning methods, is a requirement of our time.

Artificial intelligence systems are traditionally understood as computer systems that are capable not only of performing specific tasks according to a predefined algorithm, but also of solving creative problems based on the analysis of a large amount of diverse information and imitating human thought processes.

According to the Cambridge Dictionary, artificial intelligence (AI) is the study of how to design computer systems that exhibit human-like capabilities – such as understanding language, recognizing images, solving problems, and learning. It refers to computer

technology that enables tasks to be performed in ways that resemble human thinking and behavior. (Cambridge Business English Dictionary).

Thanks to technological advances and processing speeds in recent years, as well as the reduction in the cost of such technologies, artificial intelligence is becoming an increasingly popular and useful tool in law enforcement. However, the introduction of artificial intelligence technologies into criminal justice systems and law enforcement activities raises a number of considerations that must be taken into account to ensure the fair, transparent, and accountable implementation of such solutions.

LITERATURE REVIEW

A review of recent research highlights that the adoption of artificial intelligence in law enforcement serves as a powerful instrument for enhancing crime-fighting efforts and improving overall operational efficiency. Numerous domestic scholars and experts have explored various aspects of AI implementation within the law enforcement sphere, addressing its practical applications, challenges, and potential.

For example, M. Karchevsky (2023), noting the importance of classifying artificial intelligence and its legal regulation, considered the possibilities and prospects for using artificial intelligence (Karchevskyi, 2023).

V. Golina and S. Shramko (2020), characterizing the role of artificial intelligence in the fight against crime, emphasize the importance of introducing the latest technologies in the activities of law enforcement agencies (Holina & Shramko, 2020).

M. Mayetny (2021) analyzed the implementation of artificial neural networks in the activities of law enforcement agencies in some foreign countries, as well as the legality of their use. It is emphasized that they can become an effective tool in the fight against corruption and organized crime (Maietnyi, 2021).

O. Radutny (2017) examined the possibility of recognizing artificial intelligence (electronic person) as a subject of criminal law relations and a subject of crime, potential information and other threats from artificial intelligence, the possibility of maintaining control over the latter, the connection between information security and artificial intelligence research and its results (Radutniy, 2017). O. Plakhotnik studied the problems of the practical application of artificial intelligence in criminal proceedings in developed countries (Plakhotnik, 2019).

A. Chukaeva and S. Matulienė (2023) characterized the use of artificial intelligence in law enforcement, in particular, its impact on crime rates, detection, and investigation, as well as the overall effectiveness of law enforcement agencies. The risks of using artificial intelligence for human safety were highlighted (Chukaieva & Matulienė, 2023).

Several international scholars have dedicated their research, to varying extents, to exploring the challenges and prospects of applying artificial intelligence in law enforcement, contributing valuable insights into its development, regulation, and practical use across different legal systems.

Thus, the application of artificial intelligence technologies and tools was the subject of research by K. Brennan-Marquez and S. Henderson (2018) (Brennan-Marquez & Henderson, 2018).

Matthew Guariglia examined the growing use of machine learning and artificial intelligence in policing, highlighting both the opportunities and challenges associated with this technology. The analyst underscores the critical need to closely monitor the rapid adoption of machine learning technologies by police forces and advocates for enhanced oversight and regulation to ensure the responsible and ethical use of artificial intelligence in policing practices (Guariglia, 2023).

Exploring the relationship between artificial intelligence and law enforcement, Matt Shipman emphasized the importance of developing public policy, regulating autonomous vehicles, and ensuring that law enforcement personnel understand the limitations of artificial intelligence and the ethical issues involved (Shipman, 2023).

Other studies emphasize that artificial intelligence can contribute to reducing bias in policing by standardizing procedures and applying uniform criteria in decision-making, thereby promoting greater fairness and objectivity in law enforcement practices (Reese, 2022; Okidegbe, 2023; Kalra & Osoba, 2021).

Despite the considerable body of scientific research on the potential applications of artificial intelligence in law enforcement – much of which holds both theoretical and practical value – the topic remains open for further exploration. Key areas requiring deeper investigation include the effectiveness of artificial neural networks, the legality of their use, and the urgent need for a comprehensive legal framework to govern the application of digital technologies in policing.

Additionally, ethical and sociocultural implications, security and data protection concerns, and the analysis of practical experiences with AI integration in the justice systems of foreign countries remain underexplored and demand greater academic and legislative attention.

AIMS AND OBJECTIVES

The purpose of this study is to analyze and systematize the main applications of artificial intelligence in the law enforcement sphere of foreign states for the detection and investigation of crimes, reducing the burden on law enforcement agencies and minimizing professional risks, as well as its impact on expanding methods of combating crime. The aims of this study are to develop well-supported conclusions based on scientific research about the application of artificial intelligence systems within law enforcement agencies abroad, and to offer recommendations concerning the legal framework for the use of artificial intelligence in domestic law enforcement operations.

METHODS

Various scientific methods were used to study the topic. Specifically, terminological and normative-dogmatic methods were employed to analyze how the term “artificial intelligence” is interpreted in current scientific debates and to provide an evaluative assessment of the concept. Additionally, the systemic-structural method was applied to develop a comprehensive approach to the range of artificial intelligence technologies. The comparative-legal method was used to evaluate different approaches to the use of artificial intelligence in law enforcement at the international level. The formal-logical method was used to analyze the systematic approach to the implementation of artificial intelligence in law enforcement. The dialectical method was used to highlight the discourse of scientists on the legitimacy of using artificial intelligence in various spheres of life, in particular in law enforcement, and to summarize fundamentally important conclusions.

This multi-level approach allows not only to identify key problems, but also to propose adapted solutions that take into account the specifics of the use of artificial intelligence in law enforcement.

RESULTS

Artificial intelligence technology has the potential to completely transform law enforcement agencies, from advanced criminal analytics that identify trends in vast amounts of data to biometrics that enable the rapid and unique identification of criminals. Recent years have been characterized by a shift in focus in the activities of law enforcement agencies in developed countries from a reactive to a predictive approach. Law enforcement agencies have increasingly moved from crime prevention to crime prediction and prevention.

International experience shows that artificial intelligence expands the capabilities of law enforcement agencies in fighting crime and protecting public safety. Let's look at some of the main applications of artificial intelligence in law enforcement.

1. Artificial intelligence for video and image analysis

Artificial intelligence algorithms can analyze videos, images, and audio files to identify individuals, weapons, potential child pornography, and a range of other objects and criminal behavior. Video analysis has traditionally been a labor-intensive task for law enforcement. However, AI-based video analysis tools can quickly parse video content, allowing law enforcement agencies to efficiently process large amounts of data. In various locations, law enforcement agencies have explored the use of AI-powered video analysis for tasks such as surveillance, crime detection, and evidence collection. Computer vision-enabled traffic cameras can identify stolen vehicles, enforce speed limits, red lights, seat belt use, and more.

For example, the New York Police Department (NYPD) is testing and implementing advanced technologies, including AI-powered video analytics, for public safety and crime prevention. To improve its ability to monitor public spaces, the Metropolitan Police Service in London has been experimenting with artificial intelligence technologies, including video analytics.

The key advantage of AI-enhanced video analytics is its ability to detect important details that may be overlooked by law enforcement officers. These tools greatly contribute to the depth and accuracy of investigations, from identifying objects and individuals to detecting anomalies in behavior.

AI-powered facial recognition systems have been heralded as a game-changer in this regard, allowing law enforcement agencies to cross-reference thousands of images in moments. This technology, while promising, also comes with challenges, including concerns over data privacy, accuracy, and potential bias. The use of facial recognition can be highly controversial, particularly in situations where individuals are not aware they are being surveilled, leading to debates about civil liberties and the ethical use of such systems. Despite these challenges, the utility of AI-based surveillance is undeniable in solving cold cases and identifying suspects faster than traditional methods.

A radical change in criminal investigations has been the introduction of AI-driven facial recognition technology. Facial recognition technology enables law enforcement agencies to identify individuals instantly by matching live camera feeds or photographs against databases containing images of known offenders, victims, or missing persons.

Several police departments in the United States (the New York Police Department (NYPD), the Detroit Police Department) and the Metropolitan Police Service in London have researched and experimented with facial recognition technology and the use of artificial intelligence to improve surveillance and investigations.

The states of Washington and Colorado, in 2020 and 2022, respectively, passed comprehensive legislation regulating the use of artificial intelligence by government agencies and law enforcement agencies (Washington State; Colorado Senate Bill 113). These regulations mandate that government agencies provide reports on accountability, data handling, security measures, training, and testing related to the use of facial recognition technology. Furthermore, agencies are required to secure a warrant or court order before employing this technology for continuous surveillance, identification, or real-time tracking (Washington's New State). Importantly, law enforcement cannot depend solely on facial recognition outcomes as the only means of investigation.

Although facial recognition technology facilitates more rapid and efficient identification of individuals, it simultaneously engenders substantial privacy challenges, notably concerning the risks of pervasive mass surveillance, algorithmic biases, and erroneous identifications.

The dilemma for law enforcement agencies remains striking a balance between using this powerful tool and addressing privacy concerns.

2. Artificial intelligence for natural language processing

Natural Language Processing is a branch of computer science and linguistics that focuses on the interaction between computers and human language (DeepLearning AI, 2023).

It seeks to enable machines to interpret and generate human language in meaningful and useful ways. Research suggests that natural language processing techniques are used by law enforcement agencies in a variety of areas, including administrative duties, forensic investigations, crime data analysis, and speech-to-text reporting and documentation of criminal activity (Sarzaeim et al., 2023).

Certain law enforcement agencies have adopted technologies capable of generating preliminary drafts of police reports by analyzing body-worn camera footage in conjunction with real-time verbal accounts from officers. These drafts undergo subsequent verification and augmentation by personnel to ensure accuracy. Furthermore, the application of artificial intelligence to unstructured textual data – encompassing case files, social media content, and online forums – enables the extraction of critical information and enhances the capacity to detect and monitor patterns of criminal activity with greater efficacy.

A new study in digital forensics has shown that specialized natural language processing models can accurately identify threatening and abusive messages up to 21 times faster than humans, potentially significantly speeding up police investigations (Forensic Capability Network).

Generative AI can synthesize speech and create realistic voice samples for a variety of purposes, such as voice biometrics, voice cloning, or voice phishing.

Artificial intelligence can assist in identifying key witnesses and persons of interest in ongoing investigations. For example, by analyzing phone records, emails, or social media interactions, AI systems can determine patterns of commu-

nication and interactions that might indicate criminal involvement. This information, when processed and cross-referenced with databases, can lead to faster identification of suspects or potential threats, allowing law enforcement agencies to act before crimes escalate.

3. Artificial intelligence for risk assessment

Artificial intelligence technologies possess the capability to process extensive datasets, facilitating the identification of patterns, trends, and anomalies indicative of criminal behavior and suspect locations. This analytical capacity enables law enforcement agencies to adopt a proactive stance in anticipating and responding to potential threats. Real-time crime analysis systems can integrate data from surveillance cameras, sensors, and other sources to create comprehensive and dynamic situational awareness.

Ben-Gurion University of the Negev, in collaboration with the Israel Police, seeks to develop sophisticated tools in the fields of cybersecurity, big data analytics, and artificial intelligence, with the objective of forecasting and preventing future criminal activities. To this end, as part of a joint initiative with the police, the university has opened the Center for Computational Criminology in the university's Advanced Technology Park (Christians United for Israel, 2025).

In order to provide the latest technologies in the field of crime prevention and combating terrorism to law enforcement agencies, public safety services, and intelligence agencies around the world, the New York Police Department, together with Microsoft, developed the Domain Awareness System (DAS). This system aggregates and analyzes public safety information from reports, surveillance cameras, eyewitness observations, etc. This information about potential threats and criminal activity is then received in real time by investigators and analysts of the department (Official website of the NYPD, 2025).

Key elements of the operation of the New York Police Operations Center are a spatiotemporal model of the city and behavioral models, which are used to link the most likely scenarios of criminal behavior. The Real-Time Crime Center (RTCC) uses a situational approach to big data, which requires special skills to build queries and interpret the extracted knowledge. As a result, each access to big data is a unique search, unlike standard information analysis systems in transactional and other database management systems with their fixed queries and typical tasks (New York City Police...).

ShotSpotter, an acoustic surveillance system that records gunshots and notifies police, works in a similar way. ShotSpotter's sensors can pinpoint the location of an incident to within two feet. This technology is already being used in many cities in the United States (ShotSpotter, 2025).

Law enforcement agencies should follow clear guidelines for the ethical use of social media monitoring tools, ensuring that privacy rights are respected.

4. Artificial intelligence for process automation and autonomous robotics

Process automation is designed to assist law enforcement agencies in carrying out specific tasks and can be achieved using various types of artificial intelligence.

In particular, an artificial intelligence system called VeriPol assists Spanish law enforcement agencies in making decisions about whether to register a report or report a criminal offense. This tool, jointly developed by Cardiff University and the Carlos III University of Madrid, helps detect false statements and false reports of crimes and thefts. The program works by reviewing and analyzing written statements to identify patterns that are often found in false reports. VeriPol plays an important role in reducing the burden and strain that false reports of robbery create on the resources and budgets of many law enforcement agencies (Folake Dosu).

The deployment of unmanned aerial vehicles (drones) equipped with integrated artificial intelligence is increasingly expanding within public safety and law enforcement domains. These drones have emerged as vital assets for police departments, enabling the execution of various operations at significantly reduced costs. Law enforcement agencies in the United States, the United Kingdom, Germany, and South Korea utilize AI-enhanced drones outfitted with cameras and sensors to conduct surveillance and investigative activities, achieving operational efficiency at a "fraction of the cost per flight hour" relative to conventional approaches (Scott Howe).

The New Orleans Police Department, Louisiana, USA, uses drones for law enforcement operations: search and rescue operations, response to hazardous spills, search for suspects, documenting crime scenes, and monitoring special events.

In France, the Toulouse police have begun using drones to monitor activities in an area "known for its open drug trade".

At the same time, concerns have been raised about civil liberties and privacy issues associated with the use of drones in law enforcement.

Given the importance of privacy, at least 18 states in the United States have passed laws requiring law enforcement agencies to obtain warrants before using drones for surveillance. These include Alaska, Florida, Idaho, Illinois, Indiana, Iowa, Maine, Montana, Nevada, North Carolina, North Dakota, Oregon, Tennessee, Texas, Utah, Vermont, Virginia, and Wisconsin (Key considerations for).

Another area of application for artificial intelligence is Automatic Number Plate Recognition (ANPR), a technology that uses cameras and software to read and recognize vehicle license plates. ANPR technology is used by police forces to detect, prevent, and stop criminal activity at the local, regional, and national levels. The devices capture images that are read by a computer, allowing law enforcement to compare the number plates with those of stolen vehicles or vehicles driven by persons suspected of criminal activity.

Thus, ANPR provides leads and evidence in the investigation of crimes and is used by law enforcement agencies in England, Wales, Scotland, and Northern Ireland. Currently, ANPR cameras across the United Kingdom send an average of around 60 million ANPR records to the national ANPR systems every day. The technology has become important in the detection of many crimes, including, for example, the search for persons wanted for arrest or missing, witnesses, stolen vehicles, uninsured vehicles, and the solving of serious crimes (Police.uk).

5. Artificial Intelligence for Crime Prediction

Predictive policing stands out as one of the most promising applications of artificial intelligence within law enforcement. The essence of this method of combating crime is to use the capabilities of analyzing and processing large volumes of information through artificial intelligence technologies, which enables the generation of evidence-based forecasts concerning the temporal, spatial, and qualitative characteristics of criminal activity. The purpose of these forecasts is to assist law enforcement agencies in optimizing the use of available resources and performing police functions.

In modern law enforcement practice, “predictive policing” is used in four main areas:

- Forecasting criminal offenses.
- Forecasting persons committing criminal offenses, persons prone to committing (or re-committing) criminal offenses.
- Making predictions about the personality of the criminal or creating profiles of such persons, taking into account the characteristics of already identified offenders.
- Predicting future crime victims (groups of individuals who are likely to be victims of crime) (González, 2020).
- Predictive policing enables law enforcement agencies to predict potential crime hotspots with greater accuracy. This approach ultimately facilitates proactive decision-making, moving beyond reliance solely on historical trends or intuition, and contributes to crime prevention and public safety (Jenga & Kar, 2023; Vyas & Roy, 2023).

In Vancouver, Canada, the police implemented a data analysis system based on IBM and Esri geographic information systems. The system not only identified trends but also predicted the likely time and place of crime.

More than 50 police departments in the United States use PredPol software, as do several police departments in the United Kingdom. For example, Kent County Police reported a 6% reduction in street violence after a four-month trial (Smith Mark).

The Los Angeles Police Department (LAPD) has previously used predictive policing technology, including PredPol and Operation Laser, to enhance its crime prevention efforts. The LAPD was later forced to discontinue the use of these programs due to the increase in harmful trends that contributed to discrimination (Bhuiyan, 2021).

It is worth noting that some researchers express serious concerns about the ethical component of these strategies, as well as possible violations of privacy; about the possibility of discrimination against individuals with “suspicious” personal data (based on gender, nationality, religion, place of residence, migration data) and further stigmatization of individuals who have had a conflict with the law; about the overreliance on statistical correlations instead of identifying causal relationships (Babuta, 2020).

6. Artificial intelligence for pattern detection

AI systems can scan crime data from law enforcement databases to cluster it and automatically detect patterns. For example, the Dutch police have developed and implemented the Crime Alert System (CAS) (Dutch Police, 2021) to combat a range of crimes that go beyond the original targets, including burglaries, robberies, pickpocketing, car theft, violent crime, commercial theft, and bicycle theft. The system conducts weekly analyses using both local and recent data, supplemented by external information about the areas and their residents. This is supplemented by the police's own analysis of criminal activity, local conditions, and Dutch statistics. The aim of the programme is to identify patterns in crime, such as an increase in bicycle thefts in a particular area between 9 pm and midnight. With this information, police can allocate their resources more effectively and combat these crimes more effectively (Oosterloo and G. van Schie, 2022).

To fully harness the benefits of AI in law enforcement, it is essential to establish clear regulatory frameworks, engage a broad range of stakeholders in the development and deployment processes, and proactively address ethical concerns and potential biases inherent in the technology.

DISCUSSION

The application of artificial intelligence (AI) in law enforcement has become the subject of growing academic interest, with researchers approaching the topic from divergent perspectives—ranging from technological optimism to critical scrutiny from legal and ethical standpoints. The author's position in this study is distinguished by an interdisciplinary approach that emphasizes the need for a balanced integration of AI's technological potential with legal safeguards, ethical accountability, and the preservation of fundamental human rights and public trust.

For example, in his work *Artificial Intelligence and Crime Prevention*, M. Karchevskiy (2023) highlights the effectiveness of AI tools in preventing crime, particularly through big data analysis and predictive modeling. While this perspective underscores the operational benefits of AI in streamlining law enforcement activities, it largely overlooks the risks associated with algorithmic opacity and the violation of fundamental legal principles, such as the presumption of innocence. By contrast, the present study argues that the implementation of AI systems in law enforcement must be subject to strict legal and ethical frameworks, ensuring transparency, explainability, and accountability.

Similarly, Holina and Shramko (2020) examine AI as a tool for modernizing public safety infrastructure, emphasizing surveillance systems and automated monitoring technologies. However, their approach pays insufficient attention to the privacy implications and legal concerns associated with data collection and processing. The author of this paper maintains that any intrusion into personal data or public surveillance must be assessed through the lens of proportionality and necessity, echoing the recommendations of González Fuster (2020), who stresses the importance of fundamental rights in shaping AI governance for law enforcement within the European Union.

M.I. Maietnyi (2021) focuses on the use of artificial neural networks in law enforcement, emphasizing their adaptability and learning capabilities. While this technologically oriented approach is valuable, it neglects a crucial issue—namely, the so-called “black box” problem, whereby even system developers are unable to fully explain the decision-making logic of AI tools. In contrast, the author's approach prioritizes algorithmic accountability and the legal requirement for decisions to be both interpretable and challengeable, particularly in the context of criminal justice.

On the other end of the spectrum, critical voices have emerged against the deployment of AI in policing. For instance, M. Guariglia (2023) raises concerns over mass surveillance and facial recognition technologies, arguing that such tools risk undermining civil liberties and reinforcing systemic discrimination. Similarly, N. Okidegbe (2023) contends that algorithmic systems tend to replicate, rather than eliminate, existing biases in the criminal justice system. While these critiques are valid and necessary, the current study contends that rather than rejecting AI altogether, the focus should be on building institutional mechanisms for identifying and mitigating algorithmic bias. This aligns with the findings of the RAND Corporation (Yeung et al., 2021), which calls for independent auditing and bias-testing of AI systems used in law enforcement.

In sum, while some scholars place overwhelming emphasis on technical efficiency (Karchevskiy, Maietnyi), and others adopt a fundamentally skeptical or even prohibitive stance toward AI in policing (Guariglia, Okidegbe), the approach developed in this paper seeks to reconcile innovation with legal and ethical responsibility. What sets this perspective apart is its integrative nature, combining technological assessment with legal regulation and human rights considerations. AI in law enforcement should not be embraced unconditionally, nor dismissed categorically. Rather, its adoption must follow a measured, principles-based regulatory approach that recognizes both the opportunities and the risks inherent in such technologies.

CONCLUSIONS

The integration of artificial intelligence (AI) technologies into law enforcement processes offers transformative potential. Properly implemented, AI can significantly improve operational efficiency, reduce human error, assist in complex decision-making, enable better resource allocation, and facilitate proactive crime prevention strategies. Moreover, by automating routine tasks, AI has the potential to allow law enforcement professionals to focus more on community engagement and strategic functions, potentially strengthening trust between police and the public.

However, the adoption of AI in policing is not without considerable ethical, legal, and societal risks. As demonstrated in both international practice and academic discourse, the effectiveness of AI tools must not overshadow the fundamental requirement for fairness, transparency, and accountability. AI systems, especially those employed in high-stakes areas such as predictive policing, facial recognition, and criminal risk assessment, carry a significant risk of replicating or amplifying existing systemic biases, particularly when deployed without proper oversight or public transparency.

It has been observed that law enforcement agencies in various jurisdictions utilize AI in three principal ways:

1. To assist human officers in enhancing performance and efficiency.
2. To augment human cognitive and analytical capabilities.
3. In more limited and controlled cases, to fully automate specific tasks traditionally performed by humans.

Each of these applications brings with it a different set of legal and ethical considerations, particularly in contexts involving the restriction of fundamental rights or freedoms.

The analysis conducted in this study, in comparison with other academic positions, underscores the importance of a balanced, principles-based approach to the adoption of AI in law enforcement. It is not sufficient to view AI solely through the lens of technological progress or institutional efficiency. Instead, its use must be governed by strict compliance with the rule of law, full respect for fundamental human rights and freedoms, the principles of non-discrimination and equality before the law, and the core values of justice, dignity, and due process.

Accordingly, the deployment of AI in law enforcement should be subject to clearly defined legal frameworks that mandate transparency, independent oversight, and public accountability. These frameworks should also ensure mechanisms for regular auditing, explainability of algorithmic decisions, and redress for affected individuals. International experiences — both positive and problematic — highlight the critical need for adaptive, context-sensitive regulation that evolves alongside technological capabilities.

Further research should focus on the development of unified ethical standards and legal safeguards for AI use in criminal justice, as well as the design of interoperable and explainable AI systems. Comparative analysis of international practices, especially in jurisdictions with established regulatory regimes, can provide valuable insights for shaping national strategies. Importantly, such research must be interdisciplinary, involving collaboration between legal scholars, technologists, ethicists, practitioners, and civil society stakeholders.

Ultimately, AI can serve as a valuable tool for law enforcement — but only if it is implemented responsibly, transparently, and in full alignment with democratic values and human rights protections.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

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CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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ЗАРУБІЖНИЙ ДОСВІД ЗАСТОСУВАННЯ ШТУЧНОГО ІНТЕЛЕКТУ В ПРАВООХОРОННІЙ ДІЯЛЬНОСТІ

Стрімкий розвиток інформаційних технологій спричинив глобальну інформатизацію суспільства та широке впровадження систем штучного інтелекту в різні царини людської діяльності. Застосування штучного інтелекту в правоохоронній діяльності може підвищити ефективність і точність, зменшити людські помилки та упередженість, покращити процес ухвалення рішень, оптимізувати розподіл ресурсів, зміцнити зв'язки в громаді та громадську безпеку, а також сприяти зниженню рівня злочинності. Зазначено, що використання штучного інтелекту в правоохоронній діяльності передбачає використання алгоритмів, машинного навчання та аналізу великих обсягів даних для виявлення шаблонів, аномалій і незвичайних поведінкових моделей, які можуть указувати на можливі порушення. Зарубіжний досвід свідчить, що правоохоронні органи дедалі частіше переходять від реактивних заходів до прогнозування та профілактики злочинності. У дослідженні виокремлено ключові тенденції, проблемні питання та перспективи впровадження штучного інтелекту в діяльність правоохоронних структур. Звернуто увагу на чималі приклади успішного впровадження штучного інтелекту в діяльності правоохоронних органів США, Великобританії, Ізраїлю, Франції, Іспанії та інших держав. Обґрунтовано, що використання штучного інтелекту та машинного навчання в правоохоронній діяльності викликає певні застереження. По мірі розвитку цих технологій надзвичайно важливо визнавати їхні потенційні переваги та проблеми й використовувати їх так, щоб поважати індивідуальні права та доповнювати процеси ухвалення рішень людиною. Підкреслено необхідність збалансованого підходу, який максимізує переваги штучного інтелекту, мінімізуючи потенційне зловживання ним. Результати дослідження можуть бути застосовані при формуванні державної політики в царині штучного інтелекту, удосконаленні правового регулювання його застосування та інтеграції штучного інтелекту в роботу вітчизняних правоохоронних органів.

Ключові слова: штучний інтелект, правоохоронні органи, правоохоронна діяльність, протидія злочинності, прогнозування злочинності, інформатизація, інформаційні технології, правові відносини

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