

CERTAIN PROBLEMATIC ISSUES IN CRIMINAL LEGISLATION AND THE ADVANTAGES OF USING ARTIFICIAL INTELLIGENCE IN DETERMINING THE ELEMENTS OF A CRIME

DJUMAYEV Shokhjakhon Begimkul ugli

Senior lecturer of Training Institute for lawyers,
PhD candidate of the Law Enforcement Academy of
the Republic of Uzbekistan

E-mail: Shohjahon7474@gmail.com

The Criminal Code and the Criminal Procedure Code of the Republic of Uzbekistan have created a legal foundation for the effective protection of individuals from criminal encroachments, for safeguarding the rights and freedoms of citizens, as well as the interests of society and the state, and for ensuring legality and legal order.

Over the past years, significant changes have taken place in the criminal legislation of our country, aimed at improving its norms and at implementing advanced international standards and foreign practices for the unconditional protection of the rights and freedoms of citizens involved in the criminal process.

In particular, seven directions and 100 objectives were defined in the “Development Strategy of the New Uzbekistan for 2022–2026,” approved by Presidential Decree No. PD–60 dated January 28, 2022. Its first direction, objective 14, envisages the consistent continuation of the policy of improving criminal, criminal-procedural and criminal-executive legislation, as well as the wide introduction of the principle of humanism into the system of criminal penalties and their execution. Furthermore, Paragraph 61 of the State Program for the implementation of the Development Strategy in the “Year of Honoring Human Dignity and Active Neighborhood” states that it is necessary to further increase the effectiveness of protecting the dignity and freedom of citizens in the process of combating crime.

Despite these reforms, several problematic issues still remain in our current criminal legislation, which give rise to ambiguous interpretations and multiple understandings. Below, we will focus on some of these issues.

According to the Criminal Code of the Republic of Uzbekistan, if a violation of legislation on appeals of individuals and legal entities results in serious harm to the rights of citizens, society, or the state, or to legally protected interests, then criminal liability arises under Part 1 of Article 144 of the Code.

The problematic aspect associated with this article—and which leads to various interpretations and differing views in practice—is the concept of “serious harm.” One of the essential grounds for holding someone criminally liable under Part 1 of this article is precisely the occurrence of serious harm. This is because one of the necessary elements of the objective side of the crime is the consequence caused by the criminal act, that is, the occurrence of



“serious harm.” It is well known that if even one of the essential elements of a crime is absent, the committed social act cannot be qualified under the relevant article of the Criminal Code. Therefore, clarifying the concept of serious harm is very important for correctly qualifying crimes.

However, the current Criminal Code does not explicitly state in its Eighth Chapter titled “Legal Meaning of Terms” what exactly should be understood as “serious harm.” Meanwhile, according to Article 4 of this Code, the criminal nature of an act, its punishability, and other legal consequences shall be determined only by the Criminal Code.

No person may be found guilty of committing a crime or subjected to punishment contrary to the law without a court judgment. A person found guilty of committing a crime enjoys the rights and fulfills the duties established by law.

From this it follows that the basis of criminal liability must be reflected only in the Criminal Code. As noted above, the current Criminal Code of the Republic of Uzbekistan does not disclose the content, types, or scope of the concept of “serious harm.”

Moreover, according to Part 3 of Article 23 of the Criminal Procedure Code of the Republic of Uzbekistan, all doubts regarding guilt, if it is impossible to eliminate them, must be resolved in favor of the suspect, the accused, or the defendant. Doubts arising in the application of the law must also be resolved in favor of the suspect, the accused, or the defendant. Therefore, situations reflected in legislation that give rise to ambiguous interpretations may also, in determining criminal liability.

Furthermore, Article 23 of the Criminal Code of the Republic of Uzbekistan provides the meaning of the concept of a crime committed with complex guilt. According to this article, if, as a result of a person intentionally committing a crime, other socially dangerous consequences occur through negligence, and if such an act is associated with stricter liability under the law, then such a crime is considered to have been committed intentionally. However, subparagraph “d” of Part 3 of Article 104 of this Code establishes criminal liability for the infliction of grievous bodily harm that results in the death of the victim. Considering that this act is, from a theoretical perspective, recognized as a crime committed with complex guilt, it becomes clear that it is not always necessary to have two or more consequences for an act to be considered “committed with complex guilt.” Therefore, if the phrase “socially dangerous consequences” in the disposition of Article 23 of the Criminal Code is formulated as “socially dangerous consequence(s)” or “a socially dangerous consequence or consequences,” it would be theoretically more appropriate.

In general, criminal law is a particularly strict branch of law that must not be applied inconsistently and plays a very important role in protecting the rights and freedoms of citizens, as well as the legally protected interests of the state and society, from criminal encroachments. For this reason, the consistent, step-by-step continuation of the policy of improving legislation in this field in our country deserves high recognition.

In recent years, technologies have deeply penetrated all spheres of our lives. The use of artificial intelligence (AI) technologies in crime detection and investigation processes makes it possible to increase efficiency and speed in this field. Compared to traditional methods, AI makes the crime-detection process more accurate, faster, and more systematic. At the same time, AI-based systems assist investigators in analyzing events, identifying connections, and drawing conclusions when determining the elements of a crime.

Additionally, the Presidential Resolution No. PR–358 of October 14, 2024, “On Approving the Strategy for the Development of Artificial Intelligence Technologies Until 2030,” approved the “Strategy for the Development of Artificial Intelligence Technologies Until 2030.” This strategy establishes the task of forming a legislative framework regulating relations concerning artificial intelligence and reviewing existing legal acts. This also demonstrates the relevance and importance of the issue being discussed.

The advantages of artificial intelligence technologies in crime detection are manifested in the following:

Rapid analysis of information. Evidence collected from the crime scene—witness statements, video footage, audio recordings, digital traces, and other materials—often consist of large volumes. AI algorithms can analyze this data much faster than human review. For example, facial-recognition systems can identify suspicious individuals in surveillance recordings or compare them with previous crimes stored in databases.

Accuracy and reduction of errors. When analyzing facts, humans may experience fatigue, subjectivity, or loss of attention. AI systems, however, conduct analysis algorithmically and significantly reduce the scale of errors. As a result, the reliability of the investigation process increases.

Identifying connections between events. AI systems are capable of detecting complex relationships by analyzing large amounts of data. For example, they can identify similarities between crimes committed in different regions or detect a criminal network. This enables investigators to find new evidence quickly and to detect crimes in advance.

Organizational efficiency. Using AI systems in the crime-detection process optimizes human resources. By automating routine and time-consuming tasks, specialists are able to focus on more complex and strategic tasks.

Advantages of artificial intelligence in determining the elements of a crime. Systematic evaluation of evidence. In determining the elements of a crime, the sequence of events and the subjective and objective aspects of the crime play a crucial role. AI systems can integrate data obtained from various sources and evaluate them in a systematic and consistent manner.

Preventive and forecasting functions

AI algorithms, in determining the elements of a crime, provide the possibility not only to analyze events that have already occurred, but also to predict potential crimes in the future. This is important for preventing crimes and taking preventive measures.

Standardization of analysis and conclusions

During the investigation process, conclusions may depend on the subjective judgment of specialists. AI systems standardize the analysis process and help produce evidence-based conclusions, which can be used as substantiated proof in court proceedings.

Let us also analyze the advantages of using artificial intelligence in determining the elements of a crime, including the object, objective aspect, subject, and subjective aspect — which are the main components of a crime.

1. Advantages of AI in determining the object of a crime

The object of a crime refers to the social relations against which the criminal act is directed.

The advantages of AI include:

Identifying the sector harmed through big data analysis. For example, in cybercrimes, AI systems automatically detect the compromised segments of information security or the damaged parts of the system.

Rapid comparison and classification. AI can automatically determine the type of crime (against the person, property-related, economic) and identify which social relation has been infringed.

Calculating the extent of harm caused to the object. For instance, in financial crimes, AI can automatically compute the amount of financial damage, and in cyberattacks, the level of damage inflicted on structures.

Analyzing previous similar cases. By comparing with data from past crimes, AI ensures speed and accuracy in determining the object of the crime.

2. Advantages of AI in determining the objective aspect of a crime

The objective aspect refers to the external side of a crime: the act (or omission), the consequence, and the causal relationship.

AI advantages include:

Identifying actions through video and audio analysis. AI analyzes surveillance camera recordings and detects specific parts where the criminal act is manifested.

Modeling cause–effect relationships. AI algorithms determine the connection between the act and its consequences and present clear models to investigators.

Reconstructing the dynamics of events. AI assists in determining how the crime was committed through 3D reconstruction or digital simulations.

Automatic calculation of parameters such as location, time, and movement speed. For example, in traffic-related crimes, AI quickly calculates the vehicle's speed and trajectory.

3. Advantages of AI in determining the subject of a crime

The subject of a crime is the person (or organization) who committed the crime, including age, sanity, and special characteristics.

AI advantages include:

Identifying the criminal through facial-recognition systems.

Analyzing biometric data. Identification through fingerprints, voice analysis, genetic data, gait-recognition technology, etc.

Estimating age and physical condition. Based on video recordings, AI determines the person's approximate age, height, weight, and movement patterns.

Real-time comparison with individuals in databases.

Analyzing corporate data in cases involving organizational subjects. When the liable subject is a legal entity, AI analyzes accounting records, emails, and transaction traces to identify responsibility.

4. Advantages of AI in determining the subjective aspect of a crime

The subjective aspect includes guilt, intent, purpose, and motive.

AI advantages include:

- Predicting intent through text and speech analysis. AI identifies key words, threats, and indications of harmful intent in emails, chats, and audio recordings.
- Comparing behavioral patterns. In economic crimes, AI analyzes a person's prior actions, expenses, and connections to determine the emergence of criminal intent.

- Analyzing psychological patterns. AI assesses stress levels, emotional states, and behavioral psychology in videos to estimate the likelihood of guilt (within legal and ethical limits).
- Predicting pre-crime behavior. For example, AI evaluates risk levels in groups inclined toward terrorism.
- Identifying motive by analyzing traces of economic or personal interests. AI extracts signs of intent from transactions, property movement, and disputes.

CONCLUSION

In general, criminal law is a rather strict field of law that must not be applied inconsistently, and it plays a highly important role in protecting the rights and freedoms of citizens, as well as the legally protected interests of the state and society, from criminal encroachments. Therefore, the step-by-step continuation of the policy of consistently improving the legislation in this field in our country may be evaluated highly.

In addition, the introduction of artificial intelligence technologies into the processes of crime detection and determining the elements of a crime not only increases the speed and accuracy of investigation, but also provides opportunities for preventing crime, systematically evaluating evidence, and optimizing human resources. At the same time, the use of AI systems must be carried out with consideration of ethical and legal issues. In the future, AI is expected to become an integral part of crime detection and investigative processes.

REFERENCES

1. Resolution of the President of the Republic of Uzbekistan No. PR-3723 dated May 14, 2018, **"On Measures to Radically Improve the System of Criminal and Criminal Procedural Legislation"** // National Database of Legislation of the Republic of Uzbekistan.
URL: <https://lex.uz/docs/55471975>
2. **Criminal Code of the Republic of Uzbekistan**, adopted on September 22, 1994 // National Database of Legislation of the Republic of Uzbekistan.
URL: <https://lex.uz/docs/6750126>
3. Kudryavtsev, V.N. **General Theory of Crime Qualification**. Moscow, 2007. p. 313.
4. Usmonaliev, M., Bakunov, P. **Criminal Law. General Part: Textbook for Higher Educational Institutions**. Tashkent: Nasaf Publishing House, 2010. p. 553.
5. Yakubov, A., Kabulov, R. **Criminal Law. General Part: Textbook**. Tashkent: Academy of the Ministry of Internal Affairs of the Republic of Uzbekistan, 2009. p. 374.
6. Xudaykulov, F.X. **The Relationship between the Concepts of Crime and Corpus Delicti and Their Objective and Subjective Elements: Instrumental Analysis and Proposals** // *Journal of Legal Research*, 2021, Vol. 6, No. 11. Also published in: *Oriental Renaissance: Innovative, Educational, Natural and Social*



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ISSN 2181-1784.

7. **Criminal Code of the Russian Federation**, adopted on June 13, 1996.
URL: <https://www.consultant.ru>

8. **Criminal Code of the Republic of Moldova**, 2003.
URL: <https://www.legislationline.org>