RIGHT TO A FAIR-TRIAL WHEN APPLYING ARTIFICIAL INTELLIGENCE IN CRIMINAL JUSTICE - LESSONS AND EXPERIENCES FOR VIETNAM

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ABSTRACT

Objective: The article studies the application of AI in the field of criminal justice. Since then, the article evaluates the feasibility and offers solutions and recommendations to ensure the right to a fair trial when applying AI to criminal justice in Vietnam.

Methods: To conduct research on the application of AI in criminal justice in Vietnam to ensure the right to a fair trial, the authors used traditional research methods of social science and legal science methods of analysis, synthesis, and case study to achieve the objective of the research.

Results: Artificial intelligence (AI) and its application, in general, are a matter of concern in social life in general and law in particular. The application of artificial intelligence in criminal justice to digitize the judicial field is being applied in many parts of the world such as the United States and European countries. Based on the theory of the order of justice before the law, the authors analyzed and assessed the impacts and effects of AI and found that the application of AI in criminal justice can negatively affect the right to a fair trial.

Conclusion: Through this study, we propose the following contents to effectively apply AI in Vietnamese criminal justice as follows: (i) The principle of the right to a fair trial must be respected when applying AI in decision-making; (ii) Enhancing the role of investigators, prosecutors, and judges in AI predictive decision-making; (iii) Building a database and AI system development agency in Vietnam; (iv) Upgrading technology infrastructure and databases at Criminal Justice Agencies; (v) Developing communication and training plan on technology and human rights content; (vi) Integrating the right to a fair trial systematically into every stage of the design, development, implementation, and ongoing monitoring of products, services, and systems using AI; (vi) Establishing the Department of AI Development and Use. In the future, the completion of the legal framework to ensure human rights under the influence of AI and legal issues on AI are issues that need to be further studied in Vietnam.

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DIREITO A UM JULGAMENTO JUSTO QUANDO SE APLICA A INTELIGÊNCIA ARTIFICIAL NA JUSTIÇA PENAL - LIÇÕES E EXPERIÊNCIAS PARA O VIETNAME

RESUMO

Objetivo: O artigo estuda a aplicação da IA no campo da justiça criminal. Desde então, o artigo avalia a viabilidade e oferece soluções e recomendações para garantir o direito a um julgamento justo ao aplicar IA à justiça criminal no Vietnã.

Métodos: Para realizar pesquisas sobre a aplicação da IA na justiça criminal no Vietnã para garantir o direito a um julgamento justo, os autores usaram métodos tradicionais de pesquisa de ciências sociais e legais métodos de análise, síntese e estudo de caso para alcançar o objetivo da pesquisa.

Resultados: A inteligência artificial (IA) e sua aplicação, em geral, preocupam a vida social em geral e o direito em particular. A aplicação da inteligência artificial na justiça criminal para digitalizar o campo judicial está sendo aplicada em muitas partes do mundo, como os Estados Unidos e países europeus. Com base na teoria da ordem da justiça perante a lei, os autores analisaram e avaliaram os impactos e efeitos da IA e descobriram que a aplicação da IA na justiça criminal pode afetar negativamente o direito a um julgamento justo.

Conclusão: Através deste estudo, propomos os seguintes conteúdos para aplicar efetivamente a IA na justiça penal vietnamita da seguinte forma: (i) O princípio do direito a um julgamento justo deve ser respeitado ao aplicar a IA na tomada de decisões; (ii) Reforço do papel dos investigadores, procuradores e juízes na tomada de decisões preditivas em IA; (iii) Construção de uma base de dados e uma agência de desenvolvimento de sistemas de IA no Vietnam; (iv) Melhoria da infraestrutura tecnológica e das bases de dados nas agências de justiça penal; (v) Desenvolvimento de um plano de comunicação e formação sobre tecnologia e conteúdo de direitos humanos; (vi) Integração sistemática do direito a um julgamento justo em cada fase do projeto, desenvolvimento, implementação e monitoramento contínuo de produtos, serviços e sistemas que usam IA; (vii) Estabelecimento do Departamento de Desenvolvimento e Uso de IA. No futuro, a conclusão do quadro jurídico para garantir os direitos humanos sob a influência da IA e questões jurídicas sobre a IA são questões que precisam de ser mais estudadas no Vietnam.

Palavras-chave: inteligência artificial, julgamento justo, devido processo, justiça criminal, direitos humanos.

DERECHO A UN JUICIO JUSTO AL APLICAR LA INTELIGENCIA ARTIFICIAL EN LA JUSTICIA PENAL - LECCIONES Y EXPERIENCIAS PARA VIETNAM

RESUMEN

Objetivo: El artículo estudia la aplicación de la IA en el ámbito de la justicia penal. Desde entonces, el artículo evalúa la viabilidad y ofrece soluciones y recomendaciones para garantizar el derecho a un juicio justo al aplicar la IA a la justicia penal en Vietnam.
Métodos: Para llevar a cabo investigaciones sobre la aplicación de la IA en la justicia penal en Vietnam para garantizar el derecho a un juicio justo, los autores utilizaron métodos de investigación tradicionales de ciencias sociales y ciencias jurídicas, métodos de análisis, síntesis y estudio de casos para lograr el objetivo de la investigación.

Resultados: La inteligencia artificial (IA) y su aplicación, en general, son motivo de preocupación en la vida social en general y en el derecho en particular. La aplicación de la inteligencia artificial en la justicia penal para digitalizar el campo judicial se está aplicando en muchas partes del mundo, como Estados Unidos y países europeos. Basándose en la teoría del orden de la justicia ante la ley, los autores analizaron y evaluaron los impactos y efectos de la IA y encontraron que la aplicación de la IA en la justicia penal puede afectar negativamente el derecho a un juicio justo.

Conclusión: A través de este estudio, proponemos los siguientes contenidos para aplicar efectivamente la IA en la justicia penal vietnamita de la siguiente manera: (i) El principio del derecho a un juicio justo debe respetarse al aplicar la IA en la toma de decisiones; (ii) Mejorar el papel de los investigadores, fiscales y jueces en la toma de decisiones predictivas sobre IA; (iii) Construir una base de datos y una agencia de desarrollo de sistemas de IA en Vietnam; (iv) Mejorar la infraestructura tecnológica y las bases de datos en las agencias de justicia penal; (v) Desarrollar un plan de comunicación y capacitación sobre tecnología y contenido de derechos humanos; (vi) Integrar sistemáticamente el derecho a un juicio justo en cada etapa del diseño, desarrollo, implementación y monitoreo continuo de productos, servicios y sistemas que utilizan IA; (vi) Establecer el Departamento de Desarrollo y Uso de IA. En el futuro, la finalización del marco legal para garantizar los derechos humanos bajo la influencia de la IA y las cuestiones legales sobre la IA son cuestiones que deben estudiarse más a fondo en Vietnam.

Palabras clave: inteligencia artificial, juicio justo, debido proceso, justicia penal, derechos humanos.

1 INTRODUCTION

In the process of solving criminal cases, besides finding out the truth of the case, the protection of human rights is one of the important goals. The practice of applying AI systems to criminal justice in some countries around the world has shown that AI not only has positive contributions but also has a negative impact on human rights in general and the right to a fair trial in particular. Currently, the world has experienced the unprecedented development of AI, but its application in criminal justice in Vietnam is still new. From there, the issues that need to be considered are as follows: (i) applying AI systems to assist judicial authorities in the process of solving criminal cases; (ii) limiting negative impacts on human rights in general and the right to a fair trial in particular. Accordingly, the article first learns about the right to a fair trial and the application of AI in criminal procedure. Next, the article mentions the participation and impact of AI in criminal proceedings in some countries around the world. Finally, the article assesses the current Vietnam legal situation and learns from experiences in the world to see the potential of AI applications in criminal justice and propose solutions for Vietnam. The
article has used many research methods, notably, the research method using the analysis-synthesis method to assess the legal status and practical application of AI in criminal justice. Besides, the case study method is also used to evaluate the reality of the research problem.

2 THEORETICAL FRAMEWORK

The principle of due process of laws is mentioned first in the text of the Great Charter of Freedom (according to the original Latin text Magna Carta Libertatum, English is the Great Charter of the Liberties). Specifically, in Chapter 29 of the Magna Carta: "The body of a free man is not to be arrested, or imprisoned, or disseised, or outlawed, or exiled, or in any way ruined, nor is the king to go against him or send forcibly against him, except by the judgment of his peers or by the law of the land."

Modern legal systems have different approaches to the Manga Carta's due procedure of law: (i) In the narrow sense: At present, the theory of due process is often discussed in its narrow sense, i.e. associated with criminal fair trial rights (Bui Tien Dat 2015, p. 61-72). Due process rights in current law are "elements constituting the concept of procedural due process". These rights are seen as a tool to protect citizens when dealing with law enforcement and judicial authorities. (ii) In the broad sense: Frequently “due process” is understood very broadly, similar to the concepts of “reasonableness”, "justice" or “fairness” (Nathan S. C. & Michael W. M., 2012, p. 1672 – 1681). “Due process of law” can be understood as a “legitimate process” consisting of two requirements: "reasonability or legitimacy of the content" of the legal norm and “the legitimacy of state power in terms of law procedure” of public acts (Nguyen Dang Dung, 2014). Since then, “procedural due process” is the correct procedure to deal with a legal issue (both in content and form) affecting human rights.

Through analyzing the doctrine of due process of law, it can be said that this is a fundamental theory to prescribe basic principles to protect human rights and ensure the values of state legislation. The most important goal of this doctrine is to ensure fairness, justice, and rationality in the state's actions affecting an individual's human rights through state power. The doctrine of due process not only places limits on the judicial and executive powers by procedural justice but also limits the legislative power by substantive justice, especially procedural justice equity in criminal due process - one of the areas that
have the ability to directly impact human rights (Bui Tien Dat, 2015).

From a different perspective, the doctrine of due process of law is the right to a fair trial. The right to a fair trial is mentioned as a separate provision in international legal instruments such as the Universal Declaration of Human Rights (UDHR) (Art. 9,10,11 of UDHR 1948), International Covenant on Civil and Political Rights (ICCPR) (Art. 9, 10, 11, 14, 15 of ICCPR 1966), … and most of these separate articles often focus on the area of criminal procedure. In the field of criminal procedure, the right to a fair trial is one of the important civil-political rights of people. In the criminal trial stage, the accused person (including those arrested, detainees, suspects, and defendants) is the subject of this right. This is considered a fundamental right. It is guaranteed to be exercised from many other specific rights in the criminal procedure such as the right to an equal trial; the right to review by an independent, objective, and established court of law; the right of defense; guaranteed right to presumption of innocence, etc… (Vo Quoc Tuan, 2021).

This doctrine of due process is often used under the term "right to a fair trial" rather than the term "fair sequence". From a practical perspective, international legal documents on protecting human rights often emphasize the human right to a fair trial. Because of the universality of these documents and the practical application of the doctrine in the protection of human rights, this doctrine is known as the "fair trial doctrine". On the contrary, from an academic perspective, the theory is approached in a broad sense, so it is often used with the term "due process of law theory" to see the logical process of content and form of guaranteeing human rights. In this article, we use the term "right to a fair trial" to refer to the Manga Carta's doctrine.

3 LITERATURE REVIEW

International researches: The article "Criminal justice, artificial intelligence systems, and human rights" by Aleš Završnik - University of Ljubljana in 2020 analyzes the automation process taking place in the field of criminal justice and provides several solutions proposed to overcome the risks AI systems pose in the field of justice. Research on "Artificial Intelligence in the Criminal Justice System: Leading Trends and Possibilities" by the group of authors Tatyana Sushina, Andrew Sobenin - Kutafin Moscow State University of Law in 2020 on the transformation of criminal proceedings within the framework of the development of digital technology in international space.
Research: "Predicting risk in criminal procedure: actuarial tools, algorithms, AI and judicial decision-making" by Carolyn McKay in 2019 argues that the advanced technology of criminal procedure is relying on data assessment of risks and consequences when decision-making in criminal proceedings uses computational tools, algorithms, machine learning, and AI.

Research in Vietnam: The article "Application of artificial intelligence in Court" by Duc Huy in 2020 raises typical examples of the application of AI in the judiciary abroad and the general opinion of some authors on whether to adopt AI or not. The study "Some Impacts of artificial intelligence on the legal profession" by Nguyen Van Quan in 2019 mentioned the general challenges affecting the legal profession, including lawyers and judges when involved. In addition, there are many articles on legal issues related to AI such as: "Establish Legal Status for artificial intelligence" by authors Bui Thi Hang Nga and Nguyen Thao Linh in 2021; "Legal Reform to meet the needs of digital transformation, protect personal data in digital transformation" by authors Duong The Kim Nguyen, Huynh Thien Tu, Le Thuy Khanh, Mai Nguyen Dung in 2021; "Human rights in the fourth industrial revolution" by the author group Vu Cong Giao, Nguyen Anh Duc in 2018.

The above studies have only mentioned the application of artificial intelligence in several fields such as criminal proceedings, law practice, and other legal issues. Studies have not mentioned ensuring the right to a fair trial in criminal proceedings in general and criminal proceedings in Vietnam in particular. This article of ours will inherit from previous studies and focus on researching the right to a fair trial when applying AI to criminal proceedings in Vietnam.

4 METHODOLOGY

The article is written using the following main analytical methods:

**Analytical method**: Using to clarify theoretical issues about the doctrine of due procedure of law, and the right to a fair trial in some countries in the world and Vietnam; helps to understand the practice of using AI in some nations around the world.

**Synthetic research methods**: This is one of the methods used throughout the research and presentation of the above scientific research. This method is considered the main method because of its novelty. There are not too many domestic articles but a lot of
foreign documents and studies on this topic. Through the analysis and synthesis of documents related to Criminal Procedure and AI, the author will have a basement to analyze, evaluate, and consider key issues in the content of the research presented. From there, the article identifies the pros and cons of applying AI to criminal procedures and makes recommendations for the Vietnamese criminal procedure system.

**Statistical methods and typical cases (Case study):** The method is used in analyzing criminal legal situations with the participation of the AI system. The article points out the advantages and disadvantages of AI and its effects on the right to a fair trial. In addition, based on analysis and case study, the article shows how to apply, manage and control AI of judicial agencies around the world to ensure the right to a fair trial throughout the criminal process. Thereby, the authors point out the obstacles in the process of applying AI to the field of criminal procedure.

**5 RESULTS AND DISCUSSION**

**5.1 THE RIGHT TO A FAIR TRIAL AND THE APPLICATION OF AI IN CRIMINAL PROCEEDINGS**

**5.1.1 The right to a fair trial**

*The right to a fair trial* is an essential human right in respecting law countries (Chile, D., 2010, p. 29-50) and is acknowledged in many international legal documents. First of all, the international convention ICCPR, which Vietnam has acceded to since 1982, is one of the international documents with high legal value in the global legal system on human rights (Le Cuong, 2019, p. 21). In the jurisdictions, the right to a fair trial is also directly identified as the “Right to a fair trial” as Article 6 Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR), Article 8 American Convention on Human Rights (1969).

According to international treaties on human rights, the "Right to a fair trial" is known as the right to have a fair trial, whether criminal or non-criminal (Do Thi Kieu, 2013, p. 6). According to Article 10 of the UDHR 1948 and Article 14.1 of the ICCPR, it can be seen that the “right to a fair trial” approaches are identified in relation to the trial stage in court. However, according to other standpoints, the scope of the right to a fair
trial is not limited to the framework of judicial activities (Nguyen Thi Lien Huong, 2015, p. 9). In this regard, Articles 11, 14, 15, of the ICCPR once again reaffirm the right to a fair trial and are concretized by rights: equality before the courts, the right to presumption of innocence, other minimum procedural guarantees for the accused and defendants in criminal procedure.

According to US law, in the 6th Amendment of the ten amendments to the US Constitution, also known as the US Bill of Rights, the right to a fair trial is provided for: “In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed; which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor; and to have the assistance of counsel for his defence”. In addition, Article 5 in this document also stipulates a number of rights in criminal cases to ensure fairness to the accused, specifically: “No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself; nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation”.

The right to a fair trial in Europe provided for in Article 6 of the ECHR, which embodies the human right to guarantee the rights of the accused, is clearly demonstrated through the following two principles: Firstly, the principle of “fair hearing” is detailed in the following 3 main contents: (1) Access to court; (2) Equality of arms; (3) The right to be present at the trial and the right to an oral hearing (Vietnamese Ministry of Justice, 2017). Secondly, the principle of presumption of innocence. According to the Convention, the presumption of innocence is considered the first procedural guarantee at the beginning of every activity of criminal procedure. It imposes a duty on those in authority to deal with the case seriously and lawfully. Thus, a person is considered guilty only when there is a conclusion of the case and this conviction must be based on an objective review and evaluation of the evidence collected legally. In another respect, the principle of presumption of innocence is closely related to the principle of fair trial. The judge cannot
be fair if his judgment is one-sided or partial, and vice versa. Thus, the core problem of the principle is that "all must be interpreted in favor of the accused" (Vietnamese Ministry of Justice, 2017).

In Vietnam, according to the 2013 Constitution of Vietnam, the right to fair consideration has not been mentioned as a basic right of citizens in Chapter II. The approach taken by the legislators does not directly prescribe due process rights as in legal theory or the US case law and European courts (Nguyen Van Quan & Nguyen Bich Thao, 2020, p. 51-62). The rights guaranteed to a fair trial in criminal proceedings must be indirectly derived from the principles outlined in the Vietnam Criminal Procedure Code and other relevant Laws. The principles can be mentioned as Presumption of innocence; Guarantee of the right of defense for accused persons and protection of legal rights and benefits of defendants and litigants; Determination of facts in a lawsuit; Upkeep of socialist law enforcement regarding criminal procedures; Veneration and protection of human rights and individuals' legitimate rights and interests; Conservation of legal equality; Timely, just and public trial and Inspection and supervision of criminal procedure.

From the global approach of international treaties on human rights; mang tính the area of international treaties in Europe and the standpoints of the United States and Vietnam, we consider that: “The right to a fair trial in criminal procedure is a fundamental human right and is ensured through the following specific rights: the right to a fair and timely trial; the right to a trial by an independent, objective and established court of law; the right to participate in court and public hearings; guaranteed right to presumption of innocence” (Nguyen Tran Nhu Khue, 2020, p. 18-22).

5.1.2 Application of Artificial Intelligence in Criminal Procedure

AI (Artificial Intelligence) was first mentioned by John McCarthy in 1956 at a conference organized by Marvin Minsky and John McCarthy with the participation of dozens of scientists at Dartmouth College (USA) (University of Washington, 2006). Currently, there are different definitions of AI, but it is difficult to give a specific definition that can fully cover because of the rapid development of AI in all aspects of life. AI is “a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence” (Schroer,
A., 2016). This intelligence is man-made. It can learn and think like a human (Bui Thi Hang Nga & Nguyen Thao Linh, 2021).

The advent and evolution of information technology, particularly artificial intelligence (AI), has sparked transformative changes across multiple sectors globally (Shibin Tad, M. C. et al., 2023, p.3). With the great development of AI, the orientation of its application will reduce the burden as well as reduce the budget allocated for judicial management in the field of criminal procedure. AI can participate in the criminal investigation process, verify evidence, select the law, provide judicial support to judges in information processing, etc., especially capable of defending and researching documents, legal records, and trials on behalf of attorneys and judges (Nguyen Van Quan, 2019, p. 12-18; Livson, M. et al., 2021, 4).

In the US, AI has been used more in criminal proceedings, typically in the analysis of images and videos; DNA analysis aids in decision-making and predicts the likelihood of committing a crime. In European countries, AI systems have recently appeared in the process of criminal proceedings. It is used in the investigation or trial stages of criminal cases. These cases of the application of AI in the criminal justice system of the United States and Europe will be analyzed in detail in the following chapter.

However, the application of "Artificial Intelligence" in criminal procedure will affect human rights, especially "The Right to a Fair Trial". Therefore, thoroughly studying how AI works in the judicial field to understand and prevent its negative impact on human rights in this aspect.

5.2 THE PARTICIPATION, IMPACT OF AI IN CRIMINAL PROCEDURE IN SOME COUNTRIES AROUND THE WORLD, AND LESSONS FOR VIETNAM

5.2.1 The practice of using AI in criminal procedure around the world

5.2.1.1 The United States

AI is widely applied in criminal procedure in the United States. In the criminal investigation stage, AI is used in image recognition (Perry, N., 2018), gun detection (Drange, M., 2016), DNA (deoxyribonucleic acid) analysis (Regalado, A. 2018), etc... The application of AI in the above activities has helped to identify the right witnesses,
evidence and prevent crime in criminal procedure more effectively. Moreover, the applications of AI contribute to speeding up the investigation and other stages in criminal proceedings. Before and during the execution of the trial, AI is used in this stage as a risk assessment tool. It is one of the most commonly used tools in US state courts. It is designed to predict the future recidivism risk of defendants. This prediction can be made before or during the trial. According to a survey report using EPIC’s risk assessment tool (EPIC, 1994), the results of a survey of state practices conducted by EPIC between September 2019 and July 2020 with the participation of more than 30 states (EPIC, 2020, p. 5). Among the risk prediction tools used, PSA and COMPAS are more popular than others.

COMPAS (Correctional Offender Management Profiling for Alternative Sanctions) - The AI system uses algorithms to assess risk in sentencing decisions (Sushina, T. & Sobenin, A. 2019, p. 434). It is a risk assessment tool that seeks to reduce recidivism and protect public security. Based on the collected data, COMPAS calculates and predicts the peril of being charged with the same crime within two years, not appearing in court, or the probability that that person will commit a violent crime force (Equivant, 2017). COMPASS predictions will serve as a basis for judges to refer to in determining penalties and fines (Dieterich, W. et al., 2016; Dupont, B. et al., 2018).

Next, the second most popular tool in the US criminal justice in adopting AI is PSA (Public Safety Assessment). It is an algorithmic pretrial risk assessment tool. Judges can use it to decide whether to release a defendant on pre-trial bail (Dupont, B., et al., 2018). Typically, New Jersey is one of the first states to switch to using the risk assessment system with regulations in “Section 2A:162-25 - Statewide Pretrial Services Program; risk assessment instrument và sử dụng PSA”. A PSA report may be required by a court or prepared automatically for all criminal defendants in a jurisdiction. PSA uses a database from 750,000 different cases over the US to evaluate two possibilities. The first possibility is to predict that the individual will re-offend if released pending trial. the second is to predict that they will not return to the trial in the future (New Jersey Courts, 2018). It should be emphasized that the PSA does not replace or interfere with the judge's decision on bail or detention. They are dependent on the final decision of the judge (Ventures, A., 2019).
5.2.1.2 European

In recent years, AI systems have appeared in the criminal process in European countries. Their emergence and development are mainly due to an increase in the burden of the criminal process and a decrease in funds allocated for judicial administration (Sushina, T. & Sobenin, A., 2019, p. 433). The involvement of these systems may take place during the investigation or trial stages of a criminal case. In addition, with the superiority in calculation and data processing of AI algorithms, they can penetrate deeply into the stage of criminal preparation that has not yet been made or scrutinize the criminal process against the victim with crimes committed.

CompStat system - crime prediction system using the CompStat method (COMPuter STATistics, or COMParative STATistics), methods for visualizing hot spots have increasingly relied on a raster GIS to interpolate a surface of crime based on reported crime events. The analysis results have the look of a "weather map," and are extremely popular for communicating crime patterns for a jurisdiction (Groff, E.R., La Vigne, N.G., 2002, p. 29-58). It has evolved into a policy management model that uses Geographic Information Systems (GIS) to map crime. In addition, this tool is used to be able to penetrate deep into the criminal preparation stage, as well as scrutinize the committed crimes. It is used to detect criminals from huge databases. The CompStat system is therefore used as a tool to identify 'at-risk' individuals (‘heat lists’—algorithm-generated lists identifying people most likely to commit a crime) (Gorner, J., 2013) and risk identification tool (‘hot spot policing’) (Kadar, C. et al., 2019).

Some European countries also favor the use of AI as a tool to predict the likelihood of a defendant’s recidivism after sentencing or the likelihood of endangering society in the future time on bail. Arnold Foundation - The algorithm gives defendants two scores — one for their likelihood of committing a crime and one for their risk of failing to appear in court — and flags those with an elevated risk of violence (Dewan, S., 2015). In addition, some countries use AI in the management and allocation of cases to judges, notably Poland, Serbia, and Slovakia (Završnik, A., 2020, p. 567-583). However, the system restricts operator access to algorithms or their source codes and data to conduct monitoring, testing, and evaluation of its independent decisions. It has resulted in this system's decision lacking basic transparency. This lack of transparency occurs to judges
when used for the purposes of court administration and division of cases (Kanduc, Z., 2011, p. 141-154).

5.2.2 The Impaction of AI on the right to a fair trial in criminal procedure

At present, the operation of criminal justice systems is becoming increasingly technologically sophisticated. Some questions are inquired as follows: (i) Can the application of AI systems be an effective solution to existing limitations in criminal justice? (ii) Does the application of AI systems to criminal justice impact human rights? (iii) Is the right to a fair trial for the subject in criminal cases guaranteed? Therefore, it is truly necessary to assess the impact of AI application in criminal justice on human rights in general and the right to a fair trial in particular.

5.2.2.1 Advantages of applying AI systems in criminal procedure

AI systems have greatly supported judicial agencies in investigating, risk assessment, reviewing, and analyzing data in criminal cases. It helps criminal procedure in the following aspects:

Firstly, AI systems assist judicial authorities in the process of data analysis and synthesis. One of the benefits is that these systems help prosecutors and judges quickly select suitable articles of law in the massive and complex legal system. In addition, AI plays a role as a tool to assist investigative agencies in evaluating evidence and documents from data entry and automatic screening. With the support of these tools, the evidence is authentic before it is brought to trial.

In the past, the authenticity of evidence was often assessed by investigators and judges. However, these people still cannot guarantee the level of accuracy of evidence like modern tools of AI systems. The consideration of evidence and proof in a criminal case is not only a simple legality review process but also an analysis based on relevant factors for the exhaustive details of the criminal judgment (McKay, C., 2019). The function of AI can do this by self-screening, classifying, evaluating documents, testimonies, exhibits, and examining which conclusions will be reasonable and accurate evidence and directly related to the finding. This is made possible by combining pre-programmed algorithmic risk assessments and eliminating human subjectivity. At the
same time, this is seen as a solution to the ‘subconscious bias’ of humans and improves human judgment (McKay, C., 2019, p. 9).

Secondly, AI assists judges in decision-making. With superior technology, AI makes recommendations for Judges to make decisions in the proceedings and hearings (Rigano, C., 2020, p. 7-8). Based on an automatic algorithm, AI retrieves legal bases from a large database to make decisions related to crimes and cases in progress. AI has the ability to learn on its own from the decisions and judgments that have been made by the courts before; has the ability to analyze, propose amendments and improvements to erroneous judgments and overcome cases where judges may have extralegal biases that affect their decisions (Chen, D. L., 2019, p. 15-42).

5.2.2.2 Disadvantages of applying AI systems in criminal procedure

Besides the aspects in the process of participating in solving criminal cases, AI intervention still has potentially negative impacts on human rights, namely the right to a fair trial.

Firstly, the “black box” effect of AI reduces transparency, reduces accountability, and increases the risk of making arbitrary decisions. The technical sophistication of the new AI systems used in decision-making processes in criminal justice settings often leads to a ‘black box’ effect (Završnik, A., 2020, p. 567-583). They are developed by private companies that have registered for intellectual property rights. In case, it is necessary to check and monitor the accuracy of decisions made by AI systems which will be limited by algorithmic security. Specifically, the identification of a vulnerability in the COMPAS algorithm that was refused by the owner company to share data makes verification difficult. Implementation requires the intervention of state agencies (Sushina, T. & Sobenin, A., 2020, p. 434). Modern machine learning systems generate and use more complex models that can make it difficult to assess the quality and origin of the data used (Zalnieriute, M. et al., 2019, p. 397-424). This will make it impossible for individuals and authorities to consider the equity and transparency of the decision. It is the security of the algorithm and the complex machine learning model that can lead to arbitrary decisions by AI.

The “black box” effect of the algorithms affects the principles of a fair trial in criminal justice. The right to a fair trial refers to the right to access and notification of
charges against the accused as well as the right to confirm and cross-examine witnesses and evidence in their cases (Sixth Amendment of the Constitution of the United States). It almost limits this fundamental right to litigants in criminal cases. Because they can't check or don't get an authentication explanation of the allegations and the evidence in their case in which they are verified and identified by AI systems. This is considered one of the negative impacts on ensuring the right to a fair trial in criminal justice.

Secondly, AI recommendations sometimes lead to “unfair or even discriminatory” decisions. AI can assist in making decisions based on algorithms and big data to eliminate human "feelings". However, the rigid algorithms and machine learning capabilities of AI make the recommendations "prejudice". The flaws that lead to discrimination arise from algorithmic bias, for a variety of reasons (Executive Office of the President of the United States, 2016, p. 7; Suzor, N. P. et al., 2018). For example, discrimination between groups of people is influenced by the specific geographic and temporal inputs of the AI system (Favaretto, M. et al., 2019, p. 14). The US COMPAS system is “prejudice” against black defendants. The system's decisions are seen as imposing on black populations that consider them to be at higher peril of recidivism than whites. The above prediction was based on unfavorable input data for black defendants, demonstrating racism discrimination in the predictive decisions made by the AI. This has seriously violated the equal rights of humans, namely the right to a fair trial for black populations.

According to the European principle of "fair hearing" mentioned in Article 6 of the ECHR, the parties are entitled to equality of arms and no discrimination. The making of adverse decisions for either party based on information and data of general intangible nature violates the principle of fair treatment and does not discriminate between the parties in the trial. This has made AI predictions and decisions lacking in accuracy and objectivity as a reference tool for judges, even in some cases as the final ruling (Mari, A., 2019).

Thirdly, the AI judge's recommendation in favor of parole or bail tends to violate the principle of presumption of innocence. The assessment of the defendant as high or low risk of recidivism has resulted in the defendant being assigned a degree of guilt or a future crime that they have not committed (Angwin, J. et al., 2016). For example, the Recidivism Risk Assessment Tool (HART) developed in the United States is often used to assess the recidivism peril that suspects are likely to commit over a given period (Oswald, M. et al., 2018). From there, these systems will make predictions and
percentages about the possibility of offenders' recidivism. However, the reference projections based on this assessment represent a violation of the human right to presumption of innocence.

5.2.3 Experienced lessons for Vietnam in the application of AI systems in criminal justice

The continuous development of digital technology offers many opportunities to improve the quality of criminal justice. Specifically, the application of AI is increasingly popular in many countries. The Ministry of Justice of Vietnam issued Decision No. 938/QD-BTP "On the promulgation of the Plan for Digital Transformation of the Judiciary Sector to 2025, with a vision to 2030". It identifies the digital transformation of the Judiciary as an important task to focus on directing and organizing the implementation to contribute to improving the efficiency of state management and improving the quality of public services in the Justice Sector (Art.1 Part II Decision No. 938/QD-BTP of Ministry of Justice of Vietnam). Besides, Vietnam has joined the Conference of Chief Justices of Asia and the Pacific - LAWASIA, Council of ASEAN Chief Justices (CACJ), and committed to complete the construction of the E-court by 2025 (Trung Hung, 2021). Chief Justice of the Supreme People's Court Nguyen Hoa Binh also said: "Speeding up the digital transformation process and building an electronic court is no longer a plan of the future, but an urgent task today" (Nguyen Hoa Binh, 2021).

Currently, the Supreme People's Court of Vietnam has put into use "Virtual Assistant" to provide intelligent services to support judges through the following features: Searching information about the relevant legal system, similar legal issues, related case law, and similar legally effective rulings; Assisting in planning, establishing, storing, and managing e-case files; Automatically creating legal documents according to templates; assisting in analyzing, verifying information, and detecting errors; Coding, posting judgments and decisions on the website of the People's Court (Nguyen Thi Hai Chau, 2021). Thus, it can be seen that the application of AI to criminal justice activities in Vietnam is still quite new and has not been adjusted in legal documents.

The digital age presents many challenges to the judicial reform process. In particular, the issue of AI application in the judicial sector of Vietnam in the future is an issue that needs to be considered. One of the issues to consider when applying AI to
Vietnam's Criminal Justice within the scope of the article is "the right to a fair trial". Accordingly, respecting and ensuring human rights” in general as well as the right to a fair trial in particular is one of the important tasks of criminal justice as recognized in Article 2 of the Vietnam Criminal Procedure Code 2015. Through the above limitations, the authors draw several experiences that Vietnam needs to consider when applying AI to criminal justice as follows:

*First*, it is necessary to focus on transparency in the process of building and developing AI algorithms. Almost all AI systems encounter and hinder the monitoring and verifying of the results derived from their algorithms. The engagement of these systems can be seen as a quick, intelligent tool. However, it cannot control the validity and reliability of algorithms during criminal proceedings (McKay, C., 2019, p. 9).

*Next*, the people who use AI in the judicial sector are investigators, prosecutors, judges, or authorities. They need to be defined in terms of the roles and rights and obligations of these actors. The AI system should only participate in the role of suggesting and recommending results from the collected data. These recommendations are factors that help investigators, prosecutors, and judges consider and choose to make a final decision. Therefore, it is necessary to coordinate the subjects mentioned above with AI systems. Investigators, prosecutors, and judges play a vital role and final decision-makers based on AI assistance.

*Finally*, the development and application of AI systems in criminal justice must ensure the principle of the right to a fair trial. From there, Vietnam needs to develop principles and regulations on the application of AI in Vietnam's criminal justice. Regarding this issue, European countries and the United States have taken some initiative in promulgating basic principles and regulations in the application of AI in criminal justice. In June 2020, The Principles of Artificial Intelligence Ethics for the Intelligence Community (IC) are intended to guide personnel on whether and how to develop and use AI, including machine learning, in furtherance of the IC's mission. The Intelligence Community commits to the design, development, and use of AI with the following principles: Respect the Law and Act with Integrity; Transparent and Accountable; Objective and Equitable; Human-Centered Development and Use; Secure and Resilient; Informed by Science and Technology (Intelligence Community, 2020). Besides that, in 2018, the European Commission on the Effectiveness of Justice (CEPEJ) adopted the "Ethical Charter on the Use of Artificial Intelligence in the Judiciary". When it comes to
criminal proceedings, the most important principles are (Sushina, T & Sobenin, A., 2020, p. 434): principle of respecting fundamental rights; the principle of non-discrimination; the principle of quality and safety; the principle of user control. The CEPEJ’s view as set out in the Charter is that the application of AI in the field of justice can contribute to improving efficiency and quality and must be implemented in a responsible manner that complies with the fundamental rights guaranteed in particular in the European Convention on Human Rights (ECHR) and the Council of Europe Convention on the Protection of Personal Data ((European Commission for the Efficiency of Justice - CEPEJ, 2018).

5.3 SUGGESTIONS FOR APPLYING AI TO VIETNAM’S CRIMINAL JUSTICE

To propose solutions to apply and assemble a legal framework of AI in Vietnam’s Criminal Justice, the authors believed that it is advisable to develop guiding principles and legal documents for regulating legal relations arising in the process of AI development and application in criminal justice. Accordingly, the guiding principles and legal documents are designed based on the following recommendations:

**The first suggestion**, the principle of the right to a fair trial must be guaranteed when applying AI in decision-making. Specifically:

*Firstly*, decision-making must comply with all the applicable laws (Australian Human Rights Commission, 2021, p. 67). This implements the “guarantee socialist law enforcement regarding criminal procedures” principle (Art. 7 Criminal Procedure Code of Vietnam 2015) and contributes to enforcing the right to have a fair trial. For example, if a decision charges someone with murder, that decision must comply with relevant principles and regulations emphasized in the Criminal Code, the Criminal Procedure Code, and other sub-law documents.

*Secondly*, the authority's competent use of AI needs transparency about times and methods. This transparency helps to reduce the breach of the principle of “Veneration and protection of human rights and individuals' legitimate rights and interests” (Art. 8 Criminal Procedure Code of Vietnam 2015); “timely, just and public trial…” (Art. 25 Criminal Procedure Code of Vietnam 2015). Accordingly, competent authorities should introduce legislation to require that an individual is informed where AI is materially used in a decision that has a legal, or similarly significant, effect on the individual’s rights.
Trang, N., T., T., Linh, N., H., Hoang, N., T., C., Kiet, P., V., T., Loan, L., T., N., & Phuc, N., T., H. (2024). RIGHT TO A FAIR-TRIAL WHEN APPLYING ARTIFICIAL INTELLIGENCE IN CRIMINAL JUSTICE - LESSONS AND EXPERIENCES FOR VIETNAM (Australian Human Rights Commission, 2019, p. 94). Therefore, transparency of how AI makes decisions allows affected individuals to challenge such decision-making systems, because information about the variables, inputs, and outputs would be available (M., Moses, L. B. and Williams, G., 2019, p. 24). Transparency regarding the use of AI in decision-making can also build public trust, and address historical breaches of that trust (Australia Human Rights Commission, 2021, p. 60). Some considered that simply notifying affected individuals that AI has been used in a decision-making process may be insufficient. It was suggested that notification should be accompanied by additional information—such as how to challenge the decision or seek a remedy, or more specific detail regarding how the decision-making process relied on AI (Australia Human Rights Commission, 2021, p. 60).

**Thirdly,** guarantees that a person has a legal entitlement to reasons for a decision made by AI. Accordingly, individuals affected by decisions made by AI have the right to be asked for explanations for the reasons for making those decisions. Such reasons help the affected individual understand the basis of a decision and challenge it if necessary. This is one of the requirements to help affected people protect their legitimate rights and interests. This is consistent with the principle of "Guarantee of the right of defense for accused persons and protection of legal rights" (Art. 16 Criminal Procedure Code of Vietnam 2015) in Vietnam's criminal procedure.

**Fourthly,** The AI decision-making process needs to be evaluated and monitored to correct if there are errors. Accordingly, before using AI to support decision-making in criminal proceedings, competent authorities need to consider the human rights impact of AI operation, use, and development on affected individuals. Thereby, the competent authority will provide appropriate guidelines for their use, monitoring, and modification. Our group suggests some criteria that Vietnam can learn in undertaking human rights impact assessments according to the recommendation of the Australian Human Rights Commission, such as: (i) assessment should follow a risk-based approach and should be conducted after learning lessons from others countries; (ii) public consultation on the proposed new system for decision-making especially those most likely to be affected; (iii) considering the human rights impact of the proposed use of AI, and in particular, automation, in the criminal field and proceed only if there is sufficient confidence that the system will not violate human rights; (iv) guarantee that there are laws governing human rights impact assessments that include any safeguards necessary to protect human

**Fifthly**, guarantee the input data, modify the learning algorithm, and evaluate the results of the algorithm to identify discriminatory patterns to (Australian Human Rights Commission, 2020; p. 26; Favaretto, M. et al, 2019, p. 14; Ziliobaite, I., 2016): (i) limit discrimination; (ii) protect the right to have a fair trial to minimize violations of the principle of "timely, just and public trial" (Art. 25 Criminal Procedure Code of Vietnam 2015) và “conservation of legal equality” (Art. 9 Criminal Procedure Code of Vietnam 2015). Therefore, conducting regular assessments of the representativeness of data sets, and making technological or algorithmic adjustments for problematic bias (Rodrigues, R., 2020, p. 3).

**Sixthly**, regularly independently examine all decisions made by competent authorities based on information provided by or suggested by AI. This independent inspection helps to well implement the “principle of inspection and supervision of criminal procedure” as stipulated in Article 33 of the 2015 Vietnam Criminal Procedure Code. Accordingly, the competent authority should regularly inspect to ensure that decisions are made in accordance with the law; not omit criminals or unjustly blame innocent people; and protect the legitimate rights and interests of citizens.

**The second suggestion**, the role of investigators, prosecutors, and judges in making decisions based on information suggested by AI should be enhanced.

While AI can automatically make decisions (e.g. a judgment), it is uncertain to produce an accurate and legal outcome in all cases. Investigators, prosecutors, and judges should be “a bulwark against the derailment of automatic dispute resolution” (Nguyen Van Quan, 2019). Therefore, investigators, prosecutors, and judges must have the role of "reviewers of the rationality of decisions made by AI". In addition, the competent judge also has the right to review complaints against decisions made automatically, as well as has an important role in controlling the accuracy of algorithms such as making sure the algorithm does not contain racism or discrimination (Nguyen Van Quan, 2019).

**The third suggestion**, building a database and developing an AI system.

Building an information database system should be done in an orderly and appropriate manner according to each process of digital transformation and development level of digital technology in Vietnam today. Therefore, the Government of Vietnam has issued Decision No. 749/QD-TTg of the Prime Minister for the approval of the "National Digital Transformation Program to the year 2025, with orientation to the year 2030" in
the judicial sector. It is considered as a preparation step for building a database system to store information in the future. With a longer vision, the database building an AI system development should be done as follows for Vietnam to apply AI in criminal proceedings:

Firstly, aggregation and systematization databases in the field of criminal procedure. The basic feature of AI is to use available data to process and produce suitable results. Therefore, building and developing a database is a mandatory requirement to apply AI in criminal procedures in Vietnam. Vietnam needs to do the following: (i) Change the archival form from paper documents to electronic files in the process of digitizing the judiciary; (ii) Aggregating relevant data from various sources into the judicial branch's database; (iii) Connecting data of juridical field with other national digital platforms such as the National Public Service Portal, the National Population Database, or the General Statistics Office's Database, etc. Thereby, these AI systems can comprehensively and efficiently exploit the databases to produce highly accurate and transparent output.

Secondly, research, develop, and operate AI systems to effectively process databases to make recommendations or decisions in Vietnam's criminal justice. The fourth suggestion, upgrading technology infrastructure at criminal justice agencies.

It is necessary to renovate and upgrade the technology infrastructure at current criminal justice agencies such as the Court, the Procuracy, the Investigating Agency, etc.,... to aim at the goal of applying AI in the criminal proceedings at these institutions. Technology infrastructure suitable for AI applications will make AI operations more convenient and achieve the optimal efficiency that AI brings in criminal proceedings. Therefore, Vietnam needs to have a specific agenda for determining: (i) The need for upgrading and installing suitable equipment for AI systems of Judiciary agencies from central to local levels; (ii) The schedule for upgrading technology infrastructure; (iii) The type of equipment for the technology infrastructure upgrade plan.

The fifth suggestion, developing a propaganda campaign and training plan on technology and human rights.

Vietnam needs to have a plan for propaganda and training on AI technology and the application of AI technology to criminal justice and human rights in the AI era for different audiences: (i) For the population community: people need basic information about AI and AI operation process. Providing information about AI and AI applications
to people helps them understand the operating principles of AI and make appropriate challenges if needed. In addition, to protect their rights and interests, people have the right to request explanations from agencies applying AI in making decisions related to people.

(ii) For people who make decisions based on AI data: they need a relatively deep knowledge of databases and AI operations. In addition, they have the ability to verify the accuracy of the AI's conclusions. Therefore, investigators, prosecutors, judges, and others involved must be trained in technology in addition to their specialized knowledge. (iii) For experts who build AI: they must know algorithms and high technology. However, to build AI applications in criminal procedure, they must be trained in human rights so that their designs do not violate these rights. (iv) For managers, policymakers, and operators of AI systems: They should be provided with training and information on AI, its operation, and its human rights impact on AI in the context of the system to be deployed.

The sixth suggestion, systematic integration the right to a fair trial at every stage of the design, development, implementation, and ongoing monitoring of products, services, and systems using AI.

Integrate the right to a fair trial from the design stage through the application stage to ensure full respect for rights. Therefore, the government should have a policy and mechanism to prioritize the use of the types of AI with human rights protection design certification in criminal procedure. According to the Oxford Handbook on AI Ethics, some criteria that can be used as a reference for Vietnam when setting policy criteria are as follows (Yeung, K. et al., 2020, p. 77): (i) Design and deliberation; (ii) Assessment, testing, and evaluation; (iii) Independent oversight, investigation, and sanction; (iv) traceability, evidence, and proof (Australian Human Rights Commission, 2021, p. 175).

The seventh suggestion, the establishment of the Department of Development and Use of AI

To ensure the effective application of AI in Vietnam's criminal procedure, Vietnam needs to establish a specialized agency for AI development and application. Accordingly, the tasks of the AI Development and Application Department include:

Firstly, public agencies and private sector organizations often do not understand the legal, ethical, and human rights issues when developing and applying AI. The Department of AI Development and Use is tasked with providing expert guidance on the legal and ethical standards that apply to the development and use of AI.

Secondly, legislators and policymakers will be under unprecedented pressure to
ensure that Vietnam has suitable laws and policies in place to address risks and take advantage of related opportunities to the rise of AI. Therefore, there is a need for a specialized agency to advise the Government on AI in order to develop policies, laws and protect human rights in an active and responsible manner. The Department of Development and Use of AI is responsible for monitoring AI usage trends in Vietnam and around the world to support the design, application, and operation of AI systems in criminal procedures. The Department of AI Development and Use also has an advisory function.

Thirdly, The Department of AI Development and Use monitors and examines the design, development, and use of AI in some cases to identify and mitigate impacts on human rights. This task of the Department will help the process of applying AI to criminal procedure be done for the right purpose, legally and transparently. To achieve these goals, the Department of AI Development and Use must have experts in many areas of expertise, including engineering - technology; law and business; human rights and ethics; and other social sciences.

6 CONCLUSIONS

AI technology is and will bring a great change to human society. It seems to have a very rapid and effective impact on many fields of life. In criminal justice, AI has advantages in analyzing and selecting appropriate legal provisions and assisting judicial authorities in the investigation, prosecution, and adjudication process. With outstanding data storage and analysis capabilities, AI algorithms provide crime-related risk assessments and conclusions to assist investigators, prosecutors, and judges in decision-making. This shows that the potential of AI in this field is huge if its limitations can be removed. The application of AI in criminal justice raises many complex problems, including the issue of guaranteeing human rights. A review of the implementation experience using AI in countries such as the US and Europe shows that it can negatively affect the right to a fair trial. This is demonstrated by amplifying pre-existing prejudices and errors and thereby undermining the effectiveness of justice and law enforcement.

In Vietnam's criminal justice, the issue of AI applications in criminal justice is still new. The application of AI in Vietnam will face many obstacles. However, we believe that "in the future, it is possible to apply AI in criminal justice in Vietnam".
Therefore, the design, development, and use of these technologies must be placed within a certain legal framework. Through this study, we propose the following contents to effectively apply AI in Vietnamese criminal justice as follows: (i) The principle of the right to a fair trial must be respected when applying AI in decision-making; (ii) Enhancing the role of investigators, prosecutors, and judges in AI predictive decision-making; (iii) Building a database and AI system development agency in Vietnam; (iv) Upgrading technology infrastructure and databases at Criminal Justice Agencies; (v) Developing communication and training plan on technology and human rights content; (vi) Integrating the right to a fair trial systematically into every stage of the design, development, implementation, and ongoing monitoring of products, services, and systems using AI; (vi) Establishing the Department of AI Development and Use. In the future, the completion of the legal framework to ensure human rights under the influence of AI and legal issues on AI are issues that need to be further studied in Vietnam.
REFERENCES


Drange, M. (2016). We're Spending Millions On This High-Tech System Designed To Reduce Gun Violence. Is It Making A Difference?. Forbes. We're Spending Millions On This High-Tech System Designed To Reduce Gun Violence. Is It Making A Difference? (forbes.com)


Regalado, A. (2018). Investigators searched a million people’s DNA to find Golden State serial killer. MIT Technology Review. We will find you: DNA search used to nab Golden State Killer can home in on about 60% of white Americans | Science | AAAS.


The Criminal Procedure Code of Vietnam 2015

The International Covenant on Civil and Political Rights 1966 (ICCPR)

The Universal Declaration of Human Rights 1948 (UDHR)

