

Use of AI Risk Assessment for Conditional Release based on Principles of Justice and Protection of Human Rights

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Abstract. *The use of Artificial Intelligence (AI) in parole risk assessments in Indonesia is beginning to be considered as a policy alternative to address the problem of correctional overcrowding and the limitations of conventional assessment mechanisms. However, to date, there is no specific and comprehensive legal regulation governing the use of AI in the parole decision-making process. This situation creates a normative gap that could potentially raise issues concerning the principles of legal certainty, justice, and the protection of human rights for prisoners. This study employs normative legal research methods with a statutory and comparative legal approach. The analysis is conducted on the positive legal framework in Indonesia and compared with practices and regulations in several other jurisdictions, including the implementation of the COMPAS system in the United States and risk-based regulations in the EU AI Act in the European Union. The results show that the use of AI in parole assessments, if not accompanied by adequate legal regulations, has the potential to cause problems in the form of algorithmic bias, limited transparency due to black box mechanisms and challenges to the principle of accountability in administrative decision-making in the correctional sector. Based on these findings, this study emphasizes the importance of formulating a clear and measurable legal framework to regulate the use of AI as a supporting instrument for parole assessments. Such regulations should clarify the limitations of AI's function as a decision-making tool, along with human oversight mechanisms, principles of transparency, and accountability, so that its implementation remains aligned with the goals of the correctional system and the principles of human rights protection.*

Keywords: Artificial Intelligence; Legal Certainty; Parole; Risk Assessment.

1. Introduction

The transformation of the criminal justice system in Indonesia cannot be separated from the global dynamics triggered by the Industrial Revolution 4.0. This era is characterized by the integration of digital technologies, including Artificial Intelligence (AI), the Internet of Things

(IoT), and big data analysis, which significantly impact how the state carries out its law enforcement and justice administration functions (Klaus Schwab, 2016). Its basic principle, as outlined by Lifter and Tschienner (2017), emphasizes that the Industrial Revolution 4.0 encourages intelligent system-based decision-making that is automated, predictive, and efficient. In the context of criminal law, this development has begun to penetrate the post-sentencing stage, particularly in the correctional system that is oriented towards the development and social reintegration of prisoners.

In Indonesian criminal law, parole is a crucial instrument in the execution of sentences. Parole is regulated by Law No. 22 of 2022 concerning Corrections, embodying the goals of modern punishment, which are not merely repressive but also corrective and rehabilitative. Through parole, the state provides prisoners with the opportunity to reintegrate into society while remaining under legal supervision. However, granting parole requires a rigorous risk assessment, particularly regarding the potential for recidivism, compliance with correctional programs, and the impact on public order and security. Therefore, there is debate about utilizing AI in risk assessments as a supporting tool for parole decision-making.

The urgency of implementing technology in the correctional system becomes even more apparent when compared to the empirical conditions of correctional institutions in Indonesia. Data from the Directorate General of Corrections, Ministry of Law and Human Rights, shows that by early 2024, the number of inmates in correctional institutions and detention centers will reach more than 277,000, while the ideal capacity is only around 140,000. This situation has resulted in a national overcapacity rate approaching 198% (Directorate General of Corrections, 2024). Overcapacity not only creates administrative problems but also directly impacts the fulfillment of prisoners' rights, the effectiveness of correctional facilities, and the potential for violations of the principle of humane treatment in the implementation of sentences. In this situation, parole becomes a strategic instrument to reduce overcrowding, although the assessment process still faces various structural obstacles.

In fact, the parole assessment mechanism in Indonesia is still dominated by manual procedures and subjective judgments by correctional officers (Eubanks, 2018). Limited human resources, high workloads, and data systems that are not yet fully digitally integrated often lead to slow and inconsistent decision-making. This situation has the potential to lead to disparities in the treatment of prisoners in similar legal situations. In this context, AI is seen as capable of providing more objective and measurable data-based risk analysis. However, the application of AI in the realm of criminal law, particularly those directly related to the restriction or restoration of a person's freedom, cannot be separated from serious legal and ethical consequences.

International experience shows that the use of AI in the criminal justice system carries significant risks. The use of the COMPAS (*Correctional Offender Management Profiling for Alternative Sanctions*) system in the United States is the most widely studied example (Angwin et al., 2016). ProPublica research revealed that the COMPAS algorithm exhibited racial bias, where Black defendants were systematically assessed as having a higher risk of recidivism than white

defendants, despite their relatively comparable rates of reoffending (Larson et al., 2016). This finding confirms that AI is not completely neutral but can replicate biases inherent in historical data and social structures (Barocas & Selbst., 2016). From a criminal law perspective, this situation has the potential to violate the principle of equality before the law and the principle of substantive justice.

In addition to the issue of algorithmic bias, AI applications also face the *black box problem*, namely the inability to transparently explain algorithmic decision-making processes. AI systems based on *machine learning* and *deep learning* often fail to provide understandable reasons for the factors influencing assessment outcomes. In the context of parole, this can hinder inmates' rights to obtain explanations and to appeal decisions affecting their freedom. A similar phenomenon began to be identified in Indonesia through the trial of the Prisoner Behavior Assessment System (SPPN) in the 2022–2024 period, where decisions to deny parole were reportedly based on system scores without adequate clarification mechanisms. This situation raises serious questions about accountability and human rights protection in technology-based correctional systems.

From a normative criminal law perspective, these developments demonstrate a gap in legal regulation within Indonesian positive law. While the Electronic Information and Transactions Law and the Personal Data Protection Law regulate general aspects of technology use and personal data, there are no specific norms explicitly governing the use of AI in legal decision-making that directly impacts a person's freedom, such as parole. This lack of regulation has the potential to raise issues regarding the principles of legality, legal certainty, and accountability in criminal law and correctional administration law (Abdurrahman & Pratiwi, 2023). Therefore, identifying this legal gap is crucial to prevent deviations in practice and ensure that the use of AI remains within the framework of the rule of law.

Based on the background and literature review, this study places a new emphasis on normative analysis of the legal gaps in the use of AI in parole assessments in Indonesia, with an emphasis on the criminal law perspective. This study aims to analyze the legal regulations for the use of AI in parole under Indonesian positive law, identify potential legal deviations that may arise from its application, and formulate legal policy recommendations based on the principles of legality, justice, transparency, and human rights protection to support the realization of a just, accountable, and goal-oriented correctional system.

2. Research Methods

This research uses a normative legal research method that focuses on the analysis of positive legal norms that regulate the use of artificial intelligence *in* parole risk assessments as part of criminal execution.

The approaches used in this research include a legislative approach to examine relevant legal provisions, a conceptual approach based on the principles of legality, legal certainty, criminal

individualization, and protection of human rights, as well as a comparative approach as supporting material. The specifications of this research are descriptive-analytical.

The data collection method was conducted through a literature study using secondary data consisting of primary legal materials, secondary legal materials, and tertiary legal materials. Primary legal materials include the 1945 Constitution of the Republic of Indonesia, Law No. 22 of 2022 concerning the Socialization of Law, Law No. 27 of 2022 concerning Personal Data Protection, and other related laws and regulations. The data analysis method is carried out qualitatively by using deductive legal reasoning to draw conclusions and formulate legal policy recommendations.

3. Results and Discussion

3.1 Legal Analysis of Artificial Intelligence (AI) Regulations in Parole Risk Assessment in Indonesia

Parole is an important instrument in the Indonesian correctional system that aims to encourage the process of development and social reintegration of prisoners. Although not explicitly mentioned in the 1945 Constitution of the Republic of Indonesia, the concept of parole has a strong constitutional basis through the principles of human rights and the rule of law (Satjipto Rahardjo, Law and Social Change., 2009). Article 27 paragraph (1) of the 1945 Constitution affirms the principle of equality of every citizen before the law and government, including for prisoners who are serving their sentences. This principle emphasizes that the status of a prisoner does not eliminate a person's position as a legal subject who has the right to receive fair and equal treatment in every legal process, including in the parole mechanism.

In addition, Article 28D paragraph (1) of the 1945 Constitution guarantees the right of every person to recognition, guarantees, protection, and fair legal certainty, as well as equal treatment before the law. In the context of corrections, this constitutional norm implies that the process of assessing eligibility for parole must be carried out objectively, transparently, and responsibly. Assessments that are discriminatory, arbitrary, or not based on clear procedures have the potential to violate the principles of legal certainty and substantive justice. Furthermore, Article 28G paragraph (1) of the 1945 Constitution guarantees protection of the individual, while Article 28I paragraph (1) affirms the existence of human rights that cannot be reduced under any circumstances. These principles emphasize that even though the physical freedom of prisoners is limited by criminal decisions, their fundamental rights must still be protected by the state.

The normative basis for parole is more specifically regulated in Law No. 22 of 2022 concerning Corrections. This law replaces Law No. 12 of 1995 and introduces a new paradigm for corrections that emphasizes the development, rehabilitation, and social reintegration of inmates (Muladi & Barda Nawawi Arief., 2010). Within this framework, parole is positioned not merely as a form of sentence reduction, but as an integral part of the ongoing development process. Assessment of

eligibility for parole is based on an evaluation of the inmate's behavior, risk level of reoffending, and social and psychological readiness to return to society.

Law No. 22 of 2022 assigns a crucial role to Correctional Institutions (Bapas) and the Correctional Observation Team (TPP) in assessing and supervising inmates seeking parole. However, this law does not explicitly regulate the risk assessment methods or instruments that must be used. As a result, the assessment process still relies heavily on manual assessments and the discretion of correctional officers (Susanto, 2021). This situation raises various practical issues, such as potential subjectivity, inconsistencies between regions, and limitations in comprehensively processing historical inmate data.

These challenges are further exacerbated by the current state of Indonesian correctional institutions, which continue to face overcrowding, limited human resources, and high staff workloads. In this context, the use of artificial intelligence (AI) in parole risk assessments has emerged as a solution to improve efficiency and objectivity. AI is seen as capable of processing large amounts of data, identifying recidivism risk patterns, and providing more consistent, data-driven recommendations than manual assessments alone.

However, from an Indonesian positive law perspective, the use of AI in parole risk assessments lacks a clear legal basis. Neither Law No. 22 of 2022 nor its implementing regulations explicitly regulate the use of AI-based systems in correctional decision-making. Technical regulations related to parole, previously stipulated in Government Regulation No. 32 of 1999, and subsequently updated through Government Regulation No. 28 of 2006 and Government Regulation No. 99 of 2012, also fail to address the development of artificial intelligence technology. Therefore, it can be argued that the use of AI risk assessment in the context of parole exists in a legal vacuum (Abdurrahman & Pratiwi, 2023).

This legal vacuum has serious legal implications. In a state based on the rule of law, every government action that impacts a citizen's rights must have a clear legal basis (Soekanto & Mamudji., 2015). Decisions regarding conditional release directly affect a person's right to freedom, so they cannot be based on mechanisms or instruments that lack legal legitimacy. The use of AI without an explicit legal basis has the potential to violate the principle of legal certainty as guaranteed by Article 28D paragraph (1) of the 1945 Constitution, because prisoners do not have clarity regarding the basis and mechanism for the assessment used against them.

Furthermore, the lack of legal regulation also raises issues related to accountability. In conventional correctional systems, responsibility for parole decisions rests with officials or institutions with discretionary authority. However, if risk assessments begin to rely on AI output, questions arise about who is responsible for errors in judgment. Does the responsibility lie with the system developers, correctional officers who use AI recommendations, or state institutions that adopt the technology without adequate legal basis? Without a clear accountability framework, the use of AI has the potential to create a space for impunity that contradicts the principles of the rule of law (Gless, Silverman & Weigend, 2016).

From a state administrative law perspective, the use of AI in parole risk assessments also relates to the concept of government officials' discretion. Discretion is granted to enable officials to make decisions in certain situations not specifically regulated by law. However, discretion must still be exercised in accordance with the General Principles of Good Governance (AUPB), such as legal certainty, accuracy, and non-abuse of authority (Susanto., 2021). If AI output is used as the primary basis for decisions without human verification, officials' discretion could potentially be reduced to merely formal legitimacy for machine decisions, which ultimately contradicts the principles of AUPB itself.

Another equally important aspect is personal data protection. The use of AI risk assessments requires the collection and processing of large amounts of inmate data, including sensitive data such as criminal histories, behavioral records, and psychological conditions. Law No. 27 of 2022 concerning Personal Data Protection (PDP Law) categorizes this type of data as personal data that must be strictly protected. Without specific regulations regarding how this data is collected, processed, stored, and used in AI systems, there is a risk of violating inmates' privacy rights, as protected by Article 28G paragraph (1) of the 1945 Constitution.

Thus, normatively, it can be concluded that current Indonesian positive law is not ready to accommodate the use of AI in parole risk assessments. The absence of explicit regulations creates legal uncertainty, opening up room for abuse of authority and potentially threatening the protection of prisoners' human rights. In this context, the use of AI without a clear legal framework is not only a technical issue but also a legal one that touches on the fundamental principles of the rule of law and humane correctional systems.

Therefore, before AI can be widely used in the parole process, a comprehensive legal policy based on the principles of justice, accountability, and human rights protection is needed. Without adequate legal reform, the use of AI risks undermining the very purpose of correctional institutions, namely, developing inmates so they can reintegrate into society as responsible and dignified individuals.

3.2 Potential Legal Deviations in the Application of AI Risk Assessment for Conditional Release

The application of artificial intelligence (AI) to parole risk assessments carries complex legal consequences. While this technology is often promoted as a tool to improve the efficiency, consistency, and objectivity of assessments, in practice, AI also holds significant potential to give rise to various forms of legal irregularities. These irregularities are not merely technical in nature but also touch on fundamental aspects of the rule of law, from the principles of equality before the law, legal certainty, government accountability, to the protection of prisoners' human rights.

In the context of the Indonesian correctional system, this potential for abuse becomes even more significant given the lack of a legal framework explicitly regulating the use of AI risk assessment. As outlined in the previous subchapter, Indonesian positive law still places the assessment of eligibility for parole within the discretion of correctional officials, using a *human-*

based decision-making approach. When AI technology is introduced without an adequate normative foundation, the risk of systemic and difficult-to-detect legal abuses arises.

One of the most crucial potential legal irregularities is algorithmic bias and covert discrimination (Barocas & Selbst., 2016). Technically, AI algorithms operate based on historical data used as training data. This data reflects past law enforcement and correctional practices, which are not always neutral and free from bias. If previous practices have discriminatory tendencies based on socioeconomic background, education level, type of crime, or region of origin, these patterns have the potential to be reproduced by AI algorithms (Huq., 2019). As a result, inmates from certain groups can systematically obtain higher risk scores, even though they individually demonstrate good correctional behavior (Angwin et al., & Larson et al., 2016).

From a legal perspective, this condition contradicts the principle of equality before the law as guaranteed by Article 27 paragraph (1) of the 1945 Constitution and reaffirmed in Law No. 39 of 1999 concerning Human Rights. Discrimination resulting from algorithms, even if not explicitly carried out by humans, remains a form of unequal treatment that impacts the reduction of prisoners' rights to obtain parole. Thus, algorithmic bias cannot be viewed solely as a technical issue, but as a violation of legal principles and human rights.

Another potential source of misconduct is the lack of transparency, often referred to as "*black box decision-making*." Many modern AI systems, particularly those based on *complex machine learning*, produce output without readily understandable explanations of their decision-making process. In the context of parole, this situation becomes particularly problematic. The decision to deny or suspend parole directly impacts a person's right to liberty. Therefore, inmates have the right to know the basis for the considerations used in making these decisions.

When decisions are based on AI-generated risk scores without adequate explanation, prisoners' rights to legal certainty and clear administrative rationale are diminished. This potentially violates the principle of *due process of law*, which requires that any decision that harms an individual's rights be understood, tested, and accounted for. Within Indonesia's constitutional framework, this condition contradicts Article 28D paragraph (1) of the 1945 Constitution, which guarantees the right to fair legal certainty. Without algorithmic transparency, AI has the potential to become *a de facto authority* immune from legal oversight.

Furthermore, the implementation of AI risk assessments also has the potential to lead to deviations in the form of a shift in the discretion of correctional officials. Normatively, discretion is granted to officials to enable contextual and humane decision-making within the bounds of the law. However, when AI recommendations are used as the primary or even sole basis for consideration, officials' discretion can potentially become a mere administrative formality. Correctional officials can hide behind algorithmic results to justify their decisions, without conducting a substantive assessment of the individual inmates' conditions.

From a state administrative law perspective, this situation has the potential to violate the General Principles of Good Governance (AUPB), particularly the principles of accuracy, non-

abuse of authority, and transparency. Decisions made automatically based on AI output without adequate human verification can be categorized as procedurally flawed administrative actions. Furthermore, if officials passively accept AI results without critical consideration, legal responsibility for those decisions becomes unclear, creating what is known as a *responsibility gap*.

Legal irregularities can also arise in the absence of effective objection and appeal mechanisms. In a legal system that upholds due process of law, every individual should have the opportunity to challenge decisions that violate their rights. However, if parole decisions are based on AI assessments that are not transparent, inmates will struggle to raise substantial objections. Without knowledge of the variables used and how risk scores are calculated, the right to self-defense becomes a mere illusion. This situation has the potential to render AI an entity beyond the reach of legal correction mechanisms, even though the impact of its decisions on inmates' lives is very real.

Another equally significant potential for violations is the violation of personal data protection. The implementation of AI risk assessments requires the large-scale collection, processing, and storage of inmate data. This data includes not only basic identity data but also sensitive data such as criminal history, behavioral records, psychological conditions, and social background. If this data is not managed in accordance with data protection principles, the risk of privacy violations is very high. This contradicts Law No. 27 of 2022 concerning Personal Data Protection and Article 28G paragraph (1) of the 1945 Constitution, which guarantees personal protection and a sense of security.

In the correctional context, privacy violations not only impact individuals but can also reinforce stigmatization of inmates. Leaked or disproportionately used data can hinder social reintegration, a primary goal of the correctional system. Therefore, the failure to protect personal data in the implementation of AI risk assessments constitutes a legal violation with structural implications.

A more subtle but dangerous legal deviation is the dehumanization of the decision-making process (Muladi & Barda Nawawi Arief., 2010). Parole is essentially the result of a holistic assessment of prisoners as human beings, not merely as statistical objects. Aspects such as attitude change, goodwill, social relationships, and moral readiness can often only be assessed through direct interaction and qualitative assessment. When decisions rely too heavily on numerical scores generated by AI, these human aspects risk being marginalized.

From the perspective of Law No. 22 of 2022 concerning Corrections, this situation contradicts the spirit of correctional education, which emphasizes development and rehabilitation. Correctional education is not intended to be a mechanical process, but rather a humane effort to restore inmates' social relations with the community. If AI is used predominantly without human oversight, the goal of correctional education could potentially be reduced to mere risk management, rather than human development.

Furthermore, the application of AI also opens up the possibility of legalized bias. In certain situations, correctional officials can use AI results as formal justification for denying parole, despite other indicators demonstrating a prisoner's eligibility. This practice is dangerous because it obscures the state's constitutional responsibility to protect human rights. Article 28I paragraph (4) of the 1945 Constitution affirms that the protection, advancement, enforcement, and fulfillment of human rights are the responsibility of the state, especially the government. Hiding behind technology without humane considerations can be seen as a denial of this responsibility.

In the long term, the accumulation of these legal irregularities has the potential to erode the legitimacy of the criminal justice and correctional systems. If inmates and the public perceive parole decisions as being determined more by opaque machinery than by principles of justice and humanity, trust in legal institutions will decline. This erosion of public trust poses a serious threat to the rule of law, as legal legitimacy stems not only from written norms but also from social acceptance of the fairness of the legal process.

Therefore, it can be emphasized that the potential for legal irregularities in the application of AI risk assessment for parole is very real and multidimensional. These irregularities include algorithmic discrimination, violations of the principle of due process of law, blurred accountability, violations of privacy, dehumanization of decisions, and abuse of authority. Without a clear legal framework and strict oversight mechanisms, AI has the potential to become a new instrument that deepens injustice in the correctional system. This situation underscores the urgency of formulating comprehensive legal policies before AI is widely used in the parole process.

3.3 Legal Policy Recommendations to Prevent and Address Deviations in the Use of AI Risk Assessment

The use of artificial intelligence (AI) in parole risk assessments is an unavoidable phenomenon, given technological advances and demands for efficiency in correctional administration. However, as outlined in the previous subchapter, implementing AI without a clear legal framework has the potential to lead to various legal irregularities, ranging from algorithmic bias and violations of the principle of due process of law, blurred accountability, to the dehumanization of the correctional process. Therefore, the formulation of comprehensive and structured legal policies is necessary to ensure that the use of AI truly supports correctional goals, rather than diminishing them.

Legal policy recommendations in this context must be placed within the framework of a state based on the rule of law (*rechtsstaat*) that upholds the supremacy of law, the protection of human rights, and the accountability of state officials. Such policies should not be solely oriented toward technical efficiency, but must also ensure that any use of technology that impacts individual freedoms has legal legitimacy, oversight mechanisms, and guaranteed rights protection.

a. Strengthening the Legal Basis in Indonesian Positive Law

The most fundamental step that needs to be taken is strengthening the legal basis for the use of AI in the correctional system. Currently, Law No. 22 of 2022 concerning Corrections does not explicitly regulate the use of artificial intelligence technology in parole assessments. This situation creates a legal vacuum that has the potential to violate the principle of legal certainty as guaranteed by Article 28D paragraph (1) of the 1945 Constitution.

Therefore, lawmakers need to consider revising or adding norms to the Corrections Law that explicitly regulate the use of AI as a supporting instrument in the correctional and parole process. These norms should emphasize that AI functions only as a decision support system, not as a final and binding decision-maker. The final decision must remain with correctional officials who have the authority and are legally responsible (European Union, EU Artificial Intelligence Act, 2024).

These legal regulations are crucial for providing normative legitimacy and limiting discretionary power, preventing it from being completely left to algorithmic systems. Therefore, the use of AI does not conflict with the principle that any decision impacting a person's right to liberty must be traceable to a responsible legal entity.

b. Formation of Technical Regulations as *Lex Specialis*

In addition to strengthening the law, more detailed technical regulations are needed through Government Regulations and/or Regulations from the Minister of Law and Human Rights. These regulations serve as *lex specialis*, governing the procedures for using AI risk assessment in the correctional system. These technical regulations must cover at least several key aspects.

First, define the scope of AI use. Regulations must clearly define the types of decisions AI can support and the extent to which those recommendations can be used. In the context of parole, AI should only be used to assist with data processing and provide initial recommendations, not to replace substantive assessments by the Correctional Observation Team (TPP) or the Correctional Center (Bapas).

Second, establishing standard operating procedures (SOPs) that govern the stages of AI use, from data collection and processing to interpretation of results, to final decision-making. These SOPs are crucial to prevent the indiscriminate use of AI and ensure that each stage is legally auditable.

Third, regulations regarding the documentation and recording of decisions. Every parole decision using AI recommendations must be accompanied by a written record explaining how the AI results were used and how humane considerations were maintained. This documentation serves as an accountability tool in the event of a future dispute or objection.

c. Affirmation of the Human-in-the-Loop Principle and Limitation of Automation

One key recommendation to prevent legal irregularities is the affirmation of *the human-in-the-loop principle* (Floridi et al., & Lepri et al., 2018). This principle emphasizes that humans must remain actively and substantively involved in any decision-making that impacts human rights. In the context of parole, this principle means that AI should not make decisions automatically without human intervention.

Legal regulations should explicitly prohibit the use of AI as the sole basis for denying or granting parole. Correctional officials are required to critically evaluate AI recommendations and consider qualitative factors that algorithms cannot capture, such as changes in inmates' attitudes, goodwill, and social dynamics.

Affirming this principle is also crucial to prevent the dehumanization of the correctional process. The Indonesian correctional system, as stipulated in Law No. 22 of 2022, is oriented toward human development and rehabilitation, not merely statistical risk management. Therefore, technology should be positioned as a tool that enhances, not replaces, humanitarian considerations.

d. Algorithmic Accuracy, Validation, and Audit Standards

To prevent algorithmic bias and discrimination, legal policies must establish strict accuracy standards and algorithmic audit mechanisms. Any AI risk assessment system used in correctional settings must undergo a comprehensive pre-implementation validation process. This validation includes testing predictive accuracy, error rates (false positives and false negatives), and potential bias against certain groups.

In addition to initial validation, periodic algorithmic audits by independent parties are required (Selbst et al., 2019). These audits aim to ensure that the AI system continues to function as intended and does not produce discriminatory impacts over time. Auditors should involve academics, technology experts, and legal practitioners to ensure a multidisciplinary assessment.

Regulations regarding these audits are crucial to prevent "*legalized bias*," a situation where algorithmic bias gains formal legitimacy through the state's use of technology. With transparent and independent audits, states can ensure that the use of AI aligns with the principles of justice and equality before the law.

e. Protection of Prisoners' Personal Data

Personal data protection is a crucial element in AI risk assessment policies. The collection and processing of inmate data must fully comply with Law No. 27 of 2022 concerning Personal Data Protection. Technical regulations must emphasize the principles of *purpose limitation, data minimization, and proportionality*.

Only data that is relevant and strictly necessary for risk assessment purposes should be processed. The use of sensitive data must be strictly limited and equipped with additional security mechanisms, such as encryption and strict access controls. Furthermore, prisoners, as data subjects, must have the right to know how their data is used, stored, and protected.

Regulations regarding data retention periods and data deletion mechanisms also need to be clarified. This is crucial to prevent long-term stigmatization of prisoners who have completed their sentences and returned to society. Therefore, personal data protection serves not only as individual protection but also as a supporting tool for social reintegration.

f. Objection Mechanism and Legal Remedies

The next policy recommendation is to establish an effective objection mechanism and legal remedies for prisoners. Any prisoner harmed by the results of an AI assessment should have the right to file an objection and request a review. This mechanism is an integral part of the principle of due process of law and should not be eliminated under the guise of technological efficiency.

Complaints can be filed through internal administrative mechanisms within the correctional facility, with officials required to provide written reasons for their decisions. If these complaints are not adequately addressed, inmates should have access to judicial mechanisms to challenge the legality of the decision.

Establishing these mechanisms is crucial to ensuring that AI does not become a tool immune to legal correction. With a clear objection channel, AI use can be effectively monitored and remain within the bounds of the rule of law.

g. Affirmation of Accountability and Legal Responsibility

To close the accountability gap, legal policies must clearly define who is responsible for the use of AI risk assessments. Primary responsibility should remain with correctional officials and state institutions using the systems. Developers and providers of AI systems can also be held liable if proven negligent or intentionally providing flawed or biased systems.

Administrative and criminal sanctions should be considered as a law enforcement tool. These sanctions serve as a deterrent to ensure that all parties involved use AI responsibly and in accordance with the law.

h. Capacity Building and Institutional Oversight

The success of legal policies is determined not only by written norms but also by the capacity of the institutions implementing them. Therefore, training and capacity-building programs are needed for correctional officers, supervising judges, and related officials regarding the ethics and legal implications of AI use. Without adequate understanding, the technology has the potential to be misused or misapplied.

Furthermore, the establishment of a special monitoring unit within the Ministry of Law and Human Rights focused on the use of technology in correctional facilities could be considered. This unit would serve as a supervisor, evaluator, and complaint center for AI risk assessments.

i. Roadmap for Implementing AI Risk Assessment Policy in Indonesia

To ensure a careful, measured transition that aligns with the principles of the rule of law, a roadmap for implementing AI risk assessment policies in the Indonesian correctional system is needed. This roadmap can be formulated in several stages as follows:

- 1) **Stage 0 (0–6 months):** Inventory of AI technologies that have been or have the potential to be used in the correctional system and preparation of *a National Impact Assessment* to measure risks to human rights and potential discrimination.
- 2) **Stage 1 (6–12 months):** Revision of norms in the Corrections Law or related Government Regulations, as well as preparation of a Regulation of the Minister of Law and Human Rights that regulates standard operating procedures, algorithmic audits, and accountability mechanisms.
- 3) **Phase 2 (12–24 months):** Implementation of *the regulatory sandbox* through pilot projects in several Correctional Centers with strict supervision and initial independent audits.
- 4) **Stage 3 (>24 months):** Gradual national implementation with ongoing monitoring and evaluation mechanisms.

This roadmap allows countries to manage legal and ethical risks from the outset, while ensuring that AI use truly supports correctional goals oriented toward rehabilitation and social reintegration.

4. Conclusion

This study concludes that the use of artificial intelligence (AI) in parole risk assessments in Indonesia is not yet supported by a clear and comprehensive legal framework, potentially creating legal uncertainty and violating the principle of justice. Law No. 22 of 2022 concerning Corrections still places the parole eligibility assessment process within a decision-making paradigm based on human discretion and does not accommodate the use of algorithmic systems that directly impact prisoners' rights to liberty. The absence of specific regulations regarding AI risk assessments opens up room for legal irregularities, such as discriminatory algorithmic bias, the closed nature of the decision-making process due to the algorithm's black box nature, the shift of legal responsibility from correctional officials to technological systems, and potential violations of prisoners' personal data protection. Furthermore, excessive reliance on technology-based assessments risks reducing correctional goals to mere statistical risk management and neglecting the dimensions of guidance, rehabilitation, and social reintegration based on humanitarian values. Therefore, legal policy updates are needed that emphasize AI as

a decision-making tool (human-in-the-loop), accompanied by strict standards of algorithmic accuracy and auditing, effective objection and appeal mechanisms, and guarantees of personal data protection, so that the use of AI in parole can increase the effectiveness of the correctional system without compromising human rights and the principles of the rule of law.

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