



LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

## **Strengthening Legal Protection AI-Based Cyber Exploitation and Online Human Trafficking: Human Rights Approach in Indonesia**

**Eko Mahendra**

Faculty of Law, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: [ekomahendra2022@gmail.com](mailto:ekomahendra2022@gmail.com)

**Abstract.** *Artificial Intelligence (AI) has significantly transformed digital interaction, but its misuse has created new forms of cyber exploitation and online human trafficking. Technologies such as deepfake, synthetic identity, and AI-driven social engineering enable perpetrators to manipulate, recruit, and exploit vulnerable individuals through digital platforms. This paper aims to analyze the adequacy of Indonesia's legal framework in addressing AI-based cyber exploitation and online human trafficking and to formulate a human rights-oriented legal protection model. This study employs normative legal research using statutory, conceptual, comparative, and philosophical approaches. The analysis examines Indonesian laws, international legal instruments, AI governance principles, and human rights perspectives related to digital exploitation. The results indicate that Indonesia has established legal instruments concerning human trafficking, electronic crimes, data protection, and child protection; however, existing regulations remain insufficient to address AI-specific challenges, including algorithmic accountability, digital evidence authentication, victim protection, and cross-border law enforcement. This paper proposes strengthening legal protection through adaptive AI regulation, enhanced digital investigation capacity, victim-centered protection mechanisms, international cooperation, and ethical AI governance based on human rights principles.*

**Keywords:** *Artificial Intelligence; Cyber Exploitation; Human Rights; Legal Protection; Online Human Trafficking.*

### **1. Introduction**

The development of Artificial Intelligence (AI) has brought about significant changes in the digital ecosystem, including communication patterns, economic activity, public services, and

Strengthening Legal Protection AI-Based...  
(Eko Mahendra)



## LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

the development of modern forms of crime. AI is a machine-based technology capable of analyzing data, recognizing patterns, generating predictions, and creating digital content that mimics human capabilities. This capability offers significant benefits for innovation and efficiency, but also creates new risks when used to harm humans, particularly in the form of digital exploitation and technology-based crime.<sup>1</sup>

One form of crime that has undergone a transformation due to the development of AI is online human trafficking. While previously human trafficking was carried out through direct recruitment, employment fraud, or the physical transfer of victims, perpetrators can now utilize digital spaces to find victims, establish false trust, engage in psychological manipulation, and even control victims without direct physical interaction.<sup>2</sup>

The use of AI further complicates these crimes, as the technology can generate synthetic identities, deepfake images and videos, voice cloning, and automated communication via AI chatbots. This technology allows perpetrators to create digital identities that appear authentic, making it difficult for victims to distinguish between real interactions and algorithmic manipulation.<sup>3</sup> In the context of human trafficking, these conditions increase the risk of exploitation of vulnerable groups such as women, children, and individuals seeking economic opportunities via the internet.<sup>4</sup>

This phenomenon is also relevant in the Indonesian context. Developments in human trafficking cases demonstrate that digital technology is increasingly being used as a means of recruiting and exploiting victims, particularly through social media, communication apps, and online job offers. The Indonesian government has noted that human trafficking methods have shifted from conventional to technology-based methods, allowing perpetrators to more effectively manipulate identities and digital communications.<sup>5</sup>

According to a report by the United Nations Office on Drugs and Crime (UNODC), the use of

---

<sup>1</sup>Ryan Calo, "Artificial Intelligence Policy: A Primer and Roadmap," UC Davis Law Review, Vol. 51, no. 2, 2017, p. 399-435.

<sup>2</sup>Thomas J. Holt, Adam M. Bossler, and Kathryn C. Seigfried-Spellar, 2022, *Cybercrime and Digital Forensics*, New York: Routledge, p. 88.

<sup>3</sup>Katerina Hadjimatheou, "AI, Deepfakes and Human Exploitation in Digital Spaces," *Computer Law & Security Review*, Vol. 49, 2024, p. 7.

<sup>4</sup>United Nations Office on Drugs and Crime (UNODC), 2024, *Global Report on Trafficking in Persons*, Vienna: United Nations Publication, p. 63.

<sup>5</sup>Ministry of Communication and Informatics of the Republic of Indonesia, 2023, Circular Letter of the Minister of Communication and Informatics Number 9 of 2023 concerning the Ethics of Artificial Intelligence, Jakarta: Ministry of Communication and Informatics.



## LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

digital technology in human trafficking has increased, particularly in the recruitment and control stages of victims.<sup>6</sup>In Indonesia, the growth of internet and social media usage has also increased the potential for misuse of digital space to exploit vulnerable groups, particularly women and children. This situation demonstrates that technological transformation has created new forms of vulnerability that require adaptive legal responses.

Indonesia actually has several legal instruments related to the protection of victims of exploitation, including Law Number 21 of 2007 concerning the Eradication of the Crime of Human Trafficking,<sup>7</sup>Law Number 1 of 2024 concerning the Second Amendment to the Electronic Information and Transactions Law,<sup>8</sup>Law Number 27 of 2022 concerning Personal Data Protection,<sup>9</sup>and Law Number 35 of 2014 concerning Child Protection.<sup>10</sup>

Furthermore, the government has issued Circular Letter No. 9 of 2023 from the Minister of Communication and Informatics concerning the Ethics of Artificial Intelligence as a guideline for the responsible use of AI. This instrument emphasizes the principles of transparency, accountability, security, and protection of public rights in the use of AI. However, this regulation remains an ethical guideline and does not specifically address legal accountability for the misuse of AI as an instrument of criminal activity.<sup>11</sup>

The main issue that arises is the imbalance between the development of AI technology and legal preparedness to anticipate new forms of crime. Criminal legal systems are generally built on the assumption that the perpetrator, the act, the victim, and the consequences of a crime can be clearly identified. In AI-based crimes, this process becomes more complex because it involves various parties, such as technology users, system developers, digital platform providers, and automated processes generated by algorithms.<sup>12</sup>

Previous studies have shown that AI regulation requires an approach that balances

---

<sup>6</sup>Ibid., p. 65.

<sup>7</sup>Indonesia, Law Number 21 of 2007 concerning the Eradication of the Crime of Human Trafficking, State Gazette of the Republic of Indonesia 2007 Number 58.

<sup>8</sup>Indonesia, Law Number 1 of 2024 concerning the Second Amendment to the Electronic Information and Transactions Law, State Gazette of the Republic of Indonesia 2024 Number 4.

<sup>9</sup>Indonesia, Law Number 27 of 2022 concerning Personal Data Protection, State Gazette of the Republic of Indonesia 2022 Number 196.

<sup>10</sup>Indonesia, Law Number 35 of 2014 concerning Child Protection, State Gazette of the Republic of Indonesia 2014 Number 297.

<sup>11</sup>Ministry of Communication and Informatics of the Republic of Indonesia, Loc. Cit.

<sup>12</sup>Claudio Novelli, Mariarosaria Taddeo, and Luciano Floridi, "Accountability in Artificial Intelligence: What It Is and How It Works," *AI & Society*, Vol. 39, 2024, p. 12.



## LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

technological innovation with public protection. Ryan Calo explained that AI has distinct characteristics compared to previous technologies because it can generate decisions and actions that directly impact humans.<sup>13</sup> Lilian Edwards and Michael Veale also emphasized the importance of the principles of transparency and accountability in addressing the risks of digital harms resulting from the use of algorithms.<sup>14</sup> Meanwhile, Anne T. Gallagher explained that human trafficking is a transnational crime that requires a strong victim protection approach and legal cooperation.<sup>15</sup>

Although various studies have addressed AI, cybercrime, and human trafficking, there is limited research integrating these three issues within the Indonesian legal context. Most studies address AI from the perspective of technology regulation, while human trafficking studies focus more on conventional patterns. Therefore, this study offers a novel approach through an integrative analysis of the use of AI as an instrument of cyber exploitation and online human trafficking, combining national legal perspectives with a human rights approach.

Unlike previous research, which generally addresses AI from the perspective of technology regulation or human trafficking within conventional legal approaches, this study offers an integrative legal protection model by linking AI governance and human rights protection within the Indonesian legal context. The urgency of this research lies in the pressing need to reconstruct legal protection in Indonesia against the threat of algorithm-based cyber exploitation, which demands adaptive fulfillment of victims' basic rights.

Based on this description, this study aims to analyze the characteristics of AI-based cyber exploitation and online human trafficking, evaluate the adequacy of Indonesia's legal framework, and formulate a model for strengthening legal protection that is responsive to the development of AI technology.

## 2. Research Methods

This research is normative legal research aimed at analyzing legal norms, legal principles, and regulatory constructions related to legal protection against Artificial Intelligence (AI)-based cyber exploitation and online human trafficking in Indonesia. Normative legal research is used because the study focuses on analyzing the suitability, adequacy, and development of legal

---

<sup>13</sup>Ryan Calo, Op. Cit., p. 410.

<sup>14</sup>Lilian Edwards and Michael Veale, "Enslaving the Algorithm: From a 'Right to an Explanation' to a 'Right to Better Decisions'?", IEEE Security & Privacy Magazine, Vol. 16, no. 3, 2018, p. 46-54.

<sup>15</sup>Anne T. Gallagher, 2017, The International Law of Human Trafficking, Cambridge: Cambridge University Press, p. 412.



## LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

norms in responding to changing forms of crime due to the development of digital technology.<sup>16</sup>

The research approaches used include a statutory approach, a conceptual approach, a comparative approach, and a philosophical approach. These approaches are used to understand the relationship between applicable legal norms, the development of legal concepts, and the need to create laws that are responsive to social and technological change.<sup>17</sup>

A legislative approach is used to analyze national regulations related to the research object, namely Law Number 21 of 2007 concerning the Eradication of the Crime of Human Trafficking, Law Number 1 of 2024 concerning the Second Amendment to the Law on Information and Electronic Transactions, Law Number 27 of 2022 concerning Personal Data Protection, and Law Number 35 of 2014 concerning Child Protection. In addition, this study uses international legal instruments, specifically the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children as the basis for analysis regarding the protection of victims of human trafficking.<sup>18</sup>

A conceptual approach is used to analyze legal concepts related to legal protection, legal accountability, cybercrime, human trafficking, artificial intelligence, victim protection, and responsive law. This approach is important because the use of AI in criminal acts creates new legal issues that cannot be fully addressed by conventional concepts of criminal accountability.

A comparative approach is used by examining developments in international AI regulation, particularly the risk-based approach to AI regulation under the European Union Artificial Intelligence Act and the AI governance principles developed by the Organisation for Economic Co-operation and Development (OECD). This approach is used to gain perspective on an AI regulatory model that can accommodate technological innovation while ensuring human rights protection.<sup>19</sup>

A philosophical approach is used to analyze the fundamental value of protecting human dignity in the face of technological developments. In this research, the philosophical approach

---

<sup>16</sup>Peter Mahmud Marzuki, 2021, *Legal Research*, Jakarta: Kencana, p. 55.

<sup>17</sup>Johnny Ibrahim, 2019, *Theory and Methodology of Normative Legal Research*, Malang: Bayumedia Publishing, p. 302.

<sup>18</sup>United Nations, 2000, *Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children*, New York: United Nations.

<sup>19</sup>European Union, 2024, *Artificial Intelligence Act (Regulation EU 2024/1689)*, Brussels: Official Journal of the European Union, p. 45.



**LICS 2026**

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

is examined through the perspective of universal human rights, specifically the right to security, self-protection, and the right to be free from all forms of degrading treatment resulting from exploitation in the digital space.<sup>20</sup>

The legal sources used in this study consist of primary, secondary, and tertiary legal materials. Primary legal materials include national legislation, international legal instruments, and policies related to AI and victim protection. Secondary legal materials include law books, scientific journal articles, research findings, and expert opinions on technology law, AI, cybercrime, and legal protection. Tertiary legal materials include legal dictionaries and other supporting reference sources.

The legal materials were collected through library research, which involved inventorying, classifying, and analyzing relevant legal sources. All legal materials were analyzed qualitatively using a prescriptive legal approach to assess the adequacy of applicable legal norms and to formulate a legal protection model that is more responsive to developments in AI technology.

The research analysis was conducted through three main stages: first, identifying the characteristics of AI-based cyber exploitation and online human trafficking; second, analyzing the capabilities and limitations of Indonesian law in providing legal protection; and third, formulating an ideal legal construction based on a human rights approach and developments in international AI regulations.

Through this method, this research is aimed at producing legal recommendations that are able to address the challenges of AI development, particularly in the aspects of preventing exploitation, legal accountability, victim protection, and strengthening the Indonesian legal system in dealing with high-tech digital crimes.

### **3. Results and Discussion**

#### **3.1. Transforming the Modus Operandi of Cyber Exploitation and Human Trafficking Based on Artificial Intelligence (AI)**

The development of Artificial Intelligence (AI) has transformed the nature of digital crime from conventional patterns to forms that utilize algorithms, automation, and information manipulation. Initially developed for data processing and efficiency, AI has evolved into a tool for criminal activity, including the creation of synthetic content, identity impersonation, and

---

<sup>20</sup>United Nations, 1948, Universal Declaration of Human Rights, Paris: United Nations General Assembly, Article 3.



## LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

large-scale automated communication.<sup>21</sup>

This transformation is evident in the changing modus operandi of human trafficking. Recruitment of victims, which previously largely occurred through direct contact, can now be done through social media, communication apps, and digital platforms. Perpetrators utilize fake identities, online relationships, and psychological manipulation to build victims' trust before exploiting them. This situation has increasingly blurred the boundaries between digital and physical spaces in human trafficking crimes.<sup>22</sup>

One AI technology that poses a significant risk to human exploitation is deepfakes. This technology can generate or modify images, videos, and voices to appear to resemble specific individuals. In digital crime, deepfakes can be used to construct false identities, create manipulative content, conduct sexual extortion, and strengthen perpetrators' control over victims through information manipulation.<sup>23</sup>

In addition to deepfakes, the development of AI chatbots also presents new challenges, as they can generate communication that mimics human interaction. This technology can be used to build fake emotional connections, engage victims, and strengthen manipulation strategies against vulnerable groups, particularly children and women, in digital spaces.<sup>24</sup>

Another form that deserves attention is the use of synthetic identities, digital identities created by combining real data and fabricated information. These identities can be used to create fake accounts, construct fictitious profiles, or establish digital relationships aimed at gaining the victim's trust before exploitation.<sup>25</sup>

In the Indonesian context, the development of digital technology has increased the potential for online human trafficking. Ease of internet access, social media use, and increased digital economic activity have created new opportunities for perpetrators to recruit and control victims. A report by the United Nations Office on Drugs and Crime (UNODC) shows that digital

---

<sup>21</sup>Thomas J. Holt, Adam M. Bossler, and Kathryn C. Seigfried-Spellar, 2022, *Cybercrime and Digital Forensics: An Introduction*, 3rd Edition, New York: Routledge, p. 112.

<sup>22</sup>Katerina Hadjimatheou, "AI, Deepfakes and Human Exploitation in Digital Spaces," *Computer Law & Security Review*, Vol. 49, 2024, p. 14.

<sup>23</sup>Bobby Chesney and Danielle Keats Citron, "Deep Fakes: A Looming Challenge for Privacy, Democracy, and National Security," *California Law Review*, Vol. 107, no. 6, 2019, p. 1755.

<sup>24</sup>Lilian Edwards and Michael Veale, "Slave to the Algorithm? Why a 'Right to an Explanation' Is Probably Not the Remedy You Are Looking For," *Duke Law & Technology Review*, Vol. 16, 2017, p. 18.

<sup>25</sup>European Union Agency for Cybersecurity (ENISA), 2020, *Cybersecurity and Privacy in Artificial Intelligence: Challenges and Opportunities*, Athens: ENISA, p. 34.

Strengthening Legal Protection AI-Based...  
(Eko Mahendra)



#### LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

technology is increasingly used in various stages of human trafficking, from recruitment to victim exploitation.<sup>26</sup>

The nature of AI-based crimes demonstrates a paradigm shift in law enforcement. The primary challenge lies not only in the perpetrator's actions, but also in the legal system's ability to identify perpetrators, prove the link between technology and the crime, and determine the form of legal accountability. Under Indonesian law, human trafficking remains punishable under Law No. 21 of 2007, but developments in AI demonstrate the need for a more adaptive legal approach to new forms of exploitation.<sup>27</sup>

Thus, the use of AI in human exploitation must be understood not only as a technological issue, but also as a legal and human rights issue. AI regulation needs to be directed at preventing technology misuse, strengthening accountability, protecting victims, and overseeing the use of high-risk AI systems.<sup>28</sup>

### **3.2. The Adequacy of Indonesia's Legal Framework in Addressing Artificial Intelligence (AI)-Based Cyber Exploitation and Human Trafficking**

Indonesia already has several legal instruments in place to address human trafficking and technology-based crimes. The primary instrument is Law Number 21 of 2007 concerning the Eradication of the Crime of Human Trafficking (UU PTPPO), which prohibits the recruitment, transportation, transfer, harboring, or receipt of individuals for the purpose of exploitation.<sup>29</sup> However, the development of AI has revealed limitations in the implementation of these regulations. The Human Trafficking Law was enacted when human trafficking was still predominantly carried out through physical contact between perpetrator and victim. Meanwhile, AI-based human trafficking can occur through digital identity manipulation, automated communication, and data-driven exploitation, thus requiring a more specific legal approach.

In addition to the TPPO Law, Law Number 1 of 2024 concerning the Second Amendment to the Electronic Information and Transactions Law (ITE Law) provides a legal basis for the misuse of electronic systems and digital information, including the recognition of electronic evidence in

---

<sup>26</sup>United Nations Office on Drugs and Crime (UNODC), 2024, Global Report on Trafficking in Persons 2024, Vienna: United Nations Publication, p. 70.

<sup>27</sup>Indonesia, Law Number 21 of 2007 concerning the Eradication of the Crime of Human Trafficking, State Gazette of the Republic of Indonesia 2007 Number 58.

<sup>28</sup>UNESCO, 2021, Recommendations on the Ethics of Artificial Intelligence, Paris: UNESCO, p. 12.

<sup>29</sup>Indonesia, Law Number 21 of 2007..., Op. Cit., Article 2.



## LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

legal proceedings.<sup>30</sup> However, the development of AI technology such as deepfakes raises new issues regarding the authenticity of digital evidence because electronic content can be engineered to resemble real conditions.<sup>31</sup>

Another issue relates to legal accountability. In AI-based crimes, the parties involved can include technology users, system developers, platform providers, and those operating the technology. Therefore, the principles of accountability, transparency, and human oversight are necessary to ensure that the use of AI remains within the bounds of legal responsibility.<sup>32</sup>

The evidentiary aspect also poses a significant challenge. Digital evidence related to AI requires examination through digital forensic mechanisms to ensure its integrity, authenticity, and reliability. Without adequate technical capabilities, law enforcement officials will face difficulties in proving the perpetrator's involvement and the connection between the use of AI and the crime.<sup>33</sup>

From a victim protection perspective, Law Number 27 of 2022 concerning Personal Data Protection (PDP Law) is crucially relevant because personal data can be a key instrument in the formation of synthetic identities, victim mapping, and digital manipulation.<sup>34</sup> Furthermore, child protection is also a concern because AI can increase the risk of sexual exploitation and the spread of manipulative content that violates children's rights.<sup>35</sup>

At the international level, Indonesia has an obligation to strengthen prevention and protection of victims based on the Palermo Protocol which emphasizes the importance of eradicating human trafficking through legal cooperation and victim protection.<sup>36</sup> Meanwhile, the development of global AI regulations through the European Union's Artificial Intelligence Act shows a tendency towards a risk-based approach, emphasizing transparency, accountability,

---

<sup>30</sup>Indonesia, Law Number 1 of 2024 concerning the Second Amendment to Law Number 11 of 2008 concerning Electronic Information and Transactions, State Gazette of the Republic of Indonesia 2024 Number 4.

<sup>31</sup>European Union, 2024, Regulation (EU) 2024/1689 Artificial Intelligence Act, Brussels: Official Journal of the European Union, p. 89.

<sup>32</sup>UNESCO, Loc. Cit.

<sup>33</sup>Thomas J. Holt, Adam M. Bossler, and Kathryn C. Seigfried-Spellar, Op. Cit., p. 240.

<sup>34</sup>Indonesia, Law Number 27 of 2022 concerning Personal Data Protection, State Gazette of the Republic of Indonesia 2022 Number 196.

<sup>35</sup>Indonesia, Law Number 35 of 2014 concerning Child Protection, State Gazette of the Republic of Indonesia 2014 Number 297.

<sup>36</sup>United Nations, 2000, Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, New York: United Nations.



LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*  
and oversight of AI systems.<sup>37</sup>

### 3.3. Integrating Islamic Law and Human Rights Perspectives on AI-Based Cyber Exploitation

The development of Artificial Intelligence (AI) raises fundamental issues when examined using theological ethical parameters and contemporary legal instruments. Islam fundamentally positions humans as noble creatures whose basic rights must be protected. This principle is firmly rooted in the concept of *karāmah al-insān* (the nobility of humanity) as affirmed in the Qur'an, Surah Al-Isrā' (17) verse 70:

*"And indeed, We have glorified the children and grandchildren of Adam, and We carried them on land and in the sea, and We gave them sustenance from the good things and We preferred them above many creatures that We created with perfect advantages."*<sup>38</sup>

This theological principle is the primary foundation of human rights from an Islamic perspective, which views freedom, dignity, and physical and psychological security as natural rights granted directly by God. Therefore, any act of exploitation, digital slavery, or identity manipulation through technology that degrades human dignity automatically violates religious commands and the principles of universal justice.<sup>39</sup>

In the context of responsive law, technology is essentially a neutral tool (*wasīlah*). Its use is positive when directed toward the common good (*maṣlaḥah*), but it becomes prohibited when it becomes a pathway to harm (*mafsadah*). The misuse of AI to control people in online human trafficking rings is clearly producing massive damage that violates the rights to security and self-protection guaranteed by the constitution and international law.<sup>40</sup>

Cyber exploitation through deepfakes or cyber sexual blackmail also violates the right to personal dignity. When a person's digital identity is manipulated without authorization for exploitative purposes, it constitutes a serious violation of the rights to privacy and personal integrity.<sup>41</sup> Thus, the integration of these universal ethical values provides strong moral and legal legitimacy that high-tech governance in Indonesia must be placed above the corridor of

---

<sup>37</sup>European Union, Loc. Cit.

<sup>38</sup>Al-Qur'an, Surah Al-Isrā' (17): 70.

<sup>39</sup>M. Cherif Bassiouni, 2014, *The Shari'a and International Human Rights Law*, Oxford: Oxford University Press, p. 82.

<sup>40</sup>Mohammad Hashim Kamali, 2019, *Islamic Law in Malaysia: Issues and Developments*, Kuala Lumpur: Ilmiah Publishers, p. 145.

<sup>41</sup>Ibid., p. 148.



**LICS 2026**

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

human rights protection and recognition of the dignity of human beings.<sup>42</sup>

### **3.4. A Model for Strengthening Legal Protection against Cyber Exploitation and Human Trafficking Based on Artificial Intelligence (AI) in Indonesia**

Based on the previous analysis, legal protection against AI-based cyber exploitation and human trafficking is not sufficient only through criminal prosecution of perpetrators, but requires a legal model that encompasses aspects of technology regulation, prevention, victim protection, strengthening law enforcement agencies, and international cooperation.

First, Indonesia needs to develop comprehensive national AI regulations with a risk-based approach. These regulations should address the principles of transparency, accountability, system security, personal data protection, and prohibit the use of AI for human exploitation. This approach aligns with the European Union's Artificial Intelligence Act, which stipulates differentiated obligations based on the level of risk an AI system poses to society and fundamental human rights.<sup>43</sup>

Second, law enforcement officers need to strengthen their capacity to deal with AI-based crimes. Handling such cases requires skills in digital forensics, metadata analysis, synthetic content identification, and electronic evidence validation. Without such capacity building, criminal technology will evolve faster than law enforcement capabilities.<sup>44</sup>

Third, victim protection must be a central component of legal frameworks. Victims of AI-based exploitation not only suffer physical and economic losses, but also lose control of their digital identities, experience psychological distress, and face the risk of repeated dissemination of manipulative content. Therefore, protection mechanisms need to include legal aid, rehabilitation, restitution, digital identity restoration, and mechanisms for removing illegal content.<sup>45</sup>

Fourth, Indonesia needs to strengthen international cooperation, as AI-based human trafficking is transnational. This cooperation can be achieved through information exchange, joint investigations, mutual legal assistance, and policy harmonization between countries

---

<sup>42</sup>Mashood A. Baderin, 2021, *International Human Rights Law and Islamic Law*, Oxford: Oxford University Press, p. 104.

<sup>43</sup>European Union, Op. Cit., p. 95.

<sup>44</sup>United Nations Office on Drugs and Crime (UNODC), 2024, *Toolkit on Artificial Intelligence and Criminal Justice*, Vienna: United Nations, p. 32.

<sup>45</sup>International Organization for Migration (IOM), 2024, *Counter-Trafficking Data Collaborative Global Data Hub*, Geneva: IOM.



**LICS 2026**

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

based on the principle of eradicating transnational organized crime.<sup>46</sup>

Fifth, AI governance in Indonesia must integrate human rights principles with responsive universal humanitarian values. AI development should not be solely oriented toward digital industry innovation and economic growth, but must also prioritize safety, privacy, human freedom, and prevention of exploitation as absolute regulatory boundaries. This way, AI can develop as an instrument that brings inclusive public benefit.<sup>47</sup>

Based on this description, the model for strengthening legal protection against AI-based cyber exploitation and human trafficking in Indonesia can be formulated through five main pillars:

1. Adaptive and risk-based national AI regulation;
2. Strengthening investigative capacity and digital evidence;
3. Human rights-based victim protection;
4. Strengthening international cooperation;
5. Humanity-oriented AI governance and the protection of fundamental rights.

The model suggests that legal responses to AI must be preventative, repressive, and restorative in an integrated manner to ensure technological development remains within the bounds of human protection.

#### **4. Conclusion**

The development of Artificial Intelligence (AI) has transformed the modus operandi of cyber exploitation and online human trafficking from conventional patterns that rely on physical interaction to patterns based on algorithms, automation, and information manipulation. The main characteristics of this modern crime lie in the use of deepfake technology to produce manipulative content and sexual extortion, the use of synthetic identities to falsify perpetrator profiles, and the use of AI chatbots to build mass fake emotional connections to attract victims from vulnerable groups. This transformation blurs the boundaries of physical and digital jurisdictions, thus creating a more covert, efficient, and transnational crime chain. Indonesia's current legal framework lacks specific norms to address the misuse of artificial intelligence. Although Indonesia already has regulatory instruments such as Law No. 21 of 2007 concerning

---

<sup>46</sup>United Nations, Protocol to Prevent..., Op. Cit.

<sup>47</sup>Jasser Auda, 2021, *Re-Envisioning Human Rights: An Islamic Perspective*, London: The International Institute of Islamic Thought, p. 61.



## LICS 2026

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

the Transactions and Transactions of Artificial Intelligence (PTPPO), Law No. 1 of 2024 concerning the Second Amendment to the Electronic Information and Transactions Law (ITE), and Law No. 27 of 2022 concerning the Protection of Personal Data (PDP), these laws are still constructed based on conventional criminal assumptions. The main limitations lie in the lack of regulation of legal liability for platform providers and AI system developers, the difficulty of testing the authenticity and integrity of AI-engineered digital evidence in evidence law, and the lack of adaptive protection mechanisms against the loss of control over the digital identities of victims of exploitation. The ideal model for strengthening legal protection for Indonesia is an integrative legal framework based on five main pillars: the establishment of adaptive national AI regulations with a risk-based approach; increasing the technical capacity of law enforcement officials in digital forensics; reconstructing victim protection based on universal human rights and the right to digital recovery; expanding cross-border law enforcement cooperation (mutual legal assistance); and placing AI governance on the principle of humanity. This model integrates trusted theological values regarding the dignity of humankind (*karāmah al-insān*) with contemporary human rights instruments to ensure that technological innovation remains within the boundaries of protecting human dignity.

## 5. References

### Journals:

- Calo, Ryan. 2017. "Artificial Intelligence Policy: A Primer and Roadmap." *UC Davis Law Review*. Vol. 51. No. 2.
- Chesney, Bobby dan Danielle Keats Citron. 2019. "Deep Fakes: A Looming Challenge for Privacy, Democracy, and National Security." *California Law Review*. Vol. 107. No. 6.
- Edwards, Lilian dan Michael Veale. 2017. "Slave to the Algorithm? Why a 'Right to an Explanation' Is Probably Not the Remedy You Are Looking For." *Duke Law & Technology Review*. Vol. 16.
- Edwards, Lilian dan Michael Veale. 2018. "Enslaving the Algorithm: From a 'Right to an Explanation' to a 'Right to Better Decisions'?" *IEEE Security & Privacy Magazine*. Vol. 16. No. 3.
- Hadjimatheou, Katerina. 2024. "AI, Deepfakes and Human Exploitation in Digital Spaces." *Computer Law & Security Review*. Vol. 49.

Strengthening Legal Protection AI-Based...  
(Eko Mahendra)



#### **LICS 2026**

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

Novelli, Claudio, Mariarosaria Taddeo, dan Luciano Floridi. 2024. "Accountability in Artificial Intelligence: What It Is and How It Works." *AI & Society*. Vol. 39.

#### **Books:**

Auda, Jasser. 2021. *Re-Envisioning Human Rights: An Islamic Perspective*. London: The International Institute of Islamic Thought.

Baderin, Mashood A. 2021. *International Human Rights Law and Islamic Law*. Oxford: Oxford University Press.

Bassiouni, M. Cherif. 2014. *The Shari'a and International Human Rights Law*. Oxford: Oxford University Press.

Gallagher, Anne T. 2017. *The International Law of Human Trafficking*. Cambridge: Cambridge University Press.

Holt, Thomas J., Adam M. Bossler, dan Kathryn C. Seigfried-Spellar. 2022. *Cybercrime and Digital Forensics: An Introduction*. Edisi ke-3. New York: Routledge.

Ibrahim, Johnny. 2019. *Teori dan Metodologi Penelitian Hukum Normatif*. Malang: Bayumedia Publishing.

Kamali, Mohammad Hashim. 2019. *Islamic Law in Malaysia: Issues and Developments*. Kuala Lumpur: Ilmiah Publishers.

Marzuki, Peter Mahmud. 2021. *Penelitian Hukum*. Jakarta: Kencana.

#### **Regulation:**

European Union. 2024. *Artificial Intelligence Act (Regulation EU 2024/1689)*. Brussels: Official Journal of the European Union.

Indonesia. Law Number 1 of 2024 concerning the Second Amendment to Law Number 11 of 2008 concerning Electronic Information and Transactions. *State Gazette of the Republic of Indonesia* 2024 Number 4.

Indonesia. Law Number 21 of 2007 concerning the Eradication of the Crime of Human Trafficking. *State Gazette of the Republic of Indonesia* 2007 Number 58.

Strengthening Legal Protection AI-Based...  
(Eko Mahendra)



**LICS 2026**

**Topic:** *Strengthening Legal Frameworks for Combating Human Trafficking and Enhancing Protection of Women and Children*

Indonesia. Law Number 27 of 2022 concerning Personal Data Protection. State Gazette of the Republic of Indonesia 2022 Number 196.

Indonesia. Law Number 35 of 2014 concerning Amendments to Law Number 23 of 2002 concerning Child Protection. State Gazette of the Republic of Indonesia 2014 Number 297.

Ministry of Communication and Informatics of the Republic of Indonesia. 2023. Circular Letter of the Minister of Communication and Informatics Number 9 of 2023 concerning the Ethics of Artificial Intelligence. Jakarta: Ministry of Communication and Informatics.

United Nations. 1948. Universal Declaration of Human Rights. Paris: United Nations General Assembly.

United Nations. 2000. Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention against Transnational Organized Crime. New York: United Nations.