

# **Implementation of Artificial Intelligence in the Legal Protection of Cyber Bullying Victims on Social Media According to Law No. 1 of 2023**

**Cepi Noval**

Faculty of Law, University of Borobudur, Indonesia

Email: noval54cepi49@gmail.com

---

## **Abstrak**

Cyberbullying on social media is a serious problem that can negatively impact the mental health and well-being of victims. Lack of supervision in the family, school, community, and individual environments causes cyberbullying. Article 433 paragraph (1), and paragraph (2) of Law No. 1 of 2023 concerning the Criminal Code (KUHP) provides a new legal basis regarding defamation through social media and will be enforced in 2026. Artificial intelligence (AI) can be an innovative solution in addressing this problem. The purpose of the study is to analyze the legal protection of victims of cyber bullying on social media according to Law No. 1 of 2023 and explore the potential integration of AI in its handling. The research method used is normative juridical, using a legislative approach and an analytical approach. The results of the study show that although Law No. 1 of 2023 provides a clear legal framework, its implementation is still hampered by a lack of resources and understanding in the community. On the other hand, AI integration has proven to be effective in detecting and analyzing bullying behavior on social media, providing support to victims, and speeding up the investigation process by authorities. This study concludes that legal protection for victims of cyber bullying can be improved through the integration of artificial intelligence. Therefore, collaboration between the government, social media platform providers, and technology experts is needed to create more effective and responsive solutions to the problem of cyber bullying in society.

Keywords: Cyberbullying, Legal Protection, Law No. 1 of 2023, Social Media, Artificial Intelligence.

---

## **INTRODUCTION**

Cyberbullying is one of the negative impacts of today's technological advancements, especially social media which has become the center of information and trends, because many of someone's activities are shared on the platform. Social media such as Instagram, TikTok, Twitter, and online games indirectly trigger the emergence of cyberbullying behavior in the community. Cyberbullying seems to have become commonplace in the use of social media, even though the impact is huge. This problem knows no age limit, but the perpetrators and victims of cyberbullying are generally teenagers. Cyberbullying is considered a form of crime because it involves acts of violence such as threatening, insulting, harassing, or humiliating others through social media.

In his research, Riswanto presented statistical data from the Indonesian Internet Service Providers Association (APJII) in 2019, which showed that around 171 million people in Indonesia use the internet, with the majority being in productive age, namely between 15 to 19 years old and 20 to 24 years old. This APJII statistic concludes that adolescents (productive age) dominate internet use in Indonesia, and most adolescents use the internet to access social media. Data from the Indonesian Child Protection

Commission (KPAI) for five years, from 2011 to 2016, shows that there are around 253 cases bullying in Indonesia (Riswanto, 2020). Of these cases, 122 children became victims and 131 children became perpetrators bullying. KPAI also noted that from 2011 to 2019, there were around 37,381 reports of violence against children, including 2,473 reports related to bullying behavior in the educational environment and social media, which continues to increase. Phenomenon bullying in Indonesia seems to have reached an alarming level (Komisioner, 2020). According to a UNICEF survey, U-Report in 2021, of 2,777 adolescents aged 14 to 24 years, as many as 45% have experienced cyberbullying (News, 2021).

Law enforcement against perpetrators and protection for victims of cyberbullying is regulated in Law Number 11 of 2008 concerning Information and Electronic Transactions (UU ITE), the Criminal Code (KUHP), and Law Number 1 of 2023 concerning the Criminal Code. However, in practice, these three regulations have not been effective in ensnaring cyberbullying perpetrators. Although the Criminal Code contains articles on bullying, the law is still limited to actions in the real world and does not fully cover crimes that occur in cyberspace. The resolution of cyberbullying cases can be done through litigation or non-litigation channels, depending on the decision of the victim or the victim's guardian. They can choose to settle the case peacefully or take it to court.

It is common knowledge that information and technology are two things that greatly facilitate the lives of people around the world. Coupled with the increasingly evenly distributed internet access, the use of the internet has now reached various corners of the world. Indonesia has also experienced developments in the field of information and technology.

Based on a survey by the Indonesian Internet Service Providers Association (APJII), the number of internet users in Indonesia reached 215.63 million people in the 2022-2023 period, an increase of 2.67% from the previous period of 210.03 million users. This figure is equivalent to 78.19% of Indonesia's total population of 275.77 million people, an increase of 1.17% compared to 77.02% in 2021-2022. In terms of gender, internet penetration among men reached 79.32%, higher than 77.36% for women. In urban areas, the internet penetration rate is 77.36%, while in rural areas it is slightly higher, at 79.79%. This survey was conducted by APJII together with SRA Consulting on 8,510 respondents throughout Indonesia on January 10-27, 2023, with a multistage random sampling method, an error rate of 1.14%, and a confidence level of 95%.

UNICEF released data in 2023 showing that every day 175,000 children become new internet users, or 1 child every second. In Indonesia, there are around 30 million children who use the internet. "The high number of children who use the internet today poses great threats and risks, such as harassment on the internet (cyber harassment), exposure to negative content, cyberbullying (cyberbullying), child data leaks, to child sexual abuse material. Therefore, it is hoped that all parties will be vigilant against potential crimes. The use of artificial intelligence (AI) technology can also be a solution to automatically filter and moderate negative content," he said when opening the Artificial Intelligence (AI) Public Discussion Series with the theme "AI for Child Online Protection" (Agustini, 2023).

With the advancement and development of information technology today, it is not surprising that teenagers as social media users tend to spend more time online. Various types of information are now available on the internet for anyone who wants to access it, be it social information or other types of information in general. While some

information can have a positive impact, many also have a negative impact and can even trigger criminal actions such as cyber harassment. According to a report by the Indonesian Internet Service Providers Association (APJII) in 2021-2022, the age group of 13-18 years has the highest internet penetration rate in Indonesia, which is 98.64 percent.

During the communication process, many international institutions tend to use the term information and communication technology. This technology has become a dominant and influential force in modern society, significantly influencing the behavior and interactions of individuals and groups around the world. Advances in information technology have created a borderless world that has a significant impact on social change. This technology, however, is a double-edged sword. On the one hand, it has driven progress in human society and civilization (Amirulloh, 2017). However, on the other hand, information technology can also be used for illegal acts and violations of the law (M. Ramli, 2006).

One of the main risks of using technology such as the internet and electronic devices is the potential to inflict emotional harm and pressure on others, such as in the form of online harassment, stalking, bullying, and bullying. This kind of incident can negatively impact a person's mental health and even threaten their personal safety (Jayaputri, 2020). Cyberbullying on various social media platforms continues to increase significantly. This condition emphasizes the importance of more specific general policies as well as effective protective measures to deal with cyberbullying. In this case, concrete efforts are needed to deal with this issue comprehensively, including the application of a more adaptive and responsive legal approach to the ever-changing dynamics in the digital world (Clara, Sopyono, & Astuti, 2016).

The development of information technology today has a major impact on the lives and behaviors of people around the world. This technology facilitates interaction and dissemination of information to the public. However, despite the many benefits, the use of information technology is often abused by some people for negative purposes, such as posting insulting words, spreading hate speech, and spreading fake news that can harm others. Ethical crises in the use of social media often occur in digital communication. The term cyberbullying is certainly widely known, which refers to bullying that occurs through digital technology. This bullying can occur on various platforms, including social media, chat apps, gaming platforms, and through mobile phones.

According to Think Before Text, cyberbullying is an aggressive behavior carried out by an individual or group with a specific purpose, using electronic media, repeatedly over time, against someone who is considered incapable of resisting the act. Thus, there is an imbalance of power between the perpetrator and the victim. This imbalance refers to the perception of physical and mental capacity.

The phenomenon of bullying occurs a lot around us, including in schools and colleges. According to UNICEF (United Nations International Children's Emergency Fund), cyberbullying is a repetitive behavior that aims to scare, anger, or humiliate the target. In Indonesia, cyberbullying cases are quite high. The results of a study from APJII (Indonesian Internet Service Providers Association) show that 49 percent of the 5,900 respondents are victims of cyberbullying. This figure is high due to the increasing use of the internet among children and the lack of parental supervision. One type of cyberbullying that is common in Indonesia is flaming, which is the act of sending text messages or comments on social media that contain abusive words to hurt others.

The impact of cyberbullying is terrible and brutal, as it can damage the mental and psychological health of victims, especially children. Cyberbullying is easier to do than conventional violence, because the perpetrator does not need to meet the target directly. Many people deliberately bully individuals or children they did not know before, often provoked by irresponsible parties. Cyberbullying on social media leaves a trail in the form of immoral writings, photos, or videos. These digital footprints are hard to erase, and with a wide reach, many people can leave comments. As a result, the child's physical and mental health can be compromised, with a higher risk of experiencing stress or depression, even giving rise to suicidal thoughts due to fear and shame. In addition, victims can be ostracized by their surroundings and experience unpleasant treatment as a result of bullying posts and comments that appear on their homepage.

Classification of cyberbullying covering several categories, including Flaming (message with anger), harassment, denigration (, impersonation, Outing (dissemination of personal information), trickery, exclusion, and cyberstalking (stalking in cyberspace). Now (Aurelia Oktavira S., 2023) cyberbullying is one of the criminal acts that often occur in cyberspace. Cyberbullying is a form of intimidation or harassment that utilizes information and communication technology to commit acts of violating boundaries intentionally and repeatedly, with the aim of harming others through intimidation, threats, insults, or harassment that can cause hostility, either by individuals or groups. (Aurelia Oktavira S., 2023)

According to research conducted by Center for Digital Society (CfDS) in August 2021, entitled "Teenager-Related Cyberbullying Case in Indonesia", against 3,077 junior and senior high school students aged 13-18 years in 34 provinces in Indonesia, the results showed that 1,895 students (45.35%) admitted to having been victims, while another 1,182 students (38.41%) were perpetrators. The most frequently used platform in the case cyberbullying are WhatsApp, Instagram, and Facebook. Cyberbullying is a term that refers to disruptive social behavior, in which people are constantly chasing other individuals online with the aim of scaring or humiliating the victim (Aditya, 2020).

Cyberbullying includes hate speech in certain posts, personal messages that attack personally, and the dissemination of posts or social media account profiles in a harassing or threatening way. Cyberbullying among adolescents is a new form of traditional bullying that has emerged along with the development of information technology, and has become a global problem in recent years. This phenomenon occurs because the number of teenagers using the internet has increased significantly, especially on social networking sites, chat rooms, instant messaging apps, and online gaming platforms.

Based on data from the Indonesian Internet Providers Services Association (APJII), it can be concluded that many teenagers and minors in Indonesia are involved in cyberbullying. This is reinforced by the statement of the Indonesian Child Protection Commission which states that bullying on social media, or commonly called cyberbullying, is a serious problem that needs to be addressed immediately.

According to a report from the Indonesian Child Protection Commission, the number of cases of violence committed by children in schools (bullying) in 2021 reached 1,138 cases, with details of 574 cases of physical abuse and 515 cases of psychological violence. This figure represents a significant jump compared to the 712 cases recorded between 2011 and 2019. As a form of warning, KPAI reminds that students in schools are vulnerable to becoming victims of cyberbullying on social media.

Given the high risk of children becoming victims of cyberbullying, research by Anderson et al. suggests that cyberbullying can have a negative impact on adolescents

from various aspects of mental health, such as depression, social anxiety, suicidal thoughts, low self-esteem, and behavioral problems that can strain relationships within the family. In addition, cyberbullying can also reduce the academic achievement of adolescents. Research by Beran shows that children are vulnerable to being victims of cybercrime, which can have a serious impact on their emotional and social well-being. Victims of cyberbullying often have bad experiences that can result in a loss of confidence and identity. Beran also reported that when experiencing online bullying, victims often feel depressed, cry, embarrassed, lose friends at school, experience insomnia, and even express suicidal thoughts after experiencing the treatment.

Basically, bullying that is carried out through insults with harsh words, such as swearing, insults, or other inappropriate remarks, including those carried out through electronic media or social media, can be subject to sanctions in accordance with the article on the crime of minor insults. This is explained in an article about criminal threats for netizens who commit body shaming. The crime of petty insult is regulated in Article 315 of the old Criminal Code, which is still in force when this article is published, as well as Article 436 of Law Number 1 of 2023 concerning the new Criminal Code, which will come into effect three years after its promulgation, namely in 2026, as follows:

Article 315 of the Criminal Code states that any insult committed intentionally and does not fall into the category of defamation, whether orally or in writing, either in public or in the presence of the insulted person, or through a letter sent to the person, may be subject to sanctions for minor insults. The threat of punishment given is imprisonment for a maximum of 4 months and 2 weeks, or a fine of up to IDR 4.5 million.

Article 436 of Law Number 1 of 2023 states that insults that do not fall into the category of defamation, whether done orally or in writing in public, as well as in front of the insulted person, either through words, actions, or writing sent to them may be subject to sanctions for minor insults. The punishment imposed can be in the form of imprisonment for a maximum of 6 months or a maximum fine of category II, which is IDR 10 million (Penulis, 2024).

In the legal rules in Indonesia, every criminal act, both related to criminal acts and violations, must still be processed with existing legal rules (Hernanto & Amelia, 2024). The rapid development of digital technology has changed the way people interact, especially through social media. Behind the convenience and benefits, social media also raises various challenges, one of which is cyber bullying. Cyberbullying, or bullying that occurs in cyberspace, is a serious threat because of its widespread, anonymous, and profound psychological impact on its victims. Although the Indonesian government has made efforts to tackle this cybercrime through various regulations, such as Law No. 1 of 2023 concerning the Criminal Code, the challenges of law enforcement against cyber bullying cases on social media still require special attention.

Along with technological developments, artificial intelligence (AI) is one of the potential innovations to help handle cyber bullying cases. AI technology can be used to monitor potentially harmful content, detect cyber bullying activity, and track perpetrators more quickly and efficiently. The implementation of AI in the legal protection process is expected to be able to strengthen the supervision and law enforcement system in the digital space. In addition, AI can also help law enforcement officials to be more responsive in providing protection to victims, considering that victims often experience difficulties in identifying and reporting cyber bullying perpetrators.

However, the implementation of AI in legal protection cannot be separated from various challenges, both in terms of technology, regulations, and ethics. Law No. 1 of

2023, as a new legal foundation in Indonesia, must be able to adapt to the application of this technology so that the law enforced is in accordance with the principles of justice and protection for victims. Clear and comprehensive regulations regarding the role of AI in handling cyber bullying cases need to be strengthened in the legal framework, so that its implementation runs effectively and still respects the human rights of every individual involved.

## **RESEARCH METHOD**

This study applies a normative juridical method by analyzing regulations related to the application of artificial intelligence in legal protection for cyberbullying victims. The data used is secondary, including primary legal sources such as Law No. 1 of 2023 concerning the Criminal Code, as well as secondary legal sources that include literature, scientific journals, and related articles. Data collection was carried out through literature studies, using qualitative analysis techniques to evaluate the suitability of applicable legal norms with the application of AI in legal protection. The purpose of this study is to analyze the legal protection of cyber bullying victims on social media according to Law No. 1 of 2023 and find out the potential for AI integration in handling it.

## **RESULTS AND DISCUSSION**

### ***Legal Protection for Cyberbullying Victims on Social Media According to Law No. 1 of 2023***

Protection is provided to individuals or parties who suffer losses through a preventive and repressive approach. This includes efforts to fulfill their rights as well as providing assistance as a form of support for the comfort of victims, so that this becomes part of community protection (Saeful Bahri, 2020).

This depiction reflects the function of law based on the concepts of order, justice, certainty, utility, and peace. CST Kansil Legal Protection is a legal effort that must be carried out by law enforcement to provide security, both physical and non-physical, from all forms of threats and disturbances that may come from any party (Saeful Bahri, 2020).

Preventive legal protection measures aim to prevent crime by encouraging the government to establish special regulations related to actions that have the potential to have a negative impact on society. Meanwhile, repressive measures aim to solve the problems faced by victims, especially in terms of fulfilling their rights, without sacrificing the rights of other parties, so as to provide recovery and security for victim (Saeful Bahri, 2020).

Crimes that arise due to the use of internet media can be in the form of new crimes, or old crimes that are increasingly widespread. All criminal acts committed in cyberspace are included in the category of cybercrime (cyber-crime). One of the main problems that occur in the digital space today is cyberbullying. According to KBBI, the term "cyber" is used as a translation of the word (Suseno, 2012) "Cyber," as in the word cybernetics which translates to "cybernetics." In addition, in the general explanation of Law No. 11 of 2008 concerning Electronic Information and Transactions (UU ITE), the term "cyber" is used to describe "cyberspace," which is interpreted as cyberspace (Rastati, 2016).

The harassment or insults that a person receives through cyberspace can have a huge impact on their psychological condition. Main differences between cyberbullying and bullying traditionally lies in the medium used to launch the action (Chris Natalia, 2016).

Cyberbullying (online bullying) is an act of bullying carried out through digital technology. This action can happen on social media, applications chatting, gaming platforms, and via mobile phones. According to Think Before Text, cyberbullying is an aggressive behavior carried out by an individual or group with a specific purpose, using electronic media, repeatedly, against someone who is considered incapable of resisting the action. Thus, there is a power imbalance between the perpetrator and the victim. This inequality refers to the perception of physical and mental capacity. Patchin and Hinduja stated that (J. W. & S., 2015) cyberbullying is a treatment that is carried out deliberately and repeatedly through electronic text media or the internet.

According to Willard, (Sari & Suryanto, 2016) cyberbullying is a cruel act that is deliberately committed to target others by sending or disseminating harmful content, which can be seen as a form of social aggression in the use of the internet or other digital technologies. Kowalski and colleagues also added that the electronic context in question includes various platforms such as email, blogs, instant messaging, and text messages, aimed at individuals who cannot easily defend themselves.

According to Disa, the explanation of cyberbullying has similarities with the previously mentioned one, which is the misuse of technology by individuals who provide messages or upload images and videos with the aim of humiliating, torturing or making fun of, or threatening others. In addition, Rastati added that the spread of rumors, spying, or threats through various electronic media is also included in the category of cyberbullying. Basically, cyberbullying can be considered more painful than bullying in the real world, because the impact of the act is not only felt in cyberspace, but can also affect the victim's real life.

Another definition of cyberbullying, according to Smith, states that this behavior is an aggressive act carried out deliberately by an individual or group, by utilizing electronic media as a means, and carried out repeatedly indefinitely against victims who are unable to defend themselves. Based on the explanations of experts through the theories that have been described, it can be concluded that cyberbullying behavior is a form of technology abuse that aims to harm someone with certain intentions on electronic platforms.

According to Willard's theory, there are seven forms that can describe (E. Willard, 2007) cyberbullying. Cyberbullying has various forms with the same goal, which is to harm the victim psychologically and socially. Flaming involves sending abusive messages full of anger, while harassment includes repeated interruptions through messages or social media. Denigration or defamation aimed at damaging the reputation of the victim through gossip or slander, and impersonation involves disguising to spread negative content as if it came from the victim. Other forms include outing & trickery, which uses deception to obtain and disseminate private secrets, and exclusion, where a person is excluded from an online group. Last cyberstalking is a stalking that is often accompanied by threats, causing fear and discomfort for the victim.

Patchin and Hinduja explain some related aspects (Patchin & Hinduja, 2015), bullying in cyberspace has four main elements. Repetition is an important element, in which negative actions are performed many times, creating constant distractions for the victim. Intention or intent refers to the perpetrator's intention to harm the victim, while harm refers to the real impact that can affect the victim physically, socially, psychologically, or emotionally. Finally, the power imbalance indicates the dominance of the perpetrator over the victim, either in terms of physical strength, social position, or access to technology, which makes it difficult for the victim to resist.

Some of the factors that cause bullying include a lack of affection. Individuals who do not get affection from their parents tend to hurt and bully others, often to attract attention from their parents. In addition, previous experiences of seeing or experiencing violence are also a contributing factor to bullying; those who have been hurt or witnessed others being hurt do not hesitate to do the same.

In general, there are five factors that affect the occurrence of cyberbullying, Cyberbullying is influenced by several important factors. Traditional bullying in the real world can encourage the perpetrator to continue his or her behavior in cyberspace. In addition, the personality traits of aggressiveness, lack of empathy, and irritability play a role in making a person more likely to become a bully. The perception of the victim also influences, where the perpetrator often assesses the characteristics of the victim as a reason to bully. Strain factors, namely psychological tension due to negative relationships, can trigger aggressive behavior, such as cyberbullying. Finally, the role of parental interaction is crucial; Children who are less supervised in cyberspace are more vulnerable to being involved in this act, both as perpetrators and victims.

Cyberbullying is a form of bullying carried out online, where individuals or groups target others through digital platforms. These actions are often carried out in painful ways, such as insults, harassment, or the spread of false information, which can result in emotional and psychological damage to the victim. With the increasing use of social media among teenagers and children, this issue is increasingly becoming a concern around the world. In Indonesia, Law No. 1 of 2023 concerning the Criminal Code (KUHP) has been implemented to provide legal protection for victims of cyberbullying, but challenges in law enforcement remain.

Action cyberbullying in relation to the laws and regulations in Indonesia, especially the Criminal Code, can be seen through several articles relevant to the types of cyberbullying. One of them is Article 310 paragraph (1) of the Criminal Code which states: "Whoever deliberately attacks the honor or good name of a person by accusing something, with the aim of making it known to the public, is threatened with imprisonment for a maximum of nine months for defamation." This article deals with the form of cyberbullying in the form of harassment (harassment) (KUHP Buku Kesatu, 2021).

Article 310 paragraph (2) of the Criminal Code states: "If pollution is committed through written or images that are disseminated, shown, or pasted in public, the perpetrator is threatened with imprisonment for a maximum of one year and four months for written defamation." This article relates to the act of cyberbullying in the form of harassment that is carried out in writing or visually in the public media (KUHP Buku Kesatu, 2021).

Article 311 paragraph (1) of the Criminal Code states: "If the perpetrator of defamation or written defamation is given the opportunity to prove his allegations but fails, and the accusation is contrary to what he knows, then he is threatened with imprisonment for a maximum of four years for the crime of defamation." This article relates to the act of cyberbullying in the form of denigration, where the perpetrator defames or discredits someone's reputation unrighteously (KUHP Buku Kesatu, 2021).

Article 315 of the Criminal Code states: "Any insult committed intentionally, whether orally, in writing, or in deeds, which does not fall into the category of pollution or written defamation, and is committed in public or directly to the person concerned, is threatened with a misdemeanor in the form of imprisonment for a maximum of four months and two weeks." This article is related to the cyberbullying in the form of

harassment, namely insults or harassment that is carried out verbally or in writing through electronic media (KUHP Buku Kesatu, 2021).

Article 369 paragraph (1) states: "Whoever with the intention of unlawfully benefiting himself or others, with the threat of defamation either orally or in writing, or by threatening to reveal secrets, forcing a person to give goods or make a debt or write off a debt, is threatened with imprisonment for a maximum of four years." This article relates to the act of cyberbullying in the form of cyberstalking, where perpetrators use threats or extortion through electronic media to gain illegal profits (KUHP Buku Kesatu, 2021).

The act of cyberbullying, if associated with the provisions of Law Number 1 of 2023, can be referred to in several articles, such as:

Article 433 paragraph (1): "With a criminal element, namely verbally attacking the honor or good name of another person by accusing something so that it is known to the public, is punished for pollution." (BPK, 2023).

Article 433 paragraph (2): "With a criminal element, namely an act as referred to in paragraph (1) committed with writing or images that are broadcast, displayed, or pasted in a public place, is punished for written defamation." (BPK, 2023).

Law Number 1 of 2023 concerning the Criminal Code (KUHP) is a major step taken by Indonesia to update and strengthen the legal framework in dealing with modern crimes, including cyberbullying. This law accommodates the development of information technology, which increasingly allows the emergence of cyber-based crimes, such as insults, threats, defamation, and the dissemination of insulting or threatening information.

In this law, several articles related to insults, defamation, and threats have direct relevance to cyberbullying, especially in the context of social media and other online platforms. For example, the act of spreading hate speech or insults carried out through electronic media can be charged with criminal penalties in accordance with the article that regulates the criminal act.

Although Law No. 1 of 2023 is an important step in providing legal protection for victims of cyberbullying, there are several challenges that need to be considered in its implementation, especially in the context of the very dynamic development of digital technology.

One of the biggest challenges in the implementation of this law is that some of the terms used, such as "electronic information" and "electronic documents", still require more specific explanations. In the rapidly evolving world of technology, this term needs to be clarified to accommodate various forms of digital communication, ranging from text messages to multimedia content that can be used as a tool to commit cyberbullying. For example, insults through memes, videos, or repetitive posts on social media may not be fully covered by the current definition.

Digital evidence is an important element in the cyberbullying law enforcement process, but it is also one of the main challenges. Evidence such as text messages, comments, or videos can be easily manipulated or deleted. This causes difficulties in ensuring the validity and authenticity of the evidence presented in court. In addition, the challenge in collecting evidence also involves various platforms that are often located outside Indonesian jurisdiction, so cross-border coordination is very important.

To deal with increasingly complex cybercrime, law enforcement officials in Indonesia often face limited resources. This includes the limitations of personnel who have expertise in the fields of digital technology and cyber law, as well as the limitations

of technological devices used to detect, collect, and analyze digital evidence. Cyberbullying cases require a deep understanding of how social media works, as well as digital tools that can support the investigation process.

In general, there are five main issues regarding cyber law in each country, In the digital era, there are various important aspects that affect the use of the internet. Information security focuses on the authenticity and validity of electronic signatures as well as the authentication of messages sent online. Online transactions include the sale, payment, and delivery of goods over the internet. The right to electronic information involves the protection of copyright and rights between users and content providers. Information content regulation sets limits on how much content can be disseminated on the internet, while online contact regulation includes communication ethics as well as business rules, including taxes, export-import, and legal jurisdiction in cyberspace (Hukumonline, 2024).

Some of the relevant principles in cyber law include the protection of personal data, copyright, information security, and the prohibition against actions such as fraud, defamation, and online insults. Social media functions as an online platform that supports social interaction, where web-based technology allows for interactive discussions. Popular examples of social media today include blogs, Twitter, Facebook, Instagram, Path, and Wikipedia. According to Van Dijk, social media is a platform that prioritizes user participation and encourages collaboration (Rahmani, 2016).

### **Potential Integration of AI in Handling Cyberbullying**

Artificial Intelligence (AI) is one of the results of scientific advances in the field of information and communication technology, which has been created and experienced rapid and leading development in the last ten years. AI is an innovation in science and technology designed to allow computer systems to mimic human intellectual abilities. Currently, AI is increasingly becoming the focus of attention in the digital era. In its development, AI has had a significant positive impact in various sectors, with its use not only limited to the telecommunications industry, but also expanding into the banking, manufacturing, services, and even government sectors (Ririh, Laili, Wicaksono, & Tsurayya, 2020).

The increase in the use of Artificial Intelligence (AI) to meet the needs of society is also seen in the legal field. One example of the use of AI that has been adopted is the application E-Court which was launched by the Supreme Court in 2018. Furthermore, on August 18, 2023, coinciding with the commemoration of the Supreme Court's 78th Anniversary, the institution launched five new AI-based applications. The five applications are Smart Assembly, Court Live Streaming, One Finger, Lantern 2.0, and e-IPLANS. The Chief Justice of the Supreme Court of the Republic of Indonesia, Syarifuddin, stated that "this application reflects the commitment to create a majestic and modern Indonesian judiciary, in accordance with the mandate of the blueprint for Judicial Reform 2010-2035" (Sukma Medianti, 2023).

The Estonian state has integrated Artificial Intelligence (AI) as a judge to improve service efficiency and reduce the backlog of cases on the judge's desk. The Estonian government utilizes AI judges to handle minor disputes, such as civil disputes with a value of less than 7,000 Euros. The use of AI systems to manage minor disputes is considered efficient because it does not involve an element of discretion (Patriana Yuswar, 2023).

Legal reasoning is the main focus of AI technology development. In executing legal reasoning, AI can apply the conversion of syllogism and deductive reasoning

processes into a format suitable for computer engineering. This creates a system of rules and procedures that allow AI to draw inferences from various logical premises. This evolution has resulted in a construction in AI known as Computational Models of Legal Reasoning (CMLRs). The CMLRs program can analyze legal texts, conduct legal reasoning, provide legal arguments, and predict and provide solutions to legal problems (Ashley, 2017).

Cyberbullying is a form of violence in cyberspace that is becoming more widespread and has become a serious problem among internet users, especially among teenagers and children. The psychological impact caused by cyberbullying is significant, often resulting in conditions such as depression, anxiety, and in extreme cases, suicidal thoughts (UMSIDA, 2024). In the midst of these challenges, Artificial Intelligence (AI) offers new hope to solve problems (Kemenkes, 2023) cyberbullying. With its ability to process large amounts of data and learn from complex patterns, AI can serve as a vanguard in detection, prevention, and mitigation cyberbullying.

The integration of AI in handling cyberbullying includes the application of machine learning algorithms that are able to detect various forms of cyberbullying with high accuracy. Some commonly used techniques in this process include word- and sentence-level sentiment analysis, where AI systems can analyze negatively charged words as well as sentence context to understand the emotional nuances contained within them.

For example, a sentence that looks positive at first glance may harbor hidden sarcasm or ridicule, depending on the context of the communication. Additionally, entity and relationship recognition allows AI to identify entities such as names, locations, and organizations in text, as well as understand the relationships between those entities. This allows for the detection of attacks that are personal or targeted to specific groups, so that preventive measures can be taken early (Hospital, 2024).

Another major challenge in detecting cyberbullying is the ability to understand non-literal language; therefore, advanced AI models can be trained to recognize distinctive language patterns that reflect sarcasm and irony, which are often used in the context of harassment. In addition, considering that cyberbullying does not only occur through text, AI can also analyze visual and audio content to detect acts of violence, threats, or harassment, so the scope of detection becomes wider. With this comprehensive approach, AI can be an effective tool in dealing with the challenges of cyberbullying in the digital age.

The integration of artificial intelligence (AI) in handling cyberbullying can be done at various scales, both automatically and personally. One way it is implemented is through automated content moderation, where social media platforms can leverage AI to scan millions of posts daily and automatically remove content that violates community guidelines. This approach not only helps maintain a safe online environment, but it also reduces the workload of human moderators who are often overwhelmed by the amount of content that has to be checked. In addition, AI systems can also function in proactive detection by analyzing user behavior patterns to predict who is a potential perpetrator or victim of cyberbullying.

With this ability, precautions can be implemented before the situation becomes more severe, reducing the likelihood of negative impacts on the individuals involved. On the other hand, AI can also play a role in personalizing interventions by providing support tailored to individual needs, such as offering help resources or connecting victims with counselors or mental health professionals.

This approach not only helps in addressing the situation at hand, but also increases the effectiveness of the interventions provided, ensuring that affected individuals receive help that is appropriate to their condition. Thus, the integration of AI in handling cyberbullying offers a more holistic and efficient solution in creating a safer online environment for all users.

The integration of artificial intelligence (AI) in handling cyberbullying has a much broader impact than just providing assistance to individuals who are victims, as it also provides significant benefits to society as a whole. One of the key aspects of this benefit is AI's ability to collect and analyze data on a large scale. The data collected by the AI system includes not only information about cyberbullying incidents, but also behavioral patterns, situational context, and demographics of the users involved.

With the analysis of this data, researchers and policymakers can gain valuable insights into the trends and characteristics of cyberbullying, which is crucial for understanding how this phenomenon is developing in different circles of society. This information can then be used to formulate more effective prevention strategies, including public awareness campaigns, the development of new policies, and educational programs aimed at reducing the incidence of cyberbullying on various social media platforms.

Additionally, while AI has the ability to collect and process user data, it is crucial to ensure that the use of such data is carried out in an ethical manner and in accordance with applicable privacy principles. Responsible data collection is essential for protecting individual rights and ensuring that users feel safe and valued when using digital platforms. Clear and transparent policies regarding data use, as well as mechanisms to protect individual privacy, must be implemented so that people can trust AI technology in handling cyberbullying.

On the other hand, it's important to note that AI is not meant to replace the role of humans in content moderation. While AI can process and analyze data quickly and efficiently, human interaction remains crucial in the context of moderation. AI can work with human moderators to improve efficiency and effectiveness in detecting and responding to cyberbullying cases. This collaboration allows for the use of human expertise in understanding the nuances of situations and providing more context-sensitive responses, while AI can handle enormous volumes of data and detect patterns that may not be visible to humans.

By integrating AI in handling cyberbullying, we can create synergies between technology and human intervention, which in turn can strengthen responses to cyberbullying problems. This synergy will help make the online environment safer and more inclusive for all users, as well as reduce the negative impact caused by cyberbullying. In this way, AI not only serves as a tool for detection and prevention, but also as an integral component in creating a society that is more aware and responsive to social issues that arise in the digital age.

The development of a more robust artificial intelligence (AI) model is very important in an effort to deal with the problem of cyberbullying. Continuous research and development aim to create AI models that are not only resistant to adversarial attacks, which are techniques used to trick AI systems, but are also capable of detecting various forms of cyberbullying that are increasingly complex. With this stronger model, the system is expected to be able to recognize more subtle and varied patterns of bullying behavior, so that it can provide an appropriate and effective response.

In addition to model development, collaboration between social media platforms is also a key aspect in cyberbullying mitigation. These platforms need to work together to develop a common standard for detecting and preventing online bullying. With solid agreements and cooperation between platforms, the effectiveness of handling this problem can be improved overall. For example, if one platform identifies typical bullying behavior, that information can be shared with other platforms to increase awareness and prevention across the social media ecosystem.

In addition, public education and awareness about cyberbullying and ways to prevent it are crucial. The public needs to be given a deeper understanding of what cyberbullying is, the impact it causes, and the steps that can be taken to prevent it. Through educational programs that emphasize the importance of digital ethics and good behavior on the internet, internet users are expected to be more vigilant and proactive in creating a positive online environment. By increasing this awareness and knowledge, it is hoped that users can be more responsible in their interactions in cyberspace, thereby reducing cyberbullying incidents and their negative impact on individuals and society.

Cyberbullying mitigation efforts require a combination of the development of sophisticated artificial intelligence (AI), collaboration between social media platforms, and increased public education and awareness. With these steps, cyberbullying can be handled more comprehensively and effectively. AI technology plays a crucial role in detecting harmful content, while the cooperation of various parties allows for stronger and more consistent preventive measures.

The continuous development of AI technology is expected to reduce the number of cyberbullying and improve the welfare of internet users. In addition, AI can also help shape a more inclusive society by creating a safe online environment. With early detection and quick response, this technology not only protects individuals from the negative impact of cyberbullying but also strengthens legal protections in cyberspace.

The Ministry of Communication and Information, the National Police, the Cyber Directorate, and BSSN play an important role in handling and preventing cyberbullying in Indonesia. The Ministry of Communication and Information can use AI technology to monitor digital content, while the National Police, especially the Cyber Directorate, needs to utilize technology to crack down on cyberbullying more effectively. BSSN, as a cybersecurity agency, can integrate AI in security policies to proactively identify threats and provide early warning to authorities.

Overall, BSSN, the National Police, the Cyber Directorate, and the Ministry of Communication and Information need preventive technology (techno prevention) to increase efforts to prevent and handle cyberbullying. By utilizing artificial intelligence, data analysis, content monitoring, and behavioral analysis, these institutions can be more effective in detecting, preventing, and responding to cyberbullying cases in Indonesia. Preventive technology will be a powerful tool in creating a safer digital environment and protecting society from the threat of cyberbullying in the future.

The rapid development of digital technology has brought significant changes in the way we interact and communicate. Social media, as one of the most influential innovations, has become an indispensable communication platform in everyday life. In recent years, social media has transformed into a space for individuals to share thoughts, ideas, and experiences, allowing for easy and fast communication across geographical boundaries (Malang, 2024). However, along with this convenience, there are also serious problems that come with it, such as cybercrime, and one of them is cyberbullying (Padang, 2024).

In the face of the challenge of cyberbullying, artificial intelligence (AI) offers a promising solution. AI has the ability to quickly analyze large amounts of data, detect patterns, and provide appropriate responses. By utilizing this technology, we can strengthen legal protections for victims of cyberbullying and increase the effectiveness of prevention efforts.

AI has an important role to play in tackling cyberbullying through various approaches. One of the main ways is early detection and content classification. With Natural Language Processing (NLP), AI can understand and analyze human language naturally, allowing the system to identify keywords, phrases, and emotions that often arise in the context of cyberbullying. For example, the use of words such as "stupid" or "ugly" can indicate bullying behavior. Additionally, sentiment analysis can assess whether a message or post contains elements of negativity, hatred, or intimidation, helping the system detect threats early. In a visual context, computer vision techniques allow AI to detect images or videos that have the potential to contain violence or pornography, which is often used in cyberbullying cases.

In addition to detection, AI also plays a role in tracking and identifying perpetrators. Through social network analysis, AI can map the relationships between social media users to identify groups or individuals who frequently engage in these activities. Information such as the date, time, and location of the content can be processed through metadata analysis, helping to track the origin of malicious content and identify the perpetrators.

On the prevention and mitigation side, AI can filter content before it is published through content filters that block potentially bullying posts. Additionally, AI systems can provide automated responses to victims by offering support or guidance for reporting incidents. Furthermore, AI can support interactive educational programs that teach the dangers of cyberbullying and how to prevent it, in order to increase user awareness.

Several major social media platforms have started implementing AI technology to solve the problem of cyberbullying. For example, Facebook uses a combination of machine learning and human moderation algorithm to detect and remove content that violates our Community Policies. Twitter has also developed a feature to hide replies that are abusive or irrelevant, which can reduce the negative impact on other users (Kantor Berita Indonesia, 2019).

While the application of AI in legal protection for cyberbullying victims offers a variety of benefits, there are several challenges that need to be addressed. One of the main challenges is algorithmic bias, where AI can inherit biases from training data, which can result in unfair or discriminatory decisions against certain groups. In addition, privacy issues are also a concern, as the collection and analysis of large amounts of personal data can violate individuals' privacy rights if not properly regulated. Ethical challenges have also arisen, especially related to accountability, transparency, and the risk of misuse of technology in law enforcement (UNAIR, 2024). In addition, there is a risk of over-reliance on technology, where glitches, errors, or hacks in AI systems can have serious consequences (JDIH, 2023). To maximize the effectiveness of Law No. 1 of 2023 in protecting victims of cyberbullying, a strong synergy between legal regulation and artificial intelligence technology is needed. To create a legal framework that is more adaptive to the development of AI technology, several important aspects must be considered. First, the legal framework must be constantly updated to accommodate technological changes and protect human rights and privacy. Second, data standardization is needed to ensure interoperability between AI systems and ensure the quality of the data used. Third, the

ethics of using AI must be maintained by applying the principles of transparency, accountability, and non-discrimination so that AI is not misused in law enforcement. Finally, multidisciplinary collaboration between law, technology, psychology, and sociology is needed to create a comprehensive and responsive law enforcement system against cyberbullying

## CONCLUSION

Overall, the development of digital technology, especially social media, has brought a significant impact on social interaction and introduced new challenges, such as cyberbullying. With the support of Law No. 1 of 2023, artificial intelligence can be an effective tool in improving legal protection for victims of cyberbullying. While existing challenges need to be addressed, the potential of AI to detect, track, and prevent cyberbullying provides new hope for creating a safer and more supportive online environment for all users.

Law Number 1 of 2023 provides an important legal framework to protect victims of cyberbullying in Indonesia. However, in the face of the challenges arising from the ever-evolving digital world, artificial intelligence (AI) technology offers great potential to support law enforcement processes. By utilizing AI for early detection, analysis of digital evidence, identification of perpetrators, and prevention, the protection of victims of cyberbullying can be significantly improved. However, the successful implementation of this requires an adaptive legal framework, clear data standards, and the application of strict ethical principles. Multidisciplinary collaboration will also be key in creating more effective and comprehensive solutions.

## REFERENCES

- Aditya. (2020). Apa itu Cyber Harassment? Ini Penjelasan Lengkapnya.
- Agustini. (2023). Wamenkominfo Ajak Semua Pihak Lindungi Anak Dari Kejahatan Ruang Digital.
- Amirulloh, Muhamad. (2017). *Cyberlaw: Perlindungan Merek Dalam Cyberspace (Cybersquatting Terhadap Merek)*. Bandung: Refika Aditama.
- Ashley. (2017). *Artificial intelligence and legal analytics: new tools for law practice*. Cambridge University Press.
- Aurelia Oktavira S., Bernadetha. (2023). Jerat Hukum Pelaku Cyberbullying.
- BPK. (2023). Undang-Undang Nomor 1 Tahun 2023 Tentang Kitab Undang-Undang Hukum Pidana.
- Chris Natalia, El. (2016). Remaja, Media Sosial dan Cyberbullying. *Jurnal Komunikatif, Vol. 5, No(119–139)*, 121.
- Clara, Friskilla, Soponyono, & Astuti. (2016). "Kebijakan Hukum Pidana Dalam Upaya Penanggulangan Cyberbullying Dalam Upaya Pembaharuan Hukum Pidana." *Diponegoro Law Journal, Volume 5,(1–21)*, 2.
- E. Willard, Nancy. (2007). Cyberbullying And Cyberthreats: Responding To The Challenge Of Online Social Aggression, Threats, And Distress, Champaign. *Research Press, 255–267*.
- Hernanto, Tjoetjoe Sandjaja, & Amelia, Tina. (2024). *Omnibus Law Penegak Hukum Di Indonesia*. Bogor: PT Kaya Ilmu Bermanfaat.
- Hospital, Siloam. (2024). Apa itu Cyberbullying? Inilah Penyebab dan Cara Mengatasinya.
- Hukumonline. (2024). Mengenal Cyber Law dan Aturannya.
- Jayaputri, Citasari. (2020). Cyberbullying dan Tantangan Hukum. *Jurnal Penelitian*

- Hukum Legalitas, Volume 14, 27–34.*
- JDIH. (2023). PERKEMBANGAN TEKNOLOGI ARTIFICIAL INTELLIGENCE.
- Kantor Berita Indonesia, Antara. (2019). Twitter uji coba fitur sembunyikan balasan.
- Kemenkes. (2023). Dampak Psikologis bagi Korban Cyberbullying "Luka yang Tak Terlihat."
- Komisioner, KPAI. (2020). Sejumlah Kasus Bullying Sudah Warnai Catatan Masalah Anak Di Awal 2020 Begini Kata Komisioner Kpai.
- KUHP Buku Kesatu. (2021). Kitab Undang-Undang Hukum Pidana.
- M. Ramli, Ahmad. (2006). *Cyber Law & HAKI*. Bandung: Refika Aditama.
- Malang, Formadiksi Universitas Negeri. (2024). Hari Media Sosial: Mengapa Media Sosial Menjadi Pilar Utama Komunikasi Modern?
- News, Tangerang. (2021). Makin Banyak Anak Muda Jadi Korban Cyberbullying Ini Tanda-Tandanya.
- Padang, Kantor Kementerian Agama Kota. (2024). Pergeseran Interaksi Sosial di Era Digital: Dampak dan Solusinya Oleh : Isrizal, M.Pd Kepala MTsN 1 Kota Padang.
- Patchin, & Hinduja. (2015). *Measuring Cyberbullying: Implications for Research*.
- Patriana Yuswar, Cheryl. (2023). "AI sebagai Hakim, Dapat Hilangkan Putusan Pengadilan yang Bias?".
- Penulis. (2024). Jerat Pasal Pelaku Bullying di Media Sosial menurut UU ITE 2024.
- Rahmani, Thea. (2016). Penggunaan Media Sosial Sebagai Penguasaan Dasar-Dasar Fotografi Ponsel. In *Publik*. Yogyakarta: Publik.
- Rastati, Ranny. (2016). Bentuk Perundungan Siber Di Media Sosial Dan Pencegahannya Bagi Korban Dan Pelaku. *Jurnal Sositeknologi, 15*, 169–186, hal. 170.
- Ririh, Laili, Wicaksono, & Tsurayya. (2020). Studi Komparasi Dan Analisis SWOT Pada Implementasi Kecerdasan Buatan (Artificial Intelligence) di Indonesia. *Jurnal Teknik Industri, 15*(2), 122–133.
- Riswanto, Dody. (2020). Perilaku Cyberbullying Remaja Di Media Sosial. *Analitika, 98–111*.
- Saeful Bahri, Idik. (2020). *CYBER CRIME Dalam Sorotan Hukum Pidana*. Yogyakarta: Bahasa Rakyat Yogyakarta.
- Sari, & Suryanto. (2016). Kecerdasan Emosi, Anonimitas, dan Cyberbullying (Bully Dunia Maya). *Persona, Jurnal Psikologi Indonesia, 48–61*.
- Sukma Medianti, Uji. (2023). "Permudah Penanganan Perkara, MA Rilis Aplikasi Berbasis AI."
- Suseno, Sigid. (2012). *Yurisdiksi Tindak Pidana Siber*. Bandung: Rafika Aditama.
- UMSIDA, Romadhona. (2024). Bahaya Cyberbullying pada Remaja, Dampak, dan Cara Mencegahnya.
- UNAIR, FTMM. (2024). AI Cerdas, tapi Bisa Bias? Waspada Bahaya Algoritma!

---

**Copyright holder:**

Cepi Noval (2024)

**First publication right:**

Journal of Social Science

**This article is licensed under:**

