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The Urgency of Regulatory Reformulation and Strengthening the Capacity of Law Enforcers in Combating Cybercrime Through a Criminal Law Approach in Indonesia

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Abstract: The rapid development of information technology has had a significant impact on various aspects of life, including the emergence of various forms of increasingly complex cybercrime. Cybercrime includes various illegal acts carried out through the internet network including personal data theft, dissemination of hoax information, hacking, and digital-based financial crimes. In Indonesia, the Electronic Information and Transactions Law (UU ITE) serves as the main instrument in regulating and prosecuting cybercrimes. Criminal law plays an important role in imposing sanctions on cybercrime perpetrators and providing legal protection for the community. However, in its implementation, law enforcement against cybercrime faces various challenges, such as the weak capacity of law enforcement officers, limited regulations that are adaptive to technological developments, and jurisdictional issues in handling cross-border cybercrime. This study aims to analyze the role of criminal law in dealing with cybercrime through the Electronic Information and Transactions Law (UU ITE) and identify the challenges faced in the enforcement process. This study uses a normative research method with a statute approach and a case approach. The legislative approach examines various regulations governing cybercrime in Indonesia, particularly the Electronic Information and Transactions Law (UU ITE) and other related provisions. Meanwhile, the case study approach analyzes several resolved cybercrime cases in Indonesia to evaluate the practical effectiveness of criminal law enforcement. The findings of this research are expected to provide a more comprehensive understanding of criminal law effectiveness in addressing cybercrime, as well as offer recommendations for enhancing regulatory efficacy and law enforcement practices in Indonesia.

Keywords: Criminal Law, Cybercrime, UU ITE, Law Enforcement

INTRODUCTION

The rapid advancement of information and communication technology has brought significant transformations across various aspects of life, including economic, social, and governmental sectors. While widespread digitalization has created numerous new opportunities, it has simultaneously heightened exposure to diverse cybercrime threats

(Alviani, 2024). Cybercrime includes various forms of criminal acts committed through digital technology, such as theft of personal data, hacking, dissemination of hoax information, online fraud, and attacks on information systems (Judijanto, 2025). In Indonesia, cybercrime continues to increase along with the increasing number of internet users and increasingly massive digital transactions. This phenomenon requires strong regulations and a law enforcement system that is able to overcome the various challenges that arise in the cyber world (Dinda, 2024).

In addressing cybercrime, criminal law plays a pivotal role as a legal instrument to provide societal protection while prosecuting offenders who have been proven to violate regulations. Criminal law serves not only as a repressive instrument for punishing offenders, but also as a preventive mechanism to establish legal certainty and deter future cybercrime (Salsabilla, 2024). Without rigorous law enforcement, cybercrime may proliferate uncontrollably, generating extensive consequences including financial losses, social stability disruptions, and even national security threats (Wati, 2024). In response to escalating cybercrime threats, the Indonesian government enacted Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE), subsequently amended by Law Number 1 of 2024. The Electronic Information and Transactions (UU ITE) serves as Indonesia's primary legal framework for regulating cyber activities, including cyber offenses. The statute contains provisions addressing information technology misuse, digital defamation, unauthorized access, and other harmful acts affecting both individuals and the state (Nugraha, 2021). Despite serving as a crucial instrument for cybercrime mitigation, the Electronic Information and Transactions Law's (UU ITE) implementation continues to face significant challenges, including: (1) statutory ambiguities in key provisions, (2) limited law enforcement capacity, and (3) jurisdictional complexities in cross-border offenses.

One of the main challenges in law enforcement against cybercrime in Indonesia is the ambiguity or multiple interpretations of the articles stipulated in UU ITE. Several provisions in this law, such as those concerning defamation and the dissemination of electronic information that incites hatred or hostility, are often considered too broad and open to various interpretations. This situation creates legal uncertainty, both for the public as internet users and for law enforcement officials in determining the boundaries between legal and illegal actions. In practice, this has frequently led to the criminalization of legitimate expressions, such as social criticism or political opinions voiced on social media. The lack of clarity in these legal norms necessitates a reformulation of the provisions that are prone to misuse, making them more specific, proportional, and aligned with human rights principles.

In addition to normative issues in legislation, another significant challenge is the weak human resource capacity and limited facilities available to law enforcement agencies in combating cybercrime. Cybercrimes generally involve complex methods and require specialized technical expertise in information technology. However, not all police officers, prosecutors, or judges possess adequate competence in understanding and tracing digital footprints (digital forensics). This condition leads to low-quality investigations and evidentiary processes, ultimately affecting the effectiveness of judicial proceedings. Furthermore, the availability of software, technological infrastructure, and budget for handling cybercrime remains highly limited, especially in remote regions. Without continuous capacity-building and investment in supporting facilities, law enforcement will continue to lag behind increasingly sophisticated cybercriminals.

An equally complex issue is the jurisdictional challenge in handling cross-border cybercrime and the weak international cooperation. Cybercrimes are frequently committed by perpetrators located outside Indonesia's legal jurisdiction, utilizing overseas servers or transnational communication channels that cannot be directly accessed by domestic authorities. This results in sluggish law enforcement processes or even complete impasse due to

jurisdictional limitations and cross-border legal barriers. Meanwhile, the required international cooperation—whether through Mutual Legal Assistance (MLA) or extradition treaties—remains suboptimal due to various administrative, political, and diplomatic obstacles. Consequently, many cybercrime cases remain unresolved or fail to proceed to legal adjudication.

The urgency for regulatory reform and institutional strengthening in combating cybercrime in Indonesia has become increasingly critical as digital offenses grow more complex. A crucial immediate step is harmonizing UU ITE with other regulations, such as the Criminal Code (KUHP) and the Criminal Procedure Code (KUHAP), to prevent normative overlaps and procedural inconsistencies in law enforcement. This harmonization is essential to ensure cybercrime handling aligns with principles of justice and legal certainty. Concurrently, law enforcement institutions must be equipped with enhanced digital investigation capabilities—including expertise in digital forensics, data encryption, and electronic transaction tracing—to keep pace with evolving cybercriminal tactics. Without skilled human resources, enforcement will perpetually lag behind the sophistication of digital offenders. However, regulatory reform and capacity-building must also uphold human rights, particularly freedom of expression and privacy. Certain provisions in UU ITE have been criticized for their broad wording and potential misuse to silence criticism or restrict citizens' right to dissent. Thus, a more balanced, transparent, and proportional approach is imperative to ensure digital legal frameworks not only penalize violations but also safeguard democratic spaces.

METHOD

This study employs a normative legal research method, utilizing a statute approach and a case approach. The normative legal method involves examining various laws and regulations related to cybercrime, particularly the Law on Electronic Information and Transactions (UU ITE), as well as other relevant regulations within the Indonesian legal system. The statute approach is used to analyze the extent to which the criminal law provisions in the Law on Electronic Information and Transactions (UU ITE) are capable of accommodating the developments in cybercrime and providing a clear legal foundation for law enforcement. In addition, this research incorporates a case approach by analyzing selected court decisions and real-life cybercrime cases in Indonesia. This approach aims to evaluate the implementation of criminal law in addressing cybercrime, including the effectiveness of sanctions imposed on perpetrators and the challenges faced by law enforcement authorities. The data sources for this research are obtained through library research, including legislation, legal books, academic journals, and reports from relevant institutions. Data analysis is conducted qualitatively by interpreting applicable legal norms and linking them with the realities of law enforcement practices in the field. Through this method, the study aims to provide a comprehensive overview of the role of criminal law in addressing cybercrime and the challenges encountered in its enforcement.

RESULT AND DISCUSSION

The Role of Criminal Law, Particularly Through the Electronic Information and Transactions Law (UU ITE), in Combating Cybercrime in Indonesia

The Electronic Information and Transactions Law (UU ITE) serves as the primary regulation governing digital activities and functions as a criminal law instrument to address cybercrime in Indonesia. This law was initially enacted through Law No. 11 of 2008 and was later amended by Law No. 19 of 2016 to adapt to technological developments and to respond to emerging legal issues. The main objective of the UU ITE is to provide legal certainty regarding the use of information technology, electronic transactions, and to ensure protection against the misuse of the internet for unlawful purposes (Dermawan, 2020).

The UU ITE provides the legal foundation for law enforcement officers to take action against various forms of cybercrime. Within this regulation, several articles specifically address cyber offenses. Article 27(1) regulates the distribution of content containing immoral or indecent material, with criminal penalties as stipulated in Article 45(1)—a maximum imprisonment of six years and/or a fine of up to IDR 1 billion. Furthermore, Article 27(3) addresses defamation, which has often sparked controversy due to concerns that it may restrict freedom of expression. The penalties are outlined in Article 45(3), which prescribes a maximum of four years' imprisonment and/or a fine of up to IDR 750 million. In addition, Article 28(1) concerns the dissemination of false information that causes consumer losses in electronic transactions, punishable under Article 45A (1) with a maximum sentence of six years in prison and/or a fine of up to IDR 1 billion. Meanwhile, Articles 30 to 32 regulate illegal access and the destruction of electronic systems, with penalties detailed in Articles 46 to 48, ranging from six to twelve years' imprisonment and fines of up to IDR 10 billion (Saputra, 2024).

When compared to regulations in other countries, several nations have adopted more specific and comprehensive cyber regulations. For example, the Computer Fraud and Abuse Act (CFAA) in the United States specifically governs various forms of computer-related crimes, including illegal access, identity theft, and the misuse of electronic systems (Setiawan, 2024). Similarly, the European Union has enacted the General Data Protection Regulation (GDPR), which emphasizes the protection of personal data and imposes severe penalties for data misuse (Yuniarti, 2022). In contrast, Indonesia's UU ITE still requires harmonization with other legal frameworks in order to more effectively address the increasingly complex nature of cybercrime.

In practice, the implementation of criminal law in addressing cybercrime in Indonesia faces various challenges. Several past cases illustrate how the UU ITE has been applied in the law enforcement process. One prominent example is a case involving hate speech and the spread of hoaxes via social media, in which the perpetrator was charged under Article 28(2) of the UU ITE for disseminating information that could incite hostility based on ethnicity, religion, race, and intergroup relations (SARA). The offense carries criminal penalties as stipulated in Article 45A (2), which prescribes a maximum sentence of six years' imprisonment and/or a fine of up to IDR 1 billion (Lubis, 2020).

The formal effort to combat cybercrime in Indonesia began with the enactment of Law Number 11 of 2008 on UU ITE, which was later amended by Law Number 1 of 2024. UU ITE was introduced in response to the urgent need for regulations addressing the rapid growth of digital activities, including cybercrimes that had previously not been clearly accommodated within national law, particularly the Indonesian Penal Code (KUHP). This law provides a legal foundation for regulating electronic information traffic, digital transactions, and the enforcement of laws against violations in cyberspace. Although the Penal Code also addresses certain relevant offenses—such as fraud (Article 378 of the Penal Code) and defamation (Articles 310–311)—it does not specifically cover crimes of a digital or electronic nature. Therefore, UU ITE functions as both a complementary and specialized legal framework for tackling cybercrime. Additionally, UU ITE intersects with other regulations such as Law Number 8 of 1981 on Criminal Procedure (KUHAP) in terms of procedural enforcement, and Government Regulation Number 71 of 2019 on the Implementation of Electronic Systems and Transactions, which reinforces data security and the responsibilities of electronic system providers. In its enforcement, UU ITE adheres to fundamental principles of criminal law, including *nullum crimen sine lege* (no crime without law), *lex certa* (legal certainty), *non-retroactivity*, and proportionality between the offense and the penalty.

UU ITE regulates various cybercrimes, which include criminal acts committed through electronic systems or against electronic data. Several types of offenses are covered, including

defamation as stipulated in Article 27, paragraph (3), which states that any person who intentionally and without authorization distributes or transmits electronic information containing insults and/or defamation may be sentenced to a maximum of 4 years in prison and/or a fine of up to IDR 750 million. Additionally, Article 28, paragraph (1) prohibits the dissemination of false and misleading information that results in consumer harm, while paragraph (2) prohibits the spread of information that incites hatred based on ethnicity, religion, race, and inter-group relations (SARA). The crime of illegal access to electronic systems is regulated under Article 30, with penalties varying up to 8 years in prison, depending on the severity of the offense. Other crimes, such as illegal interception (Article 31), manipulation of electronic data (Article 32), and interference with electronic systems (Article 33), are also specifically regulated. The purpose of these criminal provisions is to protect the rights of internet users, maintain order in the digital space, and create a deterrent effect for cybercriminals.

However, the implementation of UU ITE has also sparked various controversies, particularly in cases of defamation regulated in Article 27, paragraph (3). Several cases have shown that this article is often used to prosecute individuals who express criticism against certain parties, raising concerns about freedom of expression. Furthermore, in more complex cybercrime cases, such as hacking of banking systems and identity theft, law enforcement agencies frequently face technical challenges in tracking and proving the offenses.

In terms of the effectiveness of sanctions, although UU ITE provides severe penalties for cybercriminals, the incidence of cybercrime continues to rise. This indicates that the criminal sanctions have not fully deterred offenders. One of the causes of this is the lack of coordination between relevant institutions and the limited resources available to investigate and handle cybercrime cases (Oktaviani, 2023).

In the practice of law enforcement, the implementation of criminal law through UU ITE shows a complex dynamic, as seen in various case studies of cybercrimes in Indonesia. One prominent example is the case of the spread of hoaxes related to political issues ahead of the 2019 presidential election, where the perpetrator was successfully prosecuted under Article 28, paragraph (2) of the UU ITE, concerning the dissemination of information that incites hatred or hostility based on ethnicity, religion, race, and intergroup relations (SARA). On the other hand, the Baiq Nuril case, where a teacher was charged under Article 27, paragraph (1) of the UU ITE for spreading a recording of verbal harassment, demonstrates how the articles in UU ITE can lead to controversy when applied textually without considering the context of victim protection. This indicates that while there has been success in addressing crimes that were previously not covered by conventional law, it also opens up debates about justice and the proportionality of the criminal law applied. The challenges in implementing this law lie not only in the multiple interpretations of the articles but also in the limited capacity of law enforcement officers to understand technological issues and digital forensics. Many officers at the local level still lack the competence and facilities required to investigate and adjudicate cybercrime cases effectively. Moreover, the workload and bureaucratic procedures often slow down the investigation and prosecution process. The role of law enforcement agencies, including the police, the prosecutor’s office, and the judiciary, is crucial in ensuring that the application of the UU ITE is fair and not repressive.

The evaluation of the effectiveness of criminal law through UU ITE in tackling cybercrime shows ambivalent results. On one hand, UU ITE has provided a much-needed legal framework to address crimes in the digital world that could previously not be reached by conventional legal instruments. The specific provisions regarding cybercrimes, such as illegal access, data destruction, the spread of hoaxes, and electronic defamation, mark significant progress in legal protection in the digital age. UU ITE has also been used by law enforcement agencies in various real-life cases, ranging from online fraud to hate speech, proving that this

regulation has the reach to cover new forms of criminal activity. However, this success has not fully addressed the complexity of cybercrime issues, as the effectiveness of law enforcement is not only determined by the existence of legal norms but also by the implementation and understanding of law enforcement officers regarding the ever-evolving digital context.

From a legal substance perspective, a weakness of UU ITE lies in several of its articles, which are too general and open to multiple interpretations, such as Article 27 paragraph (3) and Article 28 paragraph (2), which are often used to target legitimate public expression. This raises concerns about the potential criminalization of freedom of expression, especially on social media. In addition, from a procedural aspect, the implementation of UU ITE often faces technical obstacles, such as the lack of law enforcement officers' capabilities in conducting digital investigations, insufficient digital forensic facilities, and slow coordination between law enforcement agencies. At the investigation and trial stages, there is no standard procedure for evaluating digital evidence, which opens up opportunities for abuse or misinterpretation. The suboptimal international cooperation also poses a barrier, particularly in cases of transnational cybercrime that require cross-jurisdictional collaboration.

Challenges and Urgency of Regulatory Reform and Strengthening Law Enforcement Capacities in Cybercrime Law Enforcement Efforts

Law enforcement against cybercrime in Indonesia faces various complex challenges. Although the Electronic Information and Transactions Law (UU ITE) has become the legal basis for addressing digital crimes, there are several obstacles hindering its effective implementation. Some of the main challenges include legal and regulatory gaps, limited resources of law enforcement officers, jurisdictional challenges in dealing with cross-border crimes, and the protection of human rights in the context of freedom of expression and privacy.

One of the main challenges in enforcing the law against cybercrime is the ambiguity in several articles of the UU ITE that lead to multiple interpretations. For instance, Article 27 paragraph (3) regarding defamation is often considered subjective and has the potential to restrict freedom of expression. In practice, this article is frequently used to prosecute individuals who express criticism towards certain parties, thus creating a controversy regarding the boundary between defamation and freedom of speech (Rohmy, 2021). Furthermore, some provisions in the UU ITE still need to be aligned with the Criminal Code (KUHP) and other regulations to avoid overlaps in the application of the law. For example, the KUHP already contains articles that regulate insults and defamation (Articles 310 and 311 of the KUHP), which are substantively similar to provisions in the UU ITE but differ in terms of the mechanisms for proving them. Therefore, harmonization between the UU ITE and other regulations is needed so that cyber law can be applied more fairly and proportionally (Al Hadad, 2020).

Cybercrime often involves complex and sophisticated techniques, while the technical capacity of law enforcement officers to handle it remains limited. The lack of human resources with expertise in digital forensics, cyber investigation, and data analysis is a major obstacle in effectively investigating and solving cybercrime cases (Darmawan, 2023). Additionally, the technological infrastructure available to the police and prosecutors in handling cyber cases is still not optimal. The role of the police, particularly the Directorate of Cyber Crime at Bareskrim Polri, is crucial in detecting and uncovering cybercrimes. However, without adequate technological support and continuous training, the effectiveness of law enforcement remains limited (Akbar, 2024). Therefore, enhancing human resource capacity and collaborating with the private sector and academia in the development of cyber investigation technology is an urgent need so that law enforcement can be better prepared to face the challenges of digital crime (Yamin, 2024).

Another challenge in enforcing UU ITE is the balance between law enforcement and the protection of human rights, particularly in aspects of freedom of expression and privacy. Some articles in UU ITE, such as Article 27 paragraph (3) concerning defamation and Article 28 paragraph (2) regarding the dissemination of hate speech, are often criticized for their potential misuse to restrict criticism and freedom of speech. The use of these articles in various legal cases shows that cyber regulations can be used as a tool for criminalizing individuals who express opinions or criticisms against the government or other parties. Furthermore, the aspect of privacy protection in UU ITE is also a concern, especially in the context of the collection and processing of personal data. Until now, although the Law No. 27 of 2022 on the Protection of Personal Data (UU PDP) has been enacted, challenges remain in its implementation, particularly in ensuring that internet users' data is protected from misuse by third parties (Najwa, 2024).

The urgency of reformulating regulations and enhancing the capacity of law enforcement in combating cybercrime in Indonesia is very high, given the rapid development of technology. One important aspect that needs to be addressed immediately is the revision of problematic articles in the UU ITE. Some articles, such as Article 27 paragraph (3) concerning defamation and Article 28 paragraph (2) on the spread of fake news, are often interpreted excessively and misused to stifle freedom of expression. Revisions to these articles should be made to make them more specific and clearer, avoiding the potential for multiple interpretations that could harm innocent individuals or groups. By restructuring these articles, it is hoped that the criminal law applied will be more just and will not infringe upon the fundamental rights of citizens, especially their right to voice opinions in cyberspace.

In addition, harmonization of UU ITE with other regulations is essential to ensure alignment in law enforcement. Currently, there are several inconsistencies between UU ITE and conventional criminal law, such as the Criminal Code (KUHP) and the Criminal Procedure Code (KUHAP). In some cases, both legal systems do not specifically address crimes related to information technology, creating ambiguity in their application. Harmonization between UU ITE and other regulations, such as Government Regulations on Electronic Systems and Transactions, as well as strengthening the connection between existing laws, will enhance the legal framework governing cybercrime in Indonesia, minimize regulatory overlap, and ensure broader protection for society and information systems.

To ensure the success of cyber law enforcement, a strategic plan to enhance the capacity of law enforcement officers must be a priority. Officers trained in information technology and digital forensics are essential to effectively identify, investigate, and take action against cybercriminals. Additionally, access to adequate technology and sufficient funding must be considered so that law enforcement can operate optimally. This capacity building should also include training in procedural aspects related to the handling of digital evidence, as well as understanding individual rights in cyberspace, so that law enforcement is not only effective but also fair. Strengthening the capacity of law enforcement will make it easier to tackle increasingly complex and organized cybercrimes, which require technical knowledge and legal precision.

Finally, the development of a fair, accountable, and adaptive cyber law system to technological advancements is also a key step in ensuring optimal legal protection for society. The cyber law system must be able to keep pace with the rapid development of digital and cyber technology and ensure that the laws applied remain relevant to emerging new challenges. This includes the need for a transparent judicial system that is responsive to the dynamics of information technology. This development must also consider the need to maintain a balance between law enforcement and the protection of citizens' fundamental rights, including the right to freedom of expression and the right to privacy. With a more adaptive and accountable legal

system in place, it is expected that the enforcement of cybercrime laws will be more effective and provide a sense of security to society in navigating an increasingly complex digital life.

CONCLUSION

In conclusion, although UU ITE has provided an important legal foundation for addressing cybercrime in Indonesia, its implementation and effectiveness still face various challenges. The provisions in UU ITE, which are often ambiguous and open to multiple interpretations, need to be revised immediately to make them clearer and fairer, avoiding the potential for misuse that could harm freedom of expression and individual rights. Additionally, harmonization between UU ITE and other regulations such as the Criminal Code (KUHP) and the Criminal Procedure Code (KUHAP) is crucial to ensure that law enforcement against cybercrime operates more coherently. Despite efforts from law enforcement authorities, capacity limitations in terms of training, technology, and resources remain the main obstacles in dealing with increasingly complex cybercrimes. Therefore, strengthening human resources, improving facilities, and enhancing coordination among institutions are necessary to achieve effective law enforcement in this digital era.

Based on this evaluation, several strategic steps need to be taken to improve the cyber law enforcement system in Indonesia. First, revisions to problematic provisions in UU ITE must be carried out promptly to ensure that the law applied is more accurate and does not potentially suppress the fundamental rights of citizens. Second, harmonizing UU ITE with other regulations should be prioritized to create synergy within Indonesia's legal system, particularly regarding cybercrime. Third, enhancing the capacity of law enforcement authorities through continuous training in digital technology and cyber forensics will be crucial in effectively combating cybercrime. Lastly, developing an adaptive and responsive cyber legal system that keeps pace with technological changes must be a priority to ensure that the law remains relevant and provides maximum protection to society. With these measures, it is hoped that Indonesia can create a fairer, more efficient, and trusted legal system in dealing with cybercrime in the future.

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