

## **Review of *Cyber Crime* Based on the Law on Information and Electronic Transactions in the Perspective of Social Law Theory Engineering**

**Hilman Wijaya<sup>1</sup>, Budi Santoso<sup>2</sup>, Siti Malikhatun Badriyah<sup>3</sup>**

<sup>1</sup>Doctoral Program in Law, Faculty of Law, Diponegoro University, Semarang

<sup>2,3</sup>Lecturer in Law, Faculty of Law, Diponegoro University, Semarang

Copyright © 2025 UNDIP. All Rights Reserved.

[hilman.wijaya@students.undip.ac.id](mailto:hilman.wijaya@students.undip.ac.id)

### **ABSTRACT**

The purpose of this study is to analyze: 1) How is the Development of Cyber Crime in the development of information law and electronic transactions that apply in Indonesia?; 2) To find out and analyze the review of cybercrime in Law Number 19 of 2016 concerning information and electronic transactions from the perspective of Roscou Pound's Social Engineering Theory. The research method used is normative juridical with a legislative approach, a conceptual approach, and a case study.

The results of the study show that: 1) The development of Cyber Crime in the development of information laws and electronic transactions that apply in Indonesia has been regulated in Law No. 19 of 2016 concerning Information and Electronic Transactions, The existence of laws that regulate *cybercrime* is expected to protect and provide a sense of security for those who use technology as a forum to conduct transactions and carry out economic activities. 2) The review of cybercrime in Law Number 19 of 2016 concerning information and electronic transactions realizes freedom of opinion and the right to obtain information through the use and utilization of information and communication technology is shown to advance public welfare, educate the nation's life, and provide a sense of security and legal certainty for users and operators of electronic systems. Furthermore, as a tool of social engineering, Law number 19 of 2016 concerning amendments to Law number 11 of 2008 concerning information and electronic transactions seeks to improve the effectiveness and public services and develop trade and the national economy through the regulation of prohibited acts in the use of electronic media.

*Keywords: Cyber Crime, Law, Information, Electronic Transactions. Social Engineering.*

## Introduction

The era of globalization has placed the role of information technology in a very strategic position because it can present a world without borders, distances, space, and time and can increase productivity and efficiency.<sup>1</sup> Information technology has changed people's lifestyles globally and caused significant changes in socio-cultural, economic, and legal frameworks. Information Technology is like a double-edged sword, because in addition to contributing to the improvement of human welfare, progress, and civilization, it is also an effective means of unlawful acts.<sup>2</sup>

*Cybercrime* is one of the problems in Indonesia whose scope comes from international global law. The increase in the number of crimes in cyberspace is influenced by factors of causality that it is difficult to obtain evidence by cyber actions. When the internet becomes accessible to everyone, they can do anything by hunting from targets. For example, internet banking, hackers, search, can break the rules data as it has been converted into fake data. Cybercrime is a common problem that we must solve with a serious rule of law. In order to overcome the growing problem of cybercrime in Indonesia, the government has made laws and regulations that specifically regulate cyberlaw which is manifested as Law Number 11 of 2008 concerning Information and Electronic Transactions.

Law Number 11 of 2008 is one of the efforts to overcome cybercrime juridically and empirically, even though Law Number 11 of 2008 not only discusses the problem of obscene or pornographic sites, but also regulates the rules on electronic transactions which are the legal umbrella in cyberlaw rules in Indonesia.<sup>3</sup>

Barda Nawawi Arif<sup>4</sup>, that *Cyber Crime crimes* are divided into 2 (two) categories, namely *Cyber Crime* in a narrow sense (crimes against computer systems) and *Cyber Crime* in a broad sense (including crimes against computer systems and crimes using computer facilities). The

---

<sup>1</sup> Dimitri Mahayaan, *Inviting the Future, Utrusic, and Engineering of Society Towards the Global Era* (Bandung: Rosdakarya, 2002).p. 24

<sup>2</sup> Endang Prastini, "Government Criminal Policy Against Cyber Crime in Indonesia," *Surya Kencana Dua Journal: The Dynamics of Legal and Justice Issues* 5, no. 2 (2018): 595.

<sup>3</sup> Jawade Hafidz, "Juridical Studies in Anticipation of Cybercrime," *Journal of Legal Reform* 1, no. 1 (2014).p. 32

<sup>4</sup> Barda Nawawi Arif, *Mayantara Crime and the Development of Cyber Crime Studies in Indonesia* (Jakarta: Rajawali Pers, 2006).p. 25

characteristics of *Cyber Crime* in conventional crime, are divided into 2 (two) types of crime, namely: *Blue Collar Crime* and *White Collar Crime*. Blue-collar crime is a crime or crime that is committed conventionally such as: robbery, murder, theft, and others. Meanwhile, white-collar crimes are divided into corporate crimes, bureaucratic crimes, malpractice, and individual crimes. *Cyber Crime* is a crime that arises due to the existence of a cyber community on the internet that has unique characteristics of crime in cyberspace.

The problem of capital crime today should receive the careful attention of all parties in the development of future information technology, because this crime is one of the *extra ordinary crimes* and is even felt as a *serious crime* and *transnational crime* (crimes between countries) that always threaten the lives of citizens, the nation and the state. This crime or crime is the worst side in modern life of the information society due to the rapid advancement of technology with the increase in computer crime, pornography, digital terrorism, "war" of junk information, information poison, hackers, crackers, and so on.<sup>5</sup>

### **Problem Formulation**

Some of the problem formulations in this study include:

- 1) How is the Development of Cyber Crime in the development of information law and electronic transactions that apply in Indonesia?;
- 2) To find out and analyze the review of cybercrime in Law Number 19 of 2016 concerning information and electronic transactions from the perspective of the Social Engineering Theory of Roscou Pound?

---

<sup>5</sup> Raodia, "The Influence of Technological Development on the Occurrence of Cybercrime," *Case law* 6, no. 2 (2019), p. 232

## Research Methodology

The research method used is normative legal/juridical research.<sup>6</sup> The normative juridical research refers to the legal norms contained in laws and regulations as well as legal norms in society. In addition, by seeing the synchronization of a rule with other rules in a hierarchical manner.<sup>7</sup> A law that applies at a certain time and place, which is a written rule and norm that is officially formed and promulgated by the ruler, in addition to a written law that effectively regulates the behavior of members of society.<sup>8</sup>

The data collection method in this study is library *research* or commonly called literature research, this method is carried out to obtain secondary data in the form of primary legal materials and secondary legal materials. After being inventoried, a review is carried out to make the essence of each regulation concerned. Data is collected by studying literature sources in the form of literature books, laws and regulations, and collecting existing data in the form of data that is directly related to the research conducted.<sup>9</sup>

In this study, a legislative approach and a comparative approach are used.<sup>10</sup> Legal research is carried out by researching literature materials or secondary data.<sup>11</sup> *Statute approach*: an approach that is carried out by examining laws and regulations related to the focus of research.<sup>12</sup> In this study, a document study will be carried out as a data collection tool related to the problem proposed, namely a literature study/document study, which is sourced from laws and regulations, books, official documents, publications and research results.<sup>13</sup>

---

<sup>6</sup> Zainuddin Ali, *Legal Research Methods* (Sinar Grafika, 2021).

<sup>7</sup> Dyah Ochterina Susanti and A'an Efendi, *Legal Research*, Jakarta: Sinar Grafika, 2014, p. 11

<sup>8</sup> Johan Nasution, *Legal Research Methods*, Bandung: Mandar Maju, 2008, p. 81.

<sup>9</sup> Peter Mahmud Marzuki, *Legal Research*, Jakarta: Kencana, 2008, p.141.

<sup>10</sup> Abdulkadir Muhammad, 2004, *Law and Legal Research*, PT Citra Adiya Bakti: Bandung, p. Sec. 113.

<sup>11</sup> Soerjono Soekanto & Sri Mamudji, *Normative Law Research A Brief Review*, Jakarta: PT Raja Grafindo Persada, 2009, p. 13-14.

<sup>12</sup> Suteki, *Op. Cit*, p. 217

<sup>13</sup> Zainuddin Ali, *Legal Research Methods*, Jakarta: Sinar Grafika, 2009, p. 105

## Research Results

### 1. The Development of *Cyber Crime* in the Development of Information Law and Electronic Transactions in Indonesia

Cybercrime or *cybercrime* is a term that refers to criminal activities with a computer or computer network that is a tool, target or place where a crime occurs.<sup>14</sup> The law is in principle a regulation of the attitude of a person and society to which the violator is sanctioned by the state. Even though the *cyber* world is a virtual world, the law is still needed to regulate people's attitudes, there are at least two things, namely: First, the people in cyberspace are the people in the real world, people have values and interests both individually and together must be protected. Second, even though it occurs in cyberspace, transactions carried out by the public have an influence in the real world, both economically and non-economically.<sup>15</sup>

In some literature, *cyber crime* is often identified with computer crime, The U.S. Department of Justice defines computer crime as "...any illegal act requiring knowledge of computer technology for its perpetration, investigation or presecution". Another definition is given by the *Organization of European Community Development*, namely "any illegal, unethical or unauthorized behaviour relating to the automatic processing and/or the transmission of data".<sup>16</sup> Meanwhile, Barda Nawawi Arief<sup>17</sup> used the term mayantara crime to designate this type of crime. Andi Hamzah<sup>18</sup> uses the term cybercrime with computer crime, namely crime in the computer field in general can be interpreted as illegal use.

Currently, the regulation that is used as the main legal basis for *cybercrime* cases is Law No. 11 of 2008 Jo. Law No. 19 of 2016 concerning Information and Electronic Transactions (ITE).

---

<sup>14</sup> A Man Who Was Born To Be A Vampire and A Vampire *Law Enforcement of Cybercrime Committed by Minors* (Bali: Faculty of Law, Udayana University, 2016).p. 1

<sup>15</sup> Josua Sitompul, *Cyberspace, Cybercrimes, Cyberlaw: An Overview of Criminal Law Aspects*. (Jakarta: PT. Scott, 2012).p. 38

<sup>16</sup> Interpol RI, "Cybercrime," 2020, www.interpol.go.id.

<sup>17</sup> Barda Nawawi Arief, *Capita Selecta of Criminal Law* (Bandung: Citra Aditya Bakti, 2010).p. 255

<sup>18</sup> Andi Hamzah, *Aspects of Criminal Law in the Computer Field* (Jakarta: Sinar Grafika, 2017).p. 26

With the existence of this ITE Law, it is hoped that it can protect the information technology user community in Indonesia, this is important considering the number of internet technology users is increasing from year to year. The increasing use of the internet on the one hand provides a lot of convenience for humans in carrying out their activities, on the other hand it makes it easier for certain parties to commit a criminal act, this technological advancement also affects the lifestyle and mindset of humans, in fact currently there are many crimes using information technology.

In the Indonesian criminal law system, cybercrime is included in the category of special criminal acts, although with elements that can mainly be matched with several articles in the Criminal Code but are carried out in new *ways*. Currently, Indonesia has Law No. 11 of 2008 concerning Electronic Information and Transactions which was passed in March 2008 and has been amended by Law No. 19 of 2016 which was passed and promulgated on November 25, 2016, there are new forms of criminal law regulations that add to the rules of criminal law both materially and formally, in principle, it can be used based on the provisions contained in Article 103 of the Criminal Code and Article 284 paragraph (2) of the Criminal Code. The ITE Law is a complex legal rule, which regulates civil, criminal, and administrative legal aspects.<sup>19</sup>

Cybercrime is a relatively new criminal act, committed by people who are experts or who have expertise in the field of computers and information technology. When viewed in terms of the consequences of crime, crime through cyberspace (internet) can have an impact inside and outside cyberspace. The unlimited space and time in carrying out activities using the internet as a medium makes it difficult for an activity in the world to be detected conventionally. Computers, which used to be a tool for collecting and storing data, can now be used to commit old fashioned crimes in new packaging. If you follow the cases of computer and cyber crimes that occur and if they are studied using the criteria of conventional criminal law regulations, then it turns out that from a legal point of view, computer and cyber crime is not a simple crime.<sup>20</sup>

---

<sup>19</sup> Muhammad Prima Ersya, "Legal Problems in Overcoming Cyber Crime in Indonesia," *Journal of Moral and Civic Education* 1, no. 1 (2017), p. 55

<sup>20</sup> Ericsson, p. 53

It requires cooperation and seriousness from all parties considering that information technology, especially the internet, has been used as a means to build an information-cultured society. The existence of laws regulating *cybercrime* is expected to protect and provide a sense of security for those who use technology as a forum to conduct transactions and economic activities.<sup>21</sup>

## **2. Review of *cybercrime* in Law Number 19 of 2016 concerning information and electronic transactions from the perspective of *the Social Engineering Theory of Roscou Pound***

In the context of the ITE Law, the theories of social *engineering* put forward by Roscou Pound apply, where it is said that the law is expected to change society. Of course, the existence of the ITE Law is closely related to the social engineering theories put forward by Roscou Pound, because the ITE Law is a breakthrough or a step forward to protect information technology users so that technology can be used by the public and other stakeholders.<sup>22</sup>

Considering *that Cybercrime* is a criminal offense that continues to develop, according to Roscoe Pound's opinion, namely *Law as a tool of social engineering*, which states that the law is a tool for renewal for society that is carried out in a planned and accountable manner. Based on the theory put forward by Roscoe Pound, law must be able to be a tool for renewal for society and the formation of a structure of society to the maximum.<sup>23</sup>

The conception of law as a means of community renewal in Indonesia is wider in scope and scope than in its own birthplace in the United States because of several things, namely:

- a) The more prominent legislation in the process of legal reform in Indonesia, although jurisprudence also plays a role, is different from the situation in the United States where the Roscoe Pound Theory<sup>24</sup> is aimed mainly at the role of reform in court decisions, especially the Supreme Court's decision as the Supreme Court;

---

<sup>21</sup> *Ibid*

<sup>22</sup> *Ibid*, p. 62

<sup>23</sup> May you be a good person, *Legal Concepts in Development* (Bandung: Alumni, 2002),p. 91

<sup>24</sup> Roscoe Pound, *An Introduction of the Philosophy of Law* (London: Yale University Press, 1930),p. 99

- b) An attitude that shows sensitivity to the statements of society that rejects the application of "mechanistic" rather than the conception of "law as a tool of social engineering". Such a mechanistic application described by the word "tool" will result in results that are not much different from the application of "legism" which in the legal history of Indonesia (Dutch East Indies) has been strongly opposed. In its development in Indonesia, the (theoretical) conception of law as a tool or means of renewal was also influenced by the cultural philosophical approaches of Northrop and the "policy-oriented" approach of Laswell and McDougal; and
- c) If in the sense of "law" it also includes international law, then in Indonesia it has actually been carried out the principle of "law as a means of reform" long before the conception in question was officially formulated as the basis of legal policy. The official formulation in question is actually a formulation of the experience of the Indonesian people and nation according to history. Legal overhauls in the mining sector (including oil and gas), actions in the field of maritime law, nationalization of Dutch-owned companies, and legal actions in the telecommunications sector as outlined in Law Number 11 of 2008 concerning Information and Electronic Transactions aimed at bringing about fundamental changes are the embodiment of the aspirations of the Indonesian nation as outlined in the form of laws and legislation.

The law used as a means of reform can be in the form of a law or jurisprudence or a combination of both. In Indonesia, the most prominent is legislation, jurisprudence also plays a role but not much. In order for the implementation of legislation aimed at reform to run as it should, the legislation that is formed should be in accordance with what is the core of the thought of the Sociological Jurisprudence school, namely good law should be in accordance with the law that lives in society.<sup>25</sup>

The law is reviewed from its purpose, according to Roscoe Pound in Rudy T. Erwin, which he discusses in four parts, namely:<sup>26</sup>

---

<sup>25</sup> Abdul Rahim, *Juridical Review Of Defamation Through Social Media* (Makassar: UIN Alauddin, 2015).p. 68

<sup>26</sup> Rudy T. Erwin, *Questions and Answers of Legal Philosophy* (Jakarta: Rineka Cipta, 2015).p. 4

- 1) The purpose of the law is to maintain peace in society
- 2) There is a view of Greek philosophers on this subject who say that the purpose of law is to maintain the status quo. Each resident must move in their respective fields so that there are no clashes with other residents.
- 3) After the Middle Ages, the purpose of the law changed. The aim of the law is to enable the maximum attainment of personal development both in terms of its will and its power.
- 4) So another view emerges about the purpose of the law. The goal is not about free will but about the integrity of human desires or hopes. So the goal of the law is to make it possible to achieve the maximum to meet human needs.

Legal regulation in the Internet, especially *cybercrime*, continues to grow, there is a push for regulation that is global, but the rule of law makes it not easy to implement. This is one of the weaknesses of *cybercrime law enforcement*, especially when it comes to criminal cases committed by individuals or business entities located in other countries. The constitution of a country cannot be imposed on another country because it can conflict with the sovereignty and constitution of another country.<sup>27</sup>

Pound argues that lawyers should direct their vision more to the workings of the law than to its abstract content. It is also intended in order to be used for the purpose of efforts to reform or reform the law, besides that it is also used for the understanding of legal science. To see the factors that affect the enforcement of Law No. 19 of 2016 concerning amendments to Law No. 11 of 2008 concerning information and electronic transactions, it can be interpreted the theory of *social engineering roscou pound*.

In terms of proving criminal acts, law number 19 of 2016 concerning electronic information and transactions has provided a new breakthrough with the recognition of digital evidence as valid evidence with certain requirements, this is very important in handling non-cyber crime cases considering that these crimes are committed using technology, especially

---

<sup>27</sup> Dista Amalia Arifah, "Cybercrime Case in Indonesia Indonesia's Cybercrime Case," *Journal of Business and Economics (JBE)* 1, no. 1 (2011).p. 190

the internet so that the existence of evidence as in conventional crimes Like letters or other written documents will be very difficult to get (*paperless*).

Pound stated that social control is necessary to strengthen the civilization of human society because it controls antisocial behavior that is contrary to the rules of social order. Law, as a mechanism of social control, is the primary function of the State and works through the systematic and regular exercise of power by the agents appointed to perform that function. However, Pound added that law alone is not enough, it needs the support of family, educational, moral, and religious institutions. Law is a system of teachings with ideal and empirical elements, which combines natural and positivistic legal theories.

One of Pound's opinions or descriptions says that the importance of individual settlement by meeting reason has been more often sacrificed in order to achieve a level of certainty that is actually impossible. This school accepts the presence of legal regulations as a general guideline for judges who will determine the direction of a fair outcome, but urges that within a sufficiently broad limit the judge must be free to question the case he is facing, so as to be able to meet the demands of justice between the parties to the dispute and act in accordance with common reason.

Pound said that the need for social control stems from the fact of scarcity. Scarcity drives the need to create a legal system capable of classifying a wide range of interests. He stated that the law does not give birth to interests, but rather finds them and guarantees their safety. Law chooses for the various interests needed to maintain and carry out civilization. Pound acknowledges the overlap of various interest groups, namely between individual or personal interests and public or social interests. All of them are secured through and determined with the status of "legal rights".

Basically, the law has three aspects, namely; justice, usefulness and certainty. The aspect of usefulness refers to the goal of justice, which is to promote goodness in humans. The value of goodness for humans is usually related to 3 subjects (i.e. those that want to advance their goodness), namely individuality, collectivity and culture. If the subject is an individual, then this law drafted for individualistic purposes not only exalts the individual and his dignity but also gives special protection as in the American constitution. Meanwhile,

if the subject is the state, then the legal goal is the progress of the state that produces a collective legal system. Meanwhile, if the intended subject is culture, then the legal system created is a transpersonal legal system. Here the cultural aspect or the result of civilization receives special attention.

Law Number 19 of 2016 concerning amendments to Law Number 11 of 2008 regarding information and electronic transactions realizes freedom of opinion and the right to obtain information through the use and utilization of information and communication technology is shown to advance public welfare, educate the nation's life, and provide a sense of security and legal certainty for users and operators of electronic systems. This is one of the legal goals in terms of justice that is desired by using and utilizing access to information technology and electronic media "electronic documents" in a good and reasonable situation so that it does not cause social conflicts that cause legal consequences for violators and perpetrators.

The law as a tool of social control seeks to maintain public order and prevent the abuse of computers and networks that are unreasonable and unlawful. Furthermore, as a social engineering tool of Law number 19 of 2016 concerning amendments to Law number 11 of 2008 concerning information and electronic transactions seeks to improve the effectiveness and public services and develop trade and the national economy through the regulation of prohibited acts in the use of electronic media. In other words, the law that develops following the development of information and communication technology today is a reflection of the dynamics of today's society's civilization.

## Conclusion

Some of the results of the study can be concluded as follows:

1. The development of Cyber Crime in the development of information laws and electronic transactions that apply in Indonesia has been regulated in Law No. 19 of 2016 concerning Information and Electronic Transactions, The existence of laws that regulate *cybercrime* is expected to protect and provide a sense of security for those who use technology as a forum to conduct transactions and carry out economic activities

2. Review of cybercrime in Law Number 19 of 2016 concerning information and electronic transactions from the perspective of Roscou Pound's Social Engineering Theory; Law Number 19 of 2016 concerning amendments to Law Number 11 of 2008 regarding information and electronic transactions realizes freedom of opinion and the right to obtain information through the use and utilization of information and communication technology is shown to advance public welfare, educate the nation's life, and provide a sense of security and legal certainty for users and operators of electronic systems. Furthermore, as a tool of social engineering, Law number 19 of 2016 concerning amendments to Law number 11 of 2008 concerning information and electronic transactions seeks to improve the effectiveness and public services and develop trade and the national economy through the regulation of prohibited acts in the use of electronic media. In other words, the law that develops following the development of information and communication technology today is a reflection of the dynamics of today's society's civilization.

## BIBLIOGRAPHY

- Angara, Bayu, and I Nyoman Darmadha. *Law Enforcement of Cybercrime Committed by Minors*. Bali: Faculty of Law, Udayana University, 2016.
- Arief, Barda Nawawi. *Capita Selecta Criminal Law*. Bandung: Citra Aditya Bakti, 2010.
- Arif, Barda Nawawi. *Mayantara Crime and the Development of Cyber Crime Studies in Indonesia*. Jakarta: Rajawali Press, 2006.
- Arifah, Dista Amalia. "Cybercrime Case in Indonesia's Cybercrime Case." *Journal of Business and Economics (JBE)* 1, no. 1 (2011).
- Ersya, Muhammad Prima. "Legal Problems in Overcoming Cyber Crime in Indonesia." *Journal of Moral and Civic Education* 1, no. 1 (2017).
- Erwin, Rudy T. *Questions and Answers of Legal Philosophy*. Jakarta: Rineka Cipta, 2015.
- Hafidz, Jawade. "Juridical Studies in Anticipation of Cybercrime." *Journal of Law Reform* 1, no. 1 (2014).
- Hamzah, Andi. *Aspects of Criminal Law in the Field of Computers*. Jakarta: Sinar Grafika, 2017.
- Kusumaatmadja, Mochtar. *Legal Concepts in Development*. Bandung: Alumni, 2002.
- Mahayaan, Dimitri. *Picking up the future, utrustic, and engineering society towards a global era*. Bandung: Rosdakarya, 2002.
- Pound, Roscoe. *An Introduction of the Philosophy of Law*. London: Yale University Press, 1930.
- Prastini, Endang. "Government Criminal Policy Against Cyber Crime in Indonesia." *Journal of Surya Kencana Dua: Dynamics of Legal and Justice Issues* 5, no. 2 (2018): 595.
- Rahim, Abdul. *A juridical review of defamation through social media*. Makassar: UIN Alauddin, 2015.
- Raodia. "The Influence of Technological Development on the Occurrence of Cybercrime." *Case Law* 6, no. 2 (2019).
- RI, Interpol. "Cybercrime," 2020. [www.interpol.go.id](http://www.interpol.go.id).
- Sitompul, Joshua. *Cyberspace, Cybercrimes, Cyberlaw: An Overview of Criminal Law Aspects*. Jakarta: PT. Tatanusa, 2012.