

## ANALYZING THE RELATIONSHIP BETWEEN LAW AND TECHNOLOGY

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### Abstract

*This study aims to find out the relationship between two different field, namely law and information technology, which both aim to improve human welfare. This study employs normative research, which entails evaluating or analyzing secondary data derived from primary, secondary, and tertiary legal materials, which is then assessed descriptively, comparatively, and qualitatively before being encouraged to provide answers to the issues under consideration. Law along with the growth of social life, while information technology exists when the human need for a better life is so important. Thus, the law is needed to control the use of information technology in every side of human life. On the other hand, information technology is needed to help implement the law properly, because of human limitations in collecting and processing so much information. Information technology continues to grow rapidly, expanding into other fields, but this growth is not accompanied by control rules in its application. Generally, in Indonesia laws and regulations regarding the application and use of information technology are slow, and when a law is launched the challenges of legal backwardness are already evident. The legal technology perspective tries to look at things that might be taken into consideration in understanding the possibilities of resolving the lagging laws and regulations compared to the growth of information technology.*

Keywords: *Information Technology, Law and Technology, Technological Legal Perspective*

### 1. INTRODUCTION

Laws are necessary in social life because they aid in the establishment of social order. What exactly is law? Law is defined as a regulation or tradition that is legally recognized as binding and that has been validated by the authorities or the government, according to the Big Indonesian Dictionary (KBBI).

Law can also be interpreted as laws, regulations, and so on to regulate the social life of the community (Hutabarat, Salam, et al., 2022). According to Kelsen, law is a "normative science." The law, according to Kelsen's interpretation, does not strive to describe what must occur, but rather to identify specific norms that must be followed. According to John Austin's definition of law, "Law is the aggregate set of rules established by a man who is politically superior to or sovereign over other men." Thus, this definition describes law as a collection of norms that all people, regardless of their size, must obey (Toppr, n.d.).

Indonesia's legal development, along with population expansion and social development, is currently fairly noticeable. Various types of societal troubles that need and necessitate the law to advance as social regulators in order to create an orderly, advanced, and wealthy society. The emergence of many types of new and special legal products (lex

specialist), for example, Law No. 20 of 2001 concerning the Eradication of Corruption Crimes (KPK), is defined by the evolution of the legal component itself, in terms of legal instruments (Hutabarat, Delardi, et al., 2022). In terms of legal institutions, such as the establishment of independent law enforcement bodies with particular powers, such as the Corruption Eradication Commission, as well as legal apparatus and culture (Koloay, 2016)

Technological advancements during the Fourth Industrial Revolution (Industrie 4.0) have brought about significant changes in everyday life. However, the advancement of technology both poses a threat and causes concern, in addition to providing benefits. In the case of Artificial Intelligence (AI), one of the technologies that is currently being widely used and developed in a variety of scientific areas, one of which is law, would be an example.

General Manager Premium Content of Hukumonline.com, Robert Sidauruk said that technology has an important role to see the workings of law in the world of work. For example, Hukumonline.com has innovated a lot using modern technology used in running the company's wheels. Moreover, Hukumonline.com is a platform that is very concerned with the development of the legal world, starting from news reports, clinics, and data centers for laws and regulations.

Meanwhile, Director of Copyright & Industrial Design at the Ministry of Law and Human Rights, Molan K. Tarigan, said that information technology is growing. In the context of intellectual property rights registration, it is important to record all copyrighted works using information technology media. Further, he said that “even while recording all of our copyrighted works is not a duty, he urged Indonesians to do so, so that the government can better track intellectual property, including natural resources and university intellectual property rights.”

According to Bert-Jap Koops (ed), (2000: 83) in the book *ICT Law and Internationalization. A Survey of Government View*, if in the 1990s only a few people had heard of email and the Internet, then 10 years later these technologies have been institutionalized and known to the public (Koops et al., 2000). While it is still difficult to predict the full extent of this change's impact on society, it is apparent that the world of electronic fast-track has functioned differently in many ways than the world 10 years before. This has ramifications for the law. Numerous words have been coined in relation to law, notably Information and Communication Technology Law (ICT Law) (Fauziah, 2015).

Based on the foregoing background, this study aims to find out the relationship between law and information technology to improve human welfare based on the implementation of law in technology. Hopefully, this study can contribute knowledge to the general public and to the world of education. Besides, this study can add insight and learning materials for the author in the Society course.

## **2. RESEARCH METHOD**

This study employs normative research, which entails evaluating or analyzing secondary data derived from primary, secondary, and tertiary legal materials, which is then assessed descriptively, comparatively, and qualitatively before being encouraged to provide answers to the issues under consideration.

### **3. RESULT AND DISCUSSION**

Legal thought can also be interpreted as laws, regulations, and so on to regulate the social life of the community. In addition, citing the e-Module of the Ministry of Education and Culture of Pancasila and Citizenship Education, here are some legal definitions according to experts.

1) Ernest Utrecht

According to this Dutch legal expert, law is a set of rules that govern life. These regulations can be in the form of orders or prohibitions that regulate the order in a society and must be obeyed by all members of the community (Utrecht, 1958).

2) Prof. Mr. EM Meyers

Meyers defines law as all rules that contain moral considerations. The embodiment of law is reflected in human behavior in society and becomes the guidelines for state authorities in carrying out their duties (Marpaung et al., 2021).

3) Drs. CST Kansil

Kansil asserted that the law has the ability to provide order to human interaction. This is done in order to keep the peace and order in the community (CST Kansil, 2021).

4) R. Soeroso

Soeroso argues, the notion of law is a set of regulations made by the authorities with the aim of regulating the order of people's lives. The characteristics of the law are ordering, prohibiting, and coercing by imposing legal sanctions that are binding on anyone who violates it (Soeroso, 2002).

The interpretation of these experts allows us to infer that the concept of law refers to a rule established by the authorities with the purpose of controlling and compelling humans to establish social order. It will then be possible to impose harsh penalties on those who do not comply with it (Sabat, 2021).

The growth of technology has become inextricably linked to human existence in the modern era. The existence of technology has had a significant impact on society and the surrounding environment over time. There are a multitude of ways in which technology can aid, including contributing in the improvement of the economy.

According to the Big Indonesian Dictionary, the term "technology" refers to the scientific technique used to accomplish practical aims, applied science, or the totality of means used to provide products necessary for human life and wellbeing (Sitoresmi, 2022).

#### **3.1. The Relationship Between Law and Technology**

The law is inextricably linked to technology. Information technology has developed into a major industry capable of meeting the economy's most basic demands and utilizing other significant resources. Computer technology has resulted in the development of communication satellites that may be used for a variety of applications, including radio and television broadcasting. Moreover, other types of information dissemination systems have arisen through the use of telephone lines and computer technology to generate video-text, enabling telephone owners to access thousands of pieces of direct information at any time and from any location. The advancement of fiber optics has led in the construction of a cable television system with an almost limitless range. Electronic technology is advancing at a

breakneck pace, resulting in the development of a variety of communication equipment that is relatively inexpensive and small in size, making it accessible to the general public, such as computers, radios, music players, pocket-size televisions, video cameras, and video games, among other items, some of which combine multiple features into one multimedia device in the form of laptops and mobile phones (Forumsejawat, 2010).

The digital age, which is characterized by the widespread use of internet technology, has proven to be “a sword that has two sharp edges” in the realm of intellectual property rights (copyright). First and foremost, the availability of internet technology has enabled an increase in the publication and diffusion of information and knowledge in a wide range of locations around the globe. All humans on this planet have the ability to benefit from information and knowledge. Second, the presence of internet technology has facilitated the growth of a wide range of behaviors that cause harm and have a tendency to violate the law, and this proliferation is continuing to grow in accordance with a developing pattern.

This situation is quite concerning due to the fact that the presence of internet technology has provided additional options for the growth of copyright infringement. The number of copyright infringements in particular categories of creation, such as music and songwriting, is particularly worrisome.

Several experts in the fields of copyright and information technology believe that the issue of copyright infringement cannot be tackled by a single technique during its development. Copyright infringements committed through the use of internet technology will be minimized by joint efforts between a technological (technical) and a legal approach (juridical approach). To better understand the nature of their collaboration, this research will describe and demonstrate how law and technology are now cooperating in the context of copyright protection on the internet, both at the global and national levels (riswandi, 2016).

A review of legal and public studies of science and technology outlines how law as an institution in society interacts and interacts with scientific institutions and technological institutions.

Within society, the scientific system produces institutionalized patterns of conduct. Likewise, technology systems that result in institutionalized behavioral patterns. As a result, scientific institutions interact with and are influenced by legal institutions within society. As a matter of fact, its legal institutions interact with and are influenced by technical institutions. Hence, scientific institutions, as well as technological institutions, play an important role in human life in society.

The review of legal and public studies of science and technology has as its focus the entire real and functional phenomenon that occurs in society as a result of human activities in obtaining, managing, and developing science and technology, as well as the legal and public studies of science and technology that are conducted. Considering that such efforts and actions are carried out by all civilized cultures, the review is intended to be comprehensive in nature.

Today, science has a significant impact on human life and social development, prompting the description of science as a social phenomenon. defines science as a multifaceted human activity that encompasses not just a set of facts or theory, but also a methodology, a practice activity, and a network of habitual patterns and roles that facilitate the acquisition, testing, and development of knowledge.

Besides being an individual accomplishment and a social institution, science, according to Leonard Nash (in his 1963 book *The Nature of Natural Sciences*), both constitutes a social institution and an original discovery about the real world or social institution (genuine discovery of the real world) (Nash, 1963).

The denotation (scope) of science refers to an entity that relates to a specific field of knowledge within a family of knowledge or to science in general in its broadest sense. Scientists highlight the concept of science in research activities, scientific procedures, and knowledge outcomes as a defining attribute of science (scientific connotation).

As the term "science" is defined in this context, it refers to a broadening of the meaning of the term "knowledge of science," so that it encompasses key problems, specific perspectives, or extra qualities associated with the phenomena discussed.

It has been recognized for a long time that technological institutions play a critical role in societal growth, but it has only recently that they have been acknowledged as variables within a societal development model. In the early stages of technological development, institutions are viewed as something static, unchanging, and unaffected by changing social situations. When reaching the second stage, technical institutions are acknowledged to be changing and dynamic, but the changes are regarded as being "independent" of wider societal shifts. Technological institutions are only deemed to have functional interactions with other social variables in society after they have passed through the third stage of development.

Nowadays, there seems to be a trend toward combining, and even unifying, the terms "science and technology." The fusion of the terms "science" and "technology" is intended to unify concepts into a single meaning (Soemitro, 1990).

Information and Communication Technology (ICT) is legally defined in a variety of laws and regulations, but it all refers to the same thing: the convergence of law and technology. Because these regulations were developed in a separate history and momentum but under the same legal regime, namely the Information and Communication Technology regime, they contain various legal difficulties and gaps when considered from a legal perspective. Some of the major topics that frequently come into contact with the community, it turns out that there are still many legal issues that need to be studied more thoroughly from Das Sollen's perspective, such as Cyber Crime, Start-Up business, Indonesian Domain Names, Digital Financial Innovation, openness and public services, and other interrelated aspects (Ulya & Musyarri, 2020).

### **3.2. The Role of Law in Technology**

Law plays a critical role in technology; the development of the age in the era of Globalization, which reflects technology, must be accompanied by law; the Internet, as a technological breakthrough in the twenty-first century, is truly remarkable. The Internet enables humanity to interact freely across borders. This is not the case when communication is conducted physically. Internet technology appears to have influenced changes in human views and behavior. Where humans are aided by technology, there is a tendency for them to act outside the bounds of their human reasonableness. Furthermore, sometimes, through the use of internet technology, individuals become arbitrary with regard to the rights of others, which can be seen as a violation of conventional law.

The use or utilization of diverse information available on the internet is one of the changing human attitudes and behavior. As we all know, there is a variety of information available on the internet. This information is occasionally incorporated in the formulation or qualification of legally protected human thought results. For instance, writing in electronic form, photographs, graphics, trade logos, and domain names are all electronic. In actuality, this type of material is frequently misappropriated by being duplicated, communicated, distributed, and proclaimed with a "claim" as if he owns the information. When these acts eventually lead to instances, it is quite dangerous. As indicated in the preceding post, this is correct. As a consequence, many authors or producers of electronic material in this type are restless and concerned that if these acts are repeated, it would turn off diverse creativity that has been on the internet (Putri, 2013).

Internet users' actions are thus tried to be minimized in various ways or solutions. When it comes to the methods used, one example is the application of conventional law. Where conventional law enforcement attempts to resolve the aforementioned actions. Due to the internet's unique qualities, some of this does work and some of it doesn't. Then, a technological technique is used to solve the problem. The usage of technology has been chosen since it is capable of preventing a variety of harmful acts and deeds. As it turns out, technology itself is not capable of performing its full potential because of the inherent constraints inherent in any human endeavor. In the end, the collaboration model between law and technology was adopted.

The construction of Cyber Law arrangements brought by Telecommunication Law, Media Law and Informatics Law (Telematics) contained in the laws and regulations before the Electronic Information and Transaction Law is rooted in the concept of convergence of Law with Information Technology which gave birth to several terms such as Information Technology Law, Cyber Law (Virtual World Law), and Mayantara Law. Literally, the term was born from the results of activities carried out through a network of computer systems and communication systems. The explanation is explicitly contained in the explanation of the Electronic Information and Transactions Act (Rocky Marbun, 2011).

Convergence of law, which is a defining feature of the Cyber Law regime, is a critical foundation for reconstructing Information and Communication Technology Law. According to Heidegger, the convergence law approach is one that emphasizes the role of technology in the evolution of law. The qualities of technology must be designed according to an ideal formal law in order for technology acting as a tool to optimize its ability to manage society more effectively and efficiently in order to stimulate benefit (Budhijanto, 2014).

Apart from the issues raised in the previous discussion about the implementation of the Law on Information and Communication Technology, the momentum generated by the omnibus law debate over the last few years is also the right momentum for re-codifying the existing laws and regulations governing Information and Communication Technology.

According to Prof. Mahfud MD, there are no technical or legal issues with the execution of the omnibus law because it will essentially result in the birth of new laws and regulations that will amend multiple existing laws and regulations simultaneously (Prabowo, 2020). Omnibus legislation has the potential to successfully reform a number of information and communication technology laws.

The legal and technological collaboration model is intended to provide an effective legal protection system. The function of prevention and prosecution will be stronger and better if

law and technology are collaborated in an action that violates the rights of others on the internet (Riswandi, 2016).

In addition, through the collaboration of law and technology the rights of the violated can be restored as they should be. For example, the right to obtain payment for the use of information that has been made. Internationally, the legal and technological collaboration model is not only seen conceptually, but this has been realized and has become a global agreement. This can be found in the international copyright convention known as the WIPO Internet Treaties, which includes two international conventions, namely; WIPO Copyright Treaty and WIPO Performance and Phonogram Treaty. The provisions referred to are Article 11 WCT which in full reads:

*“The provision on technological measures obliges the Contracting Parties to provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.”*

Meanwhile, Articles 18 of WPPT which in full reads:

*“Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by performers or producers of phonograms in connection with the exercise of their rights under this Treaty and that restrict acts, in respect of their performances or phonograms, which are not authorized by the performers or the producers of phonograms concerned or permitted by law.”*

From the two provisions above, it is clear that technical protection is an integral part of international copyright regulation. These technical protection arrangements are intended for effective copyright protection on the internet. There are two obligations arising from the two above, namely:

First, states are obliged to provide adequate legal protection, and effective redress, against circumvention of technological measures, such as conditional access systems and encryption used by copyright holders to protect their work; Second, states are obliged to provide safeguards for technologies that have reliability and integrity in the online marketplace by states that require to prohibit intentional alteration, or deletion of, electronic information, that accompany protected material, and that identify employment, rights owners, and terms and conditions for its use (Nicholson, 2009)

The United States as a country that has implemented the WIPO Internet Treaties, has formulated a technology and legal collaboration model as contained in the provisions of Article 103 of the Digital Millennium Copyright Act (DMCA) 1998 in Chapter 1201 which regulates the obligations of copyright owners in providing adequate and effective security technology (Gov, 1998). Chapter 1202 divides regulations related to security technology into 2 categories, namely: (Gov, 1998) First, actions that prevent unauthorized access to copyrighted works create; and Second, measures to prevent unauthorized copying of copyrighted works. The division of categories of granting security technology is used to ensure that the public will have sustainable capabilities in fair use of copyrighted works.

Furthermore, the 1998 DMCA establishes laws regarding the consequences that can be imposed on parties who destroy information-security equipment. Interference with security technology as defined in Sections 1201-1202 may result in a legal action in Federal Court (Gov, 1998). The United States' initiative to initiate copyright protection on the internet through the technology and legal collaboration model set forth in the 1998 DMCA was followed by a number of other countries, particularly those that have ratified the World Intellectual Property Organization's (WIPO) Internet Treaties (Riswandi, 2016).

This is not an exception in the case of Indonesia. Since the implementation of the provisions of Law No. 19 of 2002 on Copyright, Indonesia, as a country that has ratified WIPO Internet Treaties, has begun to preserve and protect copyright on the internet through a model of technological and legal collaboration. This is in accordance with the terms of Law No. 19 of 2002, Articles 25, 27, and 72. The first and second paragraphs of Article 25 of Law No. 19 of 2002 read “(1) Electronic records including information regarding the Creator's rights management will not be canceled or amended; (2) Any additional provisions made pursuant to paragraph (1) must be controlled by Government Regulation.”

Article 25 paragraphs (1) and (2) of Law no. 19 of 2002 contains norms regarding information management rights of creators. What is meant by information on the management of the rights of the creator based on the explanation of Article 25 of the Copyright Law is information that is attached electronically to a work or appears in connection with an announcement activity that explains about a work, the author and ownership of rights as well as information on terms of use, number or information code. In essence, the information management rights of the creator are technically a security technology whose purpose is to provide information related to copyright ownership and is intended to provide technical protection for copyright ownership of the creator.

Furthermore, Article 27 of Law no. 19 of 2002 states: "Except with the permission of the Author, the means of technological control as a safeguard for the rights of the Creator are not allowed to be tampered with, removed, or rendered non-functional." Elucidation of Article 27 of Law no. 19 of 2002 implicitly states that the means of technological control that are understood include secret codes, passwords, bar codes, serial numbers, description and encryption technologies used to protect works. In full, Article 72 paragraph (7) and (8) of Law no. 19 of 2002 reads: (7) Whoever intentionally and without rights violates Article 25 shall be punished with a maximum imprisonment of 2 (two) years and/or a maximum fine of Rp. 150.000.000,00 (one hundred and fifty million rupiah).

In its development, when Law no. 19 of 2002 was replaced by Law no. 28 of 2014, the collaboration of technology and law in the provisions of Law no. 28 of 2014 continues to be maintained in the context of copyright protection on the internet. This is stated in Articles 6, 7, 52, 53 and 112 of Law no. 28 of 2014. In the provisions of Articles 6 and 7 of Law no. 28 of 2014 is more focused on technology as copyright protection for moral rights. This assumption can be seen in Article 6 of Law no. 28 of 2014 states: “To protect the moral rights as referred to in Article 5 paragraph (1), the Author may have: a. Copyright management information; and/or b. Copyright electronic information.” Meanwhile, Article 7 paragraphs (1), (2), (3) of Law no. 28 of 2014 states: (1) Copyright management information as referred to in Article 6 letter a includes information on: a. a method or system that can identify the originality of the substance of the Work and its Author; and b. information code and access code. (2) Copyright electronic information as referred to in

Article 6 letter b includes information on: a. a Work, which appears and is attached electronically in connection with the Announcement of Works; b. the name of the creator, his alias or pseudonym; c. Creator as Copyright Holder; d. the period and conditions of use of the Works; e. number; and f. information code. (3) Copyright management information as referred to in paragraph (1) and Copyright electronic information as referred to in paragraph (2) owned by the Author is prohibited from being removed, changed, or damaged.

The technology regulation contained in Article 7 paragraph (3) of Law no. 28 of 2014 was further strengthened by providing criminal sanctions. This is as stated in Article 112 of Law no. 28 of 2014 which reads:

*“Any person who unlawfully commits the acts as referred to in Article 7 paragraph (3) and/or Article 52 for Commercial Use, shall be sentenced to a maximum imprisonment of 2 (two) years and/or a maximum fine of Rp. 300,000,000.00 (three hundred million rupiah).”*

However, the existence of this criminal sanction, when referring to the provisions of Article 120 of Law no. 28 of 2014 as a complaint offense, its position has become very weak in protecting technology. In terms of technology used for copyright protection for economic rights, it is stated in Article 52 of Law no. 28 of 2014. In full, Article 52 of Law no. 28 of 2014 states:

Everyone is prohibited from damaging, destroying, eliminating, or making non-functioning technological control facilities used to protect Works or Related Rights products as well as to protect Copyrights or Related Rights, except for the interests of state defense and security, as well as other reasons in accordance with the provisions of laws and regulations. invitation, or agreed otherwise (Riswandi, 2016).

In the explanation of Article 52 of Law no. 28 of 2014 states that technology control means are any technology, device, or component designed to prevent or limit actions that are not permitted by the Author, Copyright Holder, Related Rights owner, and/or those prohibited by laws and regulations. In another context, the norm of technology with the aim of protecting copyright on economic rights is also contained in the provisions of Article 53 paragraphs (1) and (2) of Law no. 28 of 2014 which reads: (1) Works or Related Rights products that use production facilities and/or data storage based on information technology and/or high technology, must comply with the licensing rules and production requirements stipulated by the authorized agency. (2) Further provisions regarding the means of production and/or data storage based on information technology and/or high technology as referred to in paragraph (1) shall be regulated by a Government Regulation.

In the explanation of Article 53 paragraph (1) of Law no. 28 of 2014 it is stated that the means of production and/or data storage based on information technology and/or high technology include optical discs, servers, cloud computing (cloud), secret codes, passwords, barcodes, serial numbers, decryption technology, and encryption used to protect the Works. For the provisions of Article 52 of Law no. 28 of 2014 is not reinforced by criminal sanctions.

However, in this context, Law No. 28 of 2014 aims to preserve technology as a mechanism of copyright protection in addition to being a protected item under Indonesian copyright laws. The provisions of Law No. 28 of 2014 have created an opportunity to damage, destroy, eliminate, or render inoperable technological control facilities that are not classified as copyright infringements for national defense and security, as well as other

reasons in accordance with the provisions of the legislation, or as agreed upon by others, where this is not regulated by Law No. 19 of 2002 (Riswandi, 2016).

#### **4. CONCLUSION**

Based on the foregoing discussion, it can be concluded as follows:

The advancement of information technology and telecommunications has resulted in the world being borderless in terms of information pertaining to social, political, economic, defense, and security issues, and many others. This occurs globally in all regions of the world and in any country as a result of the unrestricted creation and diffusion of various types of information brought about by information globalization.

Due to the emergence of an increasingly evolving world of technology, legal relationships in the midst of society are created, giving rise to a variety of crimes and other legal activities that are not yet regulated since the modes of crime employed are new to the legal world. Because of this legal relationship, the world of technology, or cyberspace, is extremely prone to abuse of the law, resulting in the emergence of new crimes. As a response, it is required to develop a new regulatory framework, also known as legal politics, to manage it.

The evolution of law in Indonesia created a range of reactions from a variety of perspectives. This reaction is a result of a variety of causes, both within to law enforcement authorities and external factors. It is law enforcement officers' unprofessionalism that undermines the authority of law in Indonesia, from their arrogance to their involvement in the legal matters they handle. Such law enforcement officer behavior should be eradicated from the Unitary State of the Republic of Indonesia in accordance with Pancasila norms. Fraud of money or property through the use of computer/cyber facilities is considered a crime in the field of information and communication technology. This type of crime can be committed in a matter of seconds without anyone noticing. Embezzlement, and falsification of the provision of information through a computer that harms other parties and benefits oneself also include in cybercrime. Criminal activities sometimes also done by sabotage of computer systems (either terminating data or removing codes that cause damage and loss). Additionally, this criminal crime may take the form of adding or changing programs, information, or media, as well as piracy involving intellectual property rights, copyrights, as well as patents.

#### **REFERENCES**

- Budhijanto, D. (2014). *Teori Hukum Konvergensi*. Bandung: PT. Refika Aditama.
- CST Kansil, S. H. (2021). *Kamus Istilah Aneka Hukum*. Pustaka Sinar Harapan.
- Fauziah, A. U. (2015). *Perkembangan Hukum di Indonesia*. [http://annisa-umi-fauziah-fisip14.web.unair.ac.id/artikel\\_detail-138577-SS11-Perkembangan%20Hukum%20di%20Indonesia.html](http://annisa-umi-fauziah-fisip14.web.unair.ac.id/artikel_detail-138577-SS11-Perkembangan%20Hukum%20di%20Indonesia.html)
- Forumsejawat. (2010). *Teknologi Informasi: Permasalahan Dan Pemanfaatannya*. <https://forumsejawat.wordpress.com/2010/10/27/teknologi-informasi-permasalahan-dan-pemanfaatannya/>

- Gov, U. S. (1998). The Digital Millennium Copyright Act of 1998—US Copyright Office Summary. *Dec, 1*, 1–18.
- Hutabarat, D. T. H., Delardi, E., Irwansyah, A., Bascara, D., Ansori, B., & Tanjung, F. (2022). The Eradication Of Corruption And The Enforcement Of The Law In Indonesia As Seen Through The Lens Of Legal Philosophy. *Policy, Law, Notary And Regulatory Issues (POLRI)*, 1(2), 1–8.
- Hutabarat, D. T. H., Salam, A., Zuwandana, A., al Azmi, C., Wijaya, C. R., Darnita, Tania, I., Lubis, L. K. A., Sitorus, M. A. P., Adawiyah, R., & Sinaga, R. (2022). Analysis Of The Implementation Of Law In Every Level Of Society In Indonesia. *Policy, Law, Notary And Regulatory Issues (POLRI)*. <https://doi.org/https://doi.org/10.55047/polri.v1i2.80>
- Koloay, R. N. S. (2016). Perkembangan Hukum Indonesia Berkenaan Dengan Teknologi Informasi Dan Komunikasi. *Jurnal Hukum Unsrat*, 22(5), 16–27. <https://media.neliti.com/media/publications/894-ID-perkembangan-hukum-indonesia-berkenaan-dengan-teknologi-informasi-dan-komunikasi.pdf>
- Koops, B.-J., Prins, C., & Hijmans, H. (2000). *ICT law and internationalisation: a survey of government views* (Vol. 10). Kluwer Law International BV.
- Marpaung, D., Bakti, S., & Suhargon, R. (2021). Urgensi Pemahaman Hukum Ekonomi Terhadap Para Generasi Muda. *Community Development Journal: Jurnal Pengabdian Masyarakat*, 2(3), 989–992.
- Nash, L. K. (1963). *The nature of the natural sciences*.
- Nicholson, D. R. (2009). Digital rights management and access to information: a developing country's perspective. *LIBRES: Library and Information Science Research Electronic Journal*, 19(1), 1.
- Prabowo, D. (2020, January 30). *Begini Mekanisme Omnibus Law Gantikan Undang-Undang Lama*. Kompas.Com. <https://nasional.kompas.com/read/2020/01/31/11511821/begini-mekanisme-omnibus-law-gantikan-undang-undang-lama?page=all>
- Putri, S. (2013). *Estatika dan Hukum dalam Teknologi komunik*. <http://stephanniputri.blogspot.com/2013/12/landasan-hukum-bidang-informasi-dan.html>
- Riswandi, B. A. (2016). Hukum Dan Teknologi: Model Kolaborasi Hukum Dan Teknologi Dalam Kerangka Perlindungan Hak Cipta Di Internet. *Jurnal Hukum Ius Quia Iustum*, 23(3), 345–367.
- Rocky Marbun, S. H. (2011). *Kiat Jitu Menyelesaikan Kasus Hukum*. Visimedia.
- Sabat, O. (2021, November 5). *Pengertian Hukum Menurut Para Ahli dan Penggolongannya*. Detikedu. <https://www.detik.com/edu/detikpedia/d-5798560/pengertian-hukum-menurut-para-ahli-dan-penggolongannya>
- Sitoresmi, A. R. (2022). Pengertian Teknologi, Perkembangan, Manfaat, dan Jenisnya yang Wajib Diketahui. *Liputan 6.Com*. <https://hot.liputan6.com/read/4861387/pengertian-teknologi-perkembangan-manfaat-dan-jenisnya-yang-wajib-diketahui>
- Soemitro, R. H. (1990). *Hukum dan Perkembangan Ilmu Pengetahuan dan Teknologi di dalam masyarakat*. 1–35.
- Soeroso, R. (2002). *Pengantar ilmu hukum*.

- Toppr. (n.d.). *Various Definitions of Law*. [https://www.toppr.com/guides/business-law-cs/introduction-to-law/various-definitions-of-law/](https://www.toppr.com/guides/business-law/cs/introduction-to-law/various-definitions-of-law/)
- Ulya, N. U., & Musyarri, F. A. (2020). Omnibus Law Tentang Pengaturan Teknologi Informasi Dan Komunikasi Guna Rekonstruksi Konvergensi Hukum Teknologi. *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional*, 9(1), 53.
- Utrecht, E. (1958). Rangkaian Sari Kuliah Hukum Pidana I. *Universitas Padjadjaran, Bandung*.