ISSN 2226-6771

VOLUME 12 December 2023 NUMBER 2

GRADUATE INSTITUTE OF INTELLECTUAL PROPERTY, NATIONAL TAIPEI UNIVERSITY OF TECHNOLOGY

NTUT Journal of Intellectual Property Law and Management

The NTUT Journal of Intellectual Property Law and Management is published twice a year by the National Taipei University of Technology ("Taipei Tech."), a national university located in Taipei City, Taiwan. The Journal is run by the Graduate Institute of Intellectual Property, an educational organization of Taipei Tech. The address of Taipei Tech. is No. 1, Sec. 3, Chung-hsiao E. Rd., Taipei City 10608, Taiwan.

EDITORIAL TEAM

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EDITORIAL NOTE ON VOLUME 12, NUMBER 2, 2023

Editorial Note

Dr. Yii-Der Su

Assistant Professor,

Graduate Institute of Intellectual Property,

National Taipei University of Technology (Taiwan).

As the Executive Editor of this issue, we would like to extend our heartfelt appreciation to all the authors, reviewers, editors, and advisors who have played indispensable roles in maintaining the highest academic quality of this prestigious journal.

The carefully curated selection of articles in this issue encompasses a wide spectrum of intellectual property issues, while also addressing substantive law and procedural law. Furthermore, the contributions have been sourced from various countries, boasting an array of rich topics that also delve into comparisons among the legal systems of different countries.

This comprehensive coverage serves as a warm invitation for submissions from the global legal, managerial, and interdisciplinary communities with a focus on IP matters. We ardently hope that our esteemed readers will find immense satisfaction and reap considerable benefits from the incisive insights presented in this publication.

With the deepest respect and gratitude,

Executive Editor

Dr. Yii-Der Su

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Conflict between Trade Secrets Protection and Customer Data Protection Start-up Companies: Indonesia on the Horns of a Dilemma

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ABSTRACT

Indonesia has experienced a bloom of start-up companies in the past ten years. In the digital commerce sector, many investors, including from China, have directed their attention to Indonesia's positive trends in business. However, this scaling up faces a classic legal hurdle – conflicting laws under a legal system. Two fields of law overlap regarding customer data protection in start-up companies in Indonesia: trade secrets protection and personal data protection. This paper proposes how Indonesia can balance the two conflicting law regimes to resolve the dilemma. The legal trends of other jurisdictions were assessed and a valuable concept was found in the decision of a United States court. The concept answers the question regarding how a country can make balanced legal and policy decisions to protect trade secrets and customer data simultaneously. The article concludes that customer data privacy is not protected in all situations in Indonesia since there is no clear legal boundary between the trade secrets and personal data protection regimes. To provide a clear demarcation in situations where both regimes overlap, Indonesia could adopt the criteria of "selective accumulation" of detailed and valuable information from customers. Based on this criteria, a mere name and address cannot be protected as trade secrets unless the start-up company can show that the name and address are associated with other valuable information about customer preferences. If Indonesia decides to adopt the above criteria, then the relevant laws in both regimes need to be amended to provide a clear boundary between the trade secrets and personal data protection legal regimes.

Keywords: Customer Information, Data Protection, Indonesia, Start-up Company, Trade Secrets.

I. Introduction

Customer data as "secrets" are protected globally under two separate law regimes: the trade secrets and personal data protection regimes.[1] However, for Indonesia, a country with promising start-up companies, there is a major problem arising from the conflicting nature of the two regimes. There is no clear "red line" separating them.

Economic globalization has encouraged Indonesia's free trade policies with other countries and regions, especially regarding start-up companies' activities.Therefore, there are improved economic relations between countries,which help to unify the world economy.The boundaries between countries are fading, especially in the current era of Industry 4.0. The digital revolution has created innovations, such as big data analytics, artificial intelligence, and theInternet of things (IoT).With these innovations, wecan acquire, store, process, and transmit large amounts of data in real-time and give the data economic value.

The rapid development of technology due to the Fourth Industrial Revolution encouragedthetransformation of the business sector. In Indonesia,this is marked by the emergence of start-up companies,which have been blooming since 2015. According to data from the Indonesian Ministry of Communication and Information (Kemenkominfo), in 2015, no less than 62 domestic start-up companies from various industrial sectors received funds from both domestic and foreign investors. Also, President Joko Widodo announced that thenumber of start-ups in Indonesia reached 2,292 companies in 2021. Among them, one company has a "decacorn" status, with a valuation of more than US$ 10 billion, and six companies haveaunicorn status, with a valuation of more than US$1 billion. Most of these companies are engaged in three main sectors: trade (e-commerce), education, and games.

In general, start-ups are synonymous with advances in information and communication technology astheir business products often relocates various activities that were originally carried out in the physical world to the virtual world. Shopee and Tokopedia, two fully grown Indonesian start-ups,have relocated physical stores to the online world with their e-commerce services. Indonesian online taxi services, such as Gojek, Maxim, and Indrive, replaced the physical booking of taxis with virtual booking.Virtual meeting applications, such as Zoom,offer virtual meetings as a replacement for physical gatherings.

In the start-up world, data play a very vital role in the growth of a company. The data collected by a company are used as a basis for making decisions, especially those related to sales. Also, user data can be used for predictions regarding the future of a business and for product validation, i.e., to find out the products that are selling andthose that are not selling in the market. In addition, data also help companies to understand the personal desires of their users. Therefore, user data have become a vitalasset needed by start-ups to develop their businesses if used properly.

This study focuses on start-up companies due to the following reasons:

First, since the study deals with protecting customer data as "secrets," it is pertinent to focus on companies that have revolutionized the use of customer data and turned them into a potent tool for business success. Here, we are referring to start-up companies. As stated earlier, start-up companies are known for technological innovations in the fields of information and communication. Also, some start-up companies are in the financial sector, known as "FinTech" companies, providing payment solutions to businesses needing online financial transaction services. Whatever a start-up company's field, data is central to its operations. Start-up companies use large amounts of data, so it is appropriate to involve them when the issue of protection of customer data is being studied. The advent of big data

[1]Lital Helman, *Trade Secrets and Personal Secrets*, 55 UNIV. RICHMOND LAW REV. 447, 447 (2021).

analytics has made it possible for start-up companies to personalize large amounts of data to understand user preferences, enabling them to come up with various exciting offers tailored to the needs of individual customers. According to Behl, big data analytics capability has a significant positive impact on the performance and competitive advantage of tech start-ups.[2]

Second, start-ups are of great importance to the economy of a nation. In Hungary, start-ups make up about fifty percent of the number of active companies and provide more than twenty-five percent of total employment.[3] Similarly, the number of start-up companies in Indonesia increased from 1,400 in 2017 to 2,400 in 2022, making Indonesia the country with the fifth most significant start-up growth.[4] Jakarta, the capital city of Indonesia, was mentioned among the first 500 cities for start-ups in the world. Other big Indonesian cities like Surabaya, Bandung, and Denpasar also have positive trends in terms of start-ups.[5] Therefore, to study the protection regimes of customer data in Indonesia, it is apt to focus on start-up companies.

The transfer of data and information from the physical to the digitalrealm makes the collection and management of user data by businesses easier and more efficient. User data playcrucial rolesina company's business. These data are fundamental to companies because they can serve as the basis for determining marketing and business policies. Businesses will always access and collect information in the form of data from their customers. They use these data to process transactions and predict the needs of customers.[6] The processes of accessing and collecting data have been carried out by conventional businesses for a long time, but in this modern era, data processing is facilitated by the existence of computer and internet.[7]

Initially, data was considered as"the new oil"because the value of personal data has changed the course of strategic marketing and business.[8]However, there is a new concept that is more appropriate in this digital era. Data should be considered as the "new soil"[9]sinceit is an evolving ecosystem.[10] Data is not oil because it cannot be cleaned when it spills. Data is almost unlimited, non-depleting, and regenerative, so data has aneven higher value, especially personal data.[11]Companycustomers' personal data are often exploited for advertising, marketing, and other

[2]Abhishek Behl, *Antecedents to Firm Performance and Competitive Advantage using the Lens of Big Data Analytics: a Cross Cultural Study*, 60 MANAG. DECIS. 368 (2020).

[3]Pejman Ebrahimi et al., *Startups and consumer purchase behavior: Application of support vector machine algorithm*, 6 BIG DATA COGN. COMPUT. 34 (2022).

[4] Data on the number of job opportunities offered by Indonesian start-ups are unavailable, but the existence of thousands of start-ups in Indonesia, including unicorn companies, indicate that Indonesian start-ups provide a considerable number of jobs.

[5]Research | The SMERU Research Institute, https://smeru.or.id/en/research/country-diagnostic-studies-selected-developing-member-countries—ecosystem-tech-startups%23:~:text=Indonesia is home to a,the United Kingdom%2C and Canada (last visited Mar 16, 2023).

[6]Gianclaudio Malgieri, *Trade Secrets v Personal Data : a possible solution for balancing rights*, 6 INT. DATA PRIV. LAW 102, 102 (2016).

[7]ROBERT L. EBE & HOWARD E. BUNDY, *Ownership, Protection and Use of Customer Data - Yours, Mine, or Ours?*, 1 (2007).

[8]FRANCESCO BANTERLE, THE INTERFACE BETWEEN DATA PROTECTION AND IP LAW: THE CASE OF TRADE SECRETS AND THE DATABASE SUI GENERIS RIGHT IN MARKETING OPERATIONS, AND THE OWNERSHIP OF RAW DATA IN BIG DATA ANALYSIS 2–4 (2018).

[9]"Data Is the New Soil" - Columbia Journalism Review, https://archives.cjr.org/the_news_frontier/data_is_the_new_soil.php (last visited Mar 16, 2023).

[10]Data is NOT Oil – Data Is the New Soil - Inteliment, https://www.inteliment.com/insights/data-is-not-oil-data-is-the-new-soil/ (last visited Mar 16, 2023).

[11]Wahyudi Djafar, *Hukum perlindungan data pribadi di indonesia: lanskap, urgensi dan kebutuhan pembaruan*, 26 *in*SEMINAR HUKUM DALAM ERA ANALISIS BIG DATA, PROGRAM PASCA SARJANA FAKULTAS HUKUM UGM , 14 (2019).

business purposes,[12]and this situation prompted the birth of data protection regulations,which were born in conjunction with technological developments, especially ICT technology. On the other hand, since businesses are requiredto produce quality, innovative and competitive products, trade secrets as one ofthe intellectual property rights (IPRs)have become increasingly important;they help to encourage economic growth and investment. [13]

Trade secrets protection is an established concept thathas been influencing innovation from the industrial revolution in the 19th centuryto the present day.The benefits of trade secretshave encouraged regulators to protect them,whichled to the formation of global protection standards that apply the same regulatory principles. The growth of start-up companies in Indonesia shows an increasing trend, although there were many layoffsdue to the impact of the COVID-19 pandemic. Many of the rapidly growing unicorn companies (those valued at over 1 billion US dollars) are local companies, such as Tokopedia, which has a total of 149.52 million visitors;Bukalapak, which reaches 29 million visitors; and Lazada, which reaches 28 million visitors.[14] These large unicorn companies collect and process customer data for various purposes, such as providing better products and services as well as marketing.

In today's global economy, the information and knowledge produced by the research and development departments of institutionshaveresulted in tremendous creativity and numerous business innovations.Such innovations are critical for business success as they help to maintain a competitive advantage iftheir distribution is confidential and protected by trade secrets laws. Customer personal data are essential for every business because they have commercial value, asbusinesses use them for marketing and formulating business policies.[15]However, such business practicesare contrary to the personal data protection laws that have been enacted in about 145 countries.[16]These lawshave applied the universal protection standards that arestipulated in international provisions such as the Organization for Economic Co-operation and Development (OECD) Privacy Guidelines 1980, which are the first internationally agreed privacy principles. Updated in 2013, they remain an essential benchmark and have been appliedin the OECD internal rules and practices and the European Union (EU) General Data Protection Regulation (GDPR).The EU GDPR stipulatesstringent regulations regarding the processing of personal data by both governments and companies andhas influencedthe regulations of other countries, who have modeled their data protection laws according to the EU GDPR.[17]

Balancing the protection of personal data and trade secrets becomes an inevitable state choice. Globally and nationally, there has been an increase in personal data leakage.In Indonesia, one of the largest Unicorn start-ups, Tokopedia, suffered asevere data breach, which caused the leakage of the personal data of 91 million customers.[18][19]Regarding data protection laws, Indonesia just enacted the

[12]BANTERLE, *supra* note 15.

[13]US CHAMBER OF COMMERCE, *The Case for Enhanced protection of Trade Secret in The Trans-Pasific Partnership Agreement*, (2013).

[14]Putri Rifda Aufa & Devita Vivin Dian, *Laporan Highlight Belanja Online Indonesia Tahun 2021*, https://iprice.co.id/trend/insights/laporan-highlight-belanja-online-indonesia-tahun-2021/ (last visited Mar 17, 2023).

[15]Malgieri, *supra* note 11 at 102.

[16]GRAHAM GREENLEAF, *Global Data Privacy Laws 2021: Despite COVID Delays, 145 Laws Show GDPR Dominance Law*, 1.

[17]GREENLEAF, *supra* note 31 at 1.

[18]Tokopedia Ungkap Cara Atasi Kasus Kebocoran Data Pribadi - E-commerce Katadata.co.id, https://katadata.co.id/lavinda/digital/61421ec0427f1/tokopedia-ungkap-cara-atasi-kasus-kebocoran-data-pribadi (last visited Mar 17, 2023).

[19]After the data leak, the Communication and Information Ministry launched an investigation. The Minister later announced that user accounts and financial data are safe, but data relating to names, emails and phone numbers may

Personal Data Protection Law, on September 20, 2022, with Law Number 27 Year 2022. It adopts several GDPR provisions.

Indonesia adopts a civil law or continental legal system based on the Roman-Dutch model, which is opposed to the common law or the Anglo-Saxon system. Regarding its governance structure, Indonesia is a unitary state. Therefore, the country has some peculiarities in its data protection and trades secret laws.

This article evaluatesvarious legal regimes regarding trade secrets and personal data protection and recommendsa solution to balance these two concepts, so that theywould complement each other. This research is a doctrinal and comparative legal research, usinga descriptive-analytical method for analyzing collected data. The data used in the study are secondary data in the form of primary legal materials (laws, court cases, statutes, etc.) and secondary legal materials (journal articles and books).

II. Trade Secrets Legal Perspectives

The results of a study conducted by the World Bank indicate that since 1980, the use of IPRhas resulted in considerable economic benefits for developing countries,including aggressive opening up of markets and investments.[20] Trade secrets, which are IPRs, refer to business assets with high economic value. They play a very important role in helping companies to survive competition and encourage innovation and competitive advantage. Based on the results of a research, the EU Commission stated that in addition to relying on patents and other IPRs, companies now rely more on trade secrets, even though trade secrets are considered as a complement.Regarding global business, economists believe that trade secrets play a unique role in ensuringreturns from the innovation that businesses have generated.Trade secrets are an aspect of the legal protection that provides benefits to businesses, especially in emerging markets such as Singapore's food industry, Thailand's rubber industry, and Indonesia's food and coffee industries.[21]

Internationally,regulations on trade secrets are influenced by arrangements of the World Trade Organization (WTO), specifically the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement, which refers to trade secrets as"undisclosed information." Indonesia has taken steps to improve regulation in the field of IPRs. These stepswere taken to align the regulation of IPRs with the principles contained in the TRIPs Agreement. Indonesia is a member of the WTO and asignatory to the TRIPs Agreement.Therefore, the Government of Indonesia ratifiedseveral international conventions or treaties in the field of IPRs on 7 May 1997, as follows: (1) Paris Convention for the Protection of Industrial Property and Convention Establishing the World Intellectual Property Organization (WIPO) were ratified through Presidential Decree No. 15/1997. (2) Patent Cooperation Treaty (PCT) and Regulations under the PCT wereratified through Presidential Decree No. 16 of 1997. (3) Trademarks Law Treaty was ratified through Presidential Decree No. 17 of 1997. (4) Bern Convention for the Protection of Literary and Artistic Work was ratified through Presidential Decree No. 18 of 1997. (5) WIPO Copyright Treaty was ratified through Presidential Decree No. 19 of 1997.[22]

Countries'positions vary regarding whether a customer list falls under the trade secrets or data protection regime. A customer list is simply a list containing information on past and present business customers. In the Anglo-Saxon legal system, information is considered an intellectual property right,

have been accessed by hackers. However, stakeholders believe that the Minister responded slowly to the breach, which led to a lawsuit against the government and the company.

[20]US CHAMBER OF COMMERCE, *supra* note 25.

[21]US CHAMBER OF COMMERCE, *supra* note 25.

[22]Retrieved from Indonesian National Development Agency (BPHN).

and a violation of the right is classified as a breach of confidence.[23] In the United States, trade secrets are regulated by the Uniform Trade Secrets Act (UTSA) of 1979 and the Defend Trade Secrets Act (DTSA) of 2016, which allow employers to enforce their right to receive protection against misappropriation of trade secrets in court.[24]The types of information that should be categorizedas trade secrets are stipulated in the definition of trade secrets by UTSA, as follows:[25]

Information, including a formula, pattern, compilation, program, device, method, technique, or process, that:

1. derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and

2. is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

The protection of trade secrets in the European Union is regulated by the EU Trade Secrets Directive. According to the directive, "trade secret" means information that:

1. is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question;

2. has commercial value because it is secret; and

3. has been subject to reasonable steps under the circumstances by the person lawfully in control of the information to keep it secret.[26]

In Indonesia, trade secrets are regulated by Law No. 30 of 2000 concerning Trade Secrets.Previously, they were regulated by provisions associated with unfair competition practices in Article 1365 of the Civil Code and Article 382 bis of the Criminal Code.[27] The trade secrets law does not explicitly regulate customer lists. However, customer lists are implicitly regulated bythe definition of trade secrets in Article 1 paragraph (1) of the trade secrets law:

Trade secrets shall mean information in the field of technology and/or businessthat is not knownby the public and has economic value because it is useful in business activities and must be kept confidential by the owner.

According to Law No. 30 of 2000 concerning Trade Secrets,[28]an information must meet certain conditions to qualify as a trade secret: (1) The information must be confidential, i.e.,only a few people must know it. (2) It must have economic value and provide benefit to the owner. (3) Confidentiality must be maintained by taking necessary steps.The legal regimes of the EU and the US agree with the

[23]Susi Yanuarsi, *Perlindungan Hukum Terhadap Pemilik Rahasia Dagang yang Bersifat Komersial*, 12 SOLUSI, 125–126 (2019).

[24]Section 757 – 759, Restatement (First) of Tort.

[25]Matthew B. Kugler; & Thomas H. Rousse, *The Privacy Hierarchy: Trade Secret and Fourth Amendments Expectation*, 104 IOWA LAW REV., 1228 (2018).

[26]Article 2 of EU Trade Secret Directives.

[27]Syarifa Mahila, *Perlindungan Rahasia Dagang dalam Hubungannya dengan Perjanjian Kerja*, 10 J. ILM. UNIV. BATANGHARI JAMBI, 17 (2010).

[28]Indonesian Law No. 30 of 2000 concerning Trade Secrets, Article 3.

above provisions of Indonesia's trade secrets law regarding the conditions that must be met before an information would be protected as a trade secret.[29]

However, regarding the use of reverse engineering[30] to obtain a trade secret, the legal regimes of the EU, the US and Indonesia have some differences. Under the EU and US legal regimes, reverse engineering is considered a legal way to obtain trade secrets if the product was legally obtained before it was reverse engineered to obtain the trade secret. This is the case if the product has been made available to the public. However, according to Article 15 (b) of Law No. 30 of 2000 concerning Trade Secrets, if reverse engineering is used to obtain the trade secrets of another party for the sole purpose of making further development of the relevant products, it does not constitute an infringement. In other words, according to Indonesian law, the use of reverse engineering to obtain trade secrets is only allowed if the information will be used to further develop the product and not to reproduce the it.

At this point, a pertinent question arises: what manner of protection is offered by trade secrets? A detailed explanation of how trade secrets work is necessary here. Unlike patents, trade secrets do not need to be registered. Subjecting trade secrets to a registration process will eliminate the secrecy. It is the responsibility of the party that owns a trade secret to protect it. The owner of the secret has to devise measures to keep it confidential by preventing members of the public from having access to it. It remains valid for as long as it remains a secret. In addition to not needing registration, it also does not need to be announced to get legal protection.[31]

Since the trade secret owner is responsible for protecting the secret, what protection does the law offer? It depends on the legal system in question. Generally, the protection comes in the form of protection against unfair competition. A business competitor may gain an unfair advantage through activities such as industrial or commercial espionage, breach of contract, and breach of confidence. If a competitor obtains a trade secret through these or other unfair practices, the trade secret owner will receive protection from the law. However, if a competitor acquires the same information that constitutes a trade secret independently by their own research and development efforts, the trade secret owner cannot prevent them from using it.[32]

III. Customer's personal data

In the digital industry, through technological advances, businesses now utilize customer data for business interests: to gain a competitive advantage over their competitors. Countries have enacted data privacy laws, ranging from the European Union, which enacted the GDPR, to the State of California, which enacted the California Customer Privacy Act (CCPA). Data privacy issues recently emerged in Indonesia, and there is increasing concern regarding how the government and private companies collect and process personal data,[33] which led to the following outcomes: (1) the emergence of complaints by individuals, groups, and organizations against violations of their privacy rights by both the print and electronic media; (2) the emergence of complaints from the public because their personal data were improperly handled, resulting in data breaches, such as illegal access of personal data as well as disseminating and sharing personal data between companies and their agencies without the knowledge of the owner. Indonesia Personal Data Law, 2022 which adopts several GDPR principles.

[29] This is evident in the definition of trade secret by the EU and US legal regimes.

[30] Reverse engineering is the process of obtaining trade secrets through the observation, study, disassembly or testing of a product.

[31] ANDRY SETIAWAN & DEWI SULISTIANINGSIH, *Advances in Social Science, Education and Humanities Research, vol 192; 1st International Conference on Indonesian Legal Studies (ICILS 2018)*.

[32] Trade Secrets – Everything you need to know, https://www.wipo.int/tradesecrets/en/ (last visited Mar 17, 2023).

[33] SINTA DEWI ROSADI, PRIVACY FROM INTERNATIONAL LAW, REGIONAL AND NATIONAL PERSPECTIVES 4–6 (2015).

The initiative to protect privacy is derived from the "human rights rules" in the Constitution. The influence of information technology development also contributed to the enactment, since most Indonesian citizens now have access to information and have learned about the threat to their privacy, as there are many advertising practices involving the collection of personal data without clear regulations. Furthermore, a significant driving force that led to the enactment of the Personal Data Protection Law is the substantial international and regional obligations in the areas of politics, economics, and legal cooperation, since Indonesia occupies a strategic position in international trade, including electronic trade. In Article 16 (2) of the Personal Data Protection Law, the basic principles of processing personal data are stipulated as follows: (a) Collection of personal data should be limited, specific, lawful, and transparent. (b) Processing of personal data should be done according to its purpose. (c) Processing of personal data should be accurate, complete, and up to date. (d) Processing of personal data should be done in a way that protects against unauthorized access and disclosure. (e) Personal data should be deleted after the retention period or based on the request by the personal data subject. (f) Processing of personal data should be done responsibly.

Articles 5-15 of the Personal Data Protection Law deal with the rights of the data subject. In summary, these articles grant the data subject the following rights: the right to access and obtain a copy of the personal data about him/her that is stored by the controller; the right to access information about how his/her personal data are being used by the data controller; and the right to request for deletion of his/her personal data. Furthermore, Article 48 of the Personal Data Protection Law stipulates that if the controller carries out a merger, separation, acquisition, consolidation, or dissolution, a notification of the transfer of personal data must be sent to the personal data subject.

There are several general principles that countries apply in protecting personal data. They are as follows:[34]

1. Customers must know what personal data are being collected.

2. Customers must know whether the personal data are sold or disclosed and to whom.

3. Customers must know the business or commercial purpose for collecting or selling personal data.

4. Customers have the right to access their personal data.

The above provisions of the Indonesian Personal Data Protection Law regarding the principles of personal data processing and the rights of the data subject agree with the provisions of other data protection laws around the world, notably the EU GDPR and the CCPA. The EU influences personal data protection practices globally through the GDPR, which came into effect in 2018. The GDPR is regarded as the strictest data protection regulation worldwide. Many countries have modeled their data protection laws on the GDPR, including Indonesia.[35]One of the data subject rights in the GDPR is access rights.In this regard,it isstipulated in Article 15 of the EU GDPR[36]that data subjects have the right to request from the controller an explanation on how their data are being processed, including but not limited to the purpose of processing, the categories of personal data that are being processed and

[34]Megan Marie Miller, *Data as the New Oil: A Slippery Slope of Trade Secret Implications Greased by the California Costumer Privacy Act*, 12 MITCHELL HAMLINE SCH. LAW (2021).

[35]Sinta Dewi Rosadi et al., *Indonesia's personal data protection bill, 2020: does it meet the needs of the new digital economy?*, INT. REV. LAW, COMPUT. \& TECHNOL. 1 (2022).

[36]Regulation (EU) 2016/679 (General Data Protection Regulation), Article 15.

who the recipients are.Also, data subjectshave the right to request from the controller rectification or erasure of their personal data.

Similarly, the California Customer Privacy Act (CCPA) comprehensively deals with the rights of the data subject. In summary, the CCPA confers on customers the right to know the personal data that a company collects about them, how such data are used and shared, and the right to request for deletion of their personal data (with exceptions).[37] The above provisions of the GDPR and CCPA are similar to those of the Indonesian Personal Data Protection Law regarding the rights of data subjects.Based on the rights of the data subject explained above, the personal data of customers cannot be processed without their knowledge and consent. However, the right of customers to obtain information about the processing of their personal data seem to conflict with the concept of trade secrets protection concerning the protection of customer lists as trade secrets by businesses.Theprotection of personal data is of utmost importance. Poor management of personal data provides a fertile ground for cybercrime and lack of accountability.[38] Therefore, there is a need to resolve the conflict between protecting personal data and trade secrets concerning customer lists.

IV. Conflict between Trade Secrets Protection and Personal Data Protection in Relation to Customer List

Prior to the digitalization era, businesses had already started to carry out customer data collection practices and data trading.[39] However, it was only in the Industry 4.0 period, the era of digitizing customer data, that customer data became a valuable asset because they could easily be accessed, stored, and managed digitally through big data analytics and artificial intelligence. Customer data are used to make products and services more attractive and for advertising. Because they contain the potential for large profits, businesses have invested funds and advanced technology to develop customer lists. In the past, customer data were only in the form of names and addresses, but now, through CRM (customer relationship management),certain advanced tools are used to collect other customer data, such as email addresses, Internet Protocol (IP) addresses, personal data on social media and behavior patterns, such as shopping behavior, purchase history and buying preferences.[40]

In many countries, several cases concerning the conflict between trade secret and data protection regulations have arisen.In the United States, the case of *Calisi v. United Financial Services* (UFS) is an example of such a case.[41] The Arizona Court of Appeals held that a customer list is entitled to trade secrets protection when the list is a "selective accumulation of detailed and valuable information."In other words, a customer list containing valuable information that is not known by competitors, such as the needs, preferences, or unique characteristics of customers, should be protected as a trade secret. However, a customer list containing mere names, addresses, and broad information falls under the data privacy regime.[42]

The conflict between trade secrets protection and personal data protection stems from the absence of a clear legal demarcation between both concepts. In some cases, they overlap, making it difficult to determine which concept should apply, especially when personal data are protected as trade secrets.

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[37] See Sections 1798.100, 1798.105, 1798.110, 1798.115 and 1798.120 of the CCPA.

[38] SINTA DEWI ROSADI, *supra* note 58.

[39] Alan E Littmann, *The technology split in customer list interpretation*, 69 UNIV. CHICAGO LAW REV. 1901, 1901 (2002).

[40] Trade Secret Protection for Customer Lists: A Checklist | Fish & Richardson - JDSupra, 2–3, https://www.jdsupra.com/legalnews/trade-secret-protection-for-customer-29052/ (last visited Mar 17, 2023).

[41] See Court of Appeals of Arizona, 232 Ariz, 103, 2013. Available at https://casetext.com/case/calisi-v-unified-fin-servs/case-summaries. (Accessed 10 June 2022)

[42] See, Calisi v. Unified Financial Services, LLC, 232 Ariz. 103 | Casetext Search + Citator.

Ownership of personal data as trade secrets should not be absolute[43] so that data privacy will not be undermined. Both concepts oppose each other in this context. While trade secrets protect customer data from disclosure, personal data protection stipulates that the data subjects have the right to request information from the data controller on how their personal data are processed.

As explained earlier, the personal data protection act that was recently passed in Indonesia contains provisions that ensure personal data protection. However, there is no mention of the extent to which personal data protection should apply in circumstances where both personal data and trade secrets legal regimes overlap. This situation leaves a considerable gap in the law. Therefore, there are no clear boundaries between the legal regimes of personal data protection and trade secrets protection in areas where they overlap.

Trade secrets are protected in Indonesia by Law No. 30 of 2000 concerning Trade Secrets, in which the definition of trade secret,[44] the scope of protection,[45] and the conditions under which trade secrets shall be protected are strictly regulated.[46] The Indonesian trade secrets law also defines the meaning of "secret/confidential"[47] and "economic value"[48]. Furthermore, the trade secrets law stipulates the rights of the trade secret owner, which include the right to use the trade secret, the right to license it to others and the right to transfer it to others.[49] Article 11 of the trade secrets law deals with the settlement of disputes. It states that atrade secret owner can bring a lawsuit against anyone who infringes on the trade secret. Article 12 provides the option of dispute settlement by alternative dispute resolution methods. Regarding what constitutes an infringement, Article 13 states as follows: "An infringement on trade secret takes place when a person deliberately discloses the trade secret or breaks the agreement, or the obligation, either written or not, to maintain the confidentiality of the relevant trade secret."

Article 14 of the Indonesian trade secrets law provides additional details regarding an infringement, as follows: "A person shall be deemed to have committed an infringement on a trade secret of another party if he obtains or possesses the trade secret in a manner that is contrary to the prevailing laws and regulations". Article 15 deals with exceptions, i.e., situations where the trade secrets law does not apply. Article 15 (a) of the Indonesian trade secrets law stipulates that disclosure of trade secrets shall not constitute an infringement for issues associated with security and defense, health, or safety of the public, while Article 15 (b) states that if reverse engineering is used to obtain the trade secret of another person for the sole purpose of making further development of the relevant products, the action does not constitute an infringement on trade secret. Finally, Article 17 states the penalties associated with trade secret infringement. It prescribes a prison sentence of at most 2 (two) years and/or a maximum fine of at most IDR 300,000,000.00 (three hundred million rupiahs).

[43] BANTERLE, *supra* note 15.

[44] Indonesian Law No. 30 of 2000 concerning Trade Secrets, *supra* note 52 at Article 1.

[45] According to Article 2 of Law No 30 of 2000 concerning Trade Secret, the scope of protection of trade secret covers methods of production, methods of processing (preparation), methods of selling, or other information in the field of technology and/or business that has economic values and is not known by the public in general.

[46] According to Article 3 paragraph 1 of Law No 30 of 2000 concerning Trade Secret, trade secrets shall be given protection if the information is confidential and has economic values and the secrecy of which is maintained with necessary efforts.

[47] Indonesian Law No. 30 of 2000 concerning Trade Secrets, *supra* note 52 at Article 3 paragraph 2.Secret or confidential means that the information is only known by a few people.

[48] According to Article 3 paragraph 3 of Law No 30 of 2000 concerning Trade Secret, for information to have economic value, it must be able to provide economic benefit to the business when kept confidential.

[49] Indonesian Law No. 30 of 2000 concerning Trade Secrets, *supra* note 52 at Articles 4 and 5.The trade secret owner has the right to license of transfer the trade secret to others.

The above summary of the Indonesian trade secrets law indicates that the law covers many important aspects of trade secrets, but it needs to address the conflict between trade secrets protection and personal data protection. The trade secrets law does not mention the conditions under which each regime should apply when trade secrets protection and data protection overlap. After an analysis of the EU and US legal systems regarding possible ways to fill the abovementioned legal gap in Indonesia, a likely solution emerges. It is suggested that Indonesia should adopt the decision of the Arizona Court of Appeals in the earlier mentioned case. Accordingly, a customer list should be entitled to protection as a trade secret only if it contains valuable information that is not known by competitors, such as the needs, preferences, or special characteristics of customers. However, if a customer list contains only the names and addresses of customers or other broad information, it should be under the data privacy regime.

To gain a deeper understanding of the proposed solution regarding how to fill the legal gap discussed earlier, the details of the case involving Calisi and United Financial Services (UFS) are presented. Calisi worked for UFS for some time. The employment ended on January 28, 2009, after a disagreement between both parties. Calisi later sued UFS for unpaid commissions and compensation. However, UFS countersued Calisi for various claims, including trade secrets misappropriation. Several issues were determined by the court, but this article focuses only on the trade secrets misappropriation claim. The trial court ruled that Calisi had misappropriated UFS "customer lists and personal information" because he contacted the individuals on UFS customer lists and offered them a discount of 10% compared to the price charged by UFS if they would patronize him.

Dissatisfied with the ruling, Calisi appeal the judgement at the Arizona Court of Appeals. Calisi, through his lawyers, argued that UFS failed to provide evidence that the customer list in question contains specialized and valuable information about its customers, such as information about their financial requirements, their tax strategies, investment objectives, etc. Calisi also argued that UFS failed to show that they invested substantial time and effort to develop the list and did not provide evidence to show that it would be difficult for competitors to acquire the list independently. The above arguments are based on the provisions of the Uniform Trade Secrets Act (UTSA). According to the act, a trade secret derives independent economic value by been known by only a few people and the trade secret holder must make reasonable effort to maintain its secrecy. Therefore, if the list does not contain unique information and if the owner does not make effort to keep it secret, it is not entitled to receive protection as a trade secret. The UTSA is relevant in this case since Arizona has adopted it.

However, UFS argued that it took substantial steps to "safeguard the confidentiality" of its customer list by incorporating confidentiality clauses in employment agreement, upgrading its electronic security system, terminating former employees' access rights, etc.

In its judgement, the Arizona Court of Appeals vacated the trail court's judgement since UFS failed to present evidence to show it had a legally enforceable trade secret. Despite the measures taken by UFS, without a trade secret, such protective measures do not on their own amount to a trade secret.[50]

V. Conclusion

This article highlighted Indonesia's dilemma of simultaneously protecting personal data and trade secrets related to start-up companies. The legal gap is evident in this context. Ownership of personal data as trade secrets should not be absolute. The criteria of "selective accumulation of detailed and

[50] See Calisi v. United Financial Services, LLC. Available at https://casetext.com/case/calisi-v-unified-fin-servs(Accessed 10 June 2022)

valuable information from customers must be assessed before applying the concept of trade secret to personal data. If this requirement is not met, personal data protection must prevail.

Adopting the criteria emanating from Calisi v. United Financial Services is important to eliminate the legal gap in Indonesia and achieve a balanced application of trade secrets and data protection. Further investigation on how other countries balance these rights would be helpful, and the knowledge could be applied in Indonesia. Protecting trade secrets in start-up companies must not jeopardize their customers' data privacy, which is a fundamental human right. Indonesia and other countries must develop clear and implementable rules to address conflicting areas between the two regimes. If the law appropriately addresses the conflicting areas of the two regimes, it would greatly support businesses and simultaneously protect customers' personal data. It is suggested that the relevant laws on trade secrets and data privacy be amended to ensure a clear demarcation between the two regimes. The existing legal gap gives uncertainty, so when cases that fall within this gap are tried in courts, judges will give conflicting judgments on similar cases. Amending the relevant laws would help to achieve legal certainty in this regard.

Regarding the suggested amendments, an article that clearly spells out the circumstances under which customer lists should be subject to the data protection regime should be added to the Indonesia Personal Data Protection Law 2022, while an article that clearly describes the circumstances under which customer lists should be subject to the trade secrets law should be added to Law No 30 of 2000 concerning Trade Secrets. If this is done, it will address the legal gap regarding the legal regime that should apply to customer lists, thus enhancing legal certainty.

References

Abhishek Behl, *Antecedents to Firm Performance and Competitive Advantage using the Lens of Big Data Analytics: a Cross Cultural Study*, 60 MANAG. DECIS. 368 (2020).

Alan E Littmann, *The technology split in customer list interpretation*, 69 UNIV. CHICAGO LAW REV. 1901, (2002).

ANDRY SETIAWAN & DEWI SULISTIANINGSIH, *Advances in Social Science, Education and Humanities Research, vol 192; 1st International Conference on Indonesian Legal Studies (ICILS 2018)*.

Calisi v. Unified Financial Services, LLC, 232 Ariz. 103 | Casetext Search + Citator.

Court of Appeals of Arizona, 232 Ariz, 103, 2013. Available athttps://casetext.com/case/calisi-v-unified-fin-servs/case-summaries. (Accessed 10 June 2022)

Data is NOT Oil – Data Is the New Soil - Inteliment, https://www.inteliment.com/insights/data-is-not-oil-data-is-the-new-soil/ (last visited Mar 16, 2023).

Data Is the New Soil - Columbia Journalism Review, https://archives.cjr.org/the_news_frontier/data_is_the_new_soil.php (last visited Mar 16, 2023).

FRANCESCO BANTERLE, THE INTERFACE BETWEEN DATA PROTECTION AND IP LAW: THE CASE OF TRADE SECRETS AND THE DATABASE SUI GENERIS RIGHT IN MARKETING OPERATIONS, AND THE OWNERSHIP OF RAW DATA IN BIG DATA ANALYSIS 4(2018).

GianclaudioMalgieri, *Trade Secrets v Personal Data: a possible solution for balancing rights*, 6 INT. DATA PRIV. LAW102,(2016).

GRAHAM GREENLEAF, *Global Data Privacy Laws 2021: Despite COVID Delays, 145 Laws Show GDPR Dominance Law*.

Indonesian Law No. 30 of 2000 concerning Trade Secrets.

Indonesian National Development Agency (BPHN).

Lital Helman, *Trade Secrets and Personal Secrets*, 55 UNIV. RICHMOND LAW REV. 447(2021).

Matthew B. Kugler; & Thomas H. Rousse, *The Privacy Hierarchy: Trade Secret and Fourth Amendments Expectation*, 104 IOWA LAW REV.,(2018).

Megan Marie Miller, *Data as the New Oil: A Slippery Slope of Trade Secret Implications Greased by the California Costumer Privacy Act*, 12 MITCHELL HAMLINE SCH. LAW (2021).

Pejman Ebrahimi et al., *Startups and consumer purchase behavior: Application of support vector machine algorithm*, 6 BIG DATA COGN. COMPUT. 34 (2022).

Putri RifdaAufa& Devita Vivin Dian, *Laporan Highlight Belanja Online Indonesia Tahun 2021*, https://iprice.co.id/trend/insights/laporan-highlight-belanja-online-indonesia-tahun-2021/ (last visited Mar 17, 2023).

Regulation (EU) 2016/679 (General Data Protection Regulation).

Research | The SMERU Research Institute, https://smeru.or.id/en/research/country-diagnostic-studies-selected-developing-member-countries—ecosystem-tech-startups%23:~:text=Indonesia is home to a,the United Kingdom%2C and Canada (last visited Mar 16, 2023).

Restatement (First) of Tort.

ROBERT L. EBE& HOWARD E. BUNDY, *Ownership, Protection and Use of Customer Data - Yours, Mine, or Ours?*, 1 (2007).

Sinta Dewi Rosadi et al., *Indonesia's personal data protection bill, 2020: does it meet the needs of the new digital economy?*,INT. REV. LAW, COMPUT. \& TECHNOL. (2022).

SINTA DEWI ROSADI, PRIVACY FROM INTERNATIONAL LAW, REGIONAL AND NATIONAL PERSPECTIVES (2015).

Susi Yanuarsi, *Perlindungan Hukum TerhadapPemilikRahasiaDagang yang BersifatKomersial*, 12 SOLUSI, (2019).

SyarifaMahila, *PerlindunganRahasiaDagangdalamHubungannyadenganPerjanjianKerja*, 10 J. ILM. UNIV. BATANGHARI JAMBI, (2010).

Tokopedia Ungkap Cara AtasiKasusKebocoran Data Pribadi - E-commerce Katadata.co.id, https://katadata.co.id/lavinda/digital/61421ec0427f1/tokopedia-ungkap-cara-atasi-kasus-kebocoran-data-pribadi (last visited Mar 17, 2023).

Trade Secret Protection for Customer Lists: A Checklist | Fish & Richardson - JDSupra, 2–3, https://www.jdsupra.com/legalnews/trade-secret-protection-for-customer-29052/ (last visited Mar 17, 2023).

Trade Secrets – Everything you need to know, https://www.wipo.int/tradesecrets/en/ (last visited Mar 17, 2023).

US CHAMBER OF COMMERCE, *The Case for Enhanced protection of Trade Secret in The Trans-Pasific Partnership Agreement*, (2013).

WahyudiDjafar, *Hukum perlindungan data pribadi di indonesia: lanskap, urgensi dan kebutuhanpembaruan*, 26 *in*SEMINAR HUKUM DALAM ERA ANALISIS BIG DATA, PROGRAM PASCASARJANAFAKULTAS HUKUM UGM,(2019).

Methods of Valuation of Intellectual Property Assets

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ABSTRACT

Intellectual Property Rights, since their inception, are a matter of concern for international trade and development. The Trade-Related Aspects of Intellectual Property Agreement was imbued with the Western philosophy of trade and commerce which, arguably, made it difficult for the developing countries to take optimum advantage of their skill and resources. Nonetheless, it was not because of Western philosophy but because of a lack of awareness in the field of Intellectual Property which hampered the ideal utilization of their resources. Many innovators develop ideas and processes for their practical implementation but rarely think of commercializing the same. It is this lack of commercialization of Intellectual Property which has hindered the growth of developing countries like India. There are various ways in which innovators can invoke the commercial power of their innovations or creations. However, with commercialization, comes profit and with profit comes risk. It is not only commercialization but how, the innovator, deals with the associated risk that counts. For that, one must assess the market, and research the trends that might affect or add an advantage to the innovation in question. Methods such as the cost approach, the market approach, and the income approach exist for Intellectual Property Valuation. Gone are the days when Intellectual Property assets were harmless in their appropriation, today they are the concern of life and death. Hence, the above-mentioned techniques are necessary for the effective commercialization of Intellectual Property assets. This paper is an attempt to shed light upon the importance of commercialization of Intellectual Property assets, and diverse modes of Intellectual Property Valuation. While doing so, the paper will focus on why the concept of Intellectual Property Valuation has still not achieved its potential and what could be the way out.

Keywords: Commercialization, Innovation, Intellectual Property Valuation, Market, Research.

I. Introduction

Friends is undoubtedly one of the most successful TV shows ever created on Earth. According to the Forbes report the cast of Friends earns near about 816 million US Dollars in pre-tax earnings or near about 136 million US Dollars each.[1] The cast of friends gets this much money merely by re-running the show. The show is so popular across the world that its popularity is reflected in the revenues of its creators and casts. Warner Brothers alone make 1 billion dollars each year from this show.[2] This is an example of Intellectual Property valuation (hereinafter, IP valuation) done right. To understand the importance of Intellectual Property Rights (hereinafter, IPRs) people often use the quote of Dr. Kamil Idris[3]

> Intellectual property could be called the *Cinderella of the new economy*. "A drab but useful servant, consigned to the dusty and uneventful offices of corporate legal departments until the princes of globalization and technological innovation – *revealing her true value* – swept her to prominence and gave her an enticing new allure"[4]

The most important phrase, as per authors, in this oft-quoted piece is 'revealing her true value', which means that the owner has to optimally commercialize what she owns, otherwise it would remain as an intellectual right without the elements of property, in other words, when one gets property, one uses it efficiently. A proper valuation of IPRs is essential not only for the owner but also for the market. Now if we break down the phrase "Intellectual Property Valuation" we get the first word Intellectual, it relates to the creative use of the mind. The exact meaning of property is not certain, various legal theorists and philosophers have given various interpretations of property but mostly all of them agree on the point that it has something to do with the commercial value of material resources and is mainly used for the rules and regulations attached with the control and administration of those material resources.[5] In this sense Intellectual property (IP) has no material existence but there exists various philosophical explanations[6] justifying the existence of certain assets that exists but are without substance such type of assets are called intangible assets[7]. Not every intangible asset can be identified but those which can be identified are given the status of intangible property, IP is one such identifiable set of properties within Intangible assets. The term value means, according to Merriam-Webster, a numerical quantity that is assigned or is determined by calculation or measurement. In the case of IPRs, the value of the resource is derived from its exclusivity;[8] it means that the owner of the IP should be able to exclude others from the usage of the IP.

Thus, the term IP valuation could mean the appropriation of monetary consideration to a certain intangible asset expressed in the form of IP, it should not only create quantitatively significant economic benefits for the owner of the given IP but also upgrade the monetary rate of the asset with

[1] Dawn Chmielewski, *How 'Friends' Generated More Than $1.4 Billion For Its Stars And Creators,* FORBES, (last visited Jul 21, 2021, 02:41 PM) https://www.forbes.com/sites/dawnchmielewski/2021/05/28/how-friends-generated-more-than-14-billion-for-its-stars-and-creators/.

[2] Chelsea Ritschel, *This is How Much the Cast of Friends Makes from Reruns,* THE INDEPENDENT, (last visited Jul 21, 2021, 02:45 PM), https://www.independent.co.uk/life-style/friends-cast-salary-jennifer-anniston-b1811729.html.

[3] Former Director General, WORLD INTELLECTUAL PROPERTY ORGANIZATION (hereinafter, WIPO).

[4] KAMIL IDRIS, INTELLECTUAL PROPERTY: A POWER TOOL FOR ECONOMIC GROWTH 24 (1st ed., 2003).

[5] Jeremy Waldron, *Property and Ownership,* in THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Edward N. Zalta ed., Summer 2020), (last visited Jul. 21, 2021, 02:55 PM), https://plato.stanford.edu/archives/sum2020/entries/property/.

[6] William Fisher, *Theories of Intellectual Property* (2000), http://www.law.harvard.edu/faculty/tfisher/iptheory.html.

[7] BARTLOMIEJ BIGA, THE ECONOMICS OF INTELLECTUAL PROPERTY AND OPENNESS: THE TRAGEDY OF INTANGIBLE ABUNDANCE (Routledge 2021)

[8] *Module 11- IP Valuation*, WIPO, https://www.wipo.int/export/sites/www/sme/en/documents/pdf/ip_panorama_11_learning_points.pdf.

which it gets associated from and provide future benefits to the owner.[9] All of these things can only be possible after knowing the real worth of the IP that the owner owns. When one knows the true value of a thing then only one can properly care about that thing. Unfortunately, in India, the lack of awareness about IPRs and their sheer negligence towards the discipline has wounded the reputation of India at the international level.

IPRs are not only legal rights they also possess great economic value, particularly in today's world. Though India has shown various positive attributes towards the qualitative promotion of IPRs it remains one of the most challenging countries when it comes to the protection and enforcement of various IPRs.[10]

It is crucial for our markets and development to effectively realize the importance of IP in today's world. Once IP was used as a defensive tool now the same IP is used as a strategic tool in determining the status of countries in today's political and economic scenario. Effective valuation of IP assets can really help in the augmentation of IP-related awareness and enforcement of the same. It is in this light; that this paper tries to deal with various methods through which one can value the IPRs.

The most important attribute of an asset is the value it creates. For calculating the value of assets various standards have been formulated by accounting institutes and there exist various well-established valuation practices in the world for both, tangible as well as intangible assets, but before delving into various practices of valuation let us first try to understand the various aspects of IPRs.

II. Intellectual Property Rights in India: An Insight

We need IP rights to protect the owner's position in the market by creating an unassailable ownership position. According to the World Intellectual Property Organization (hereinafter, WIPO), Intellectual property refers to the creation of the mind.[11] This creation can be anything right from the biggest inventions of human history to the scribble of a child. Each and everything form the content of the IP and IP law is that branch of the law that deals with the legal rights that correlate with such creations which includes reputation and goodwill as well[12] which makes it a vast field of law. For the easy administration of the IP related matters, the international community has parted the contents into several streams of the law, they are:-

- Patents,
- Copyright,
- Performers rights,
- Trademarks,
- Designs,
- Geographical Indications, etc.

[9] *Id.*
[10] *India- Protecting Intellectual Property*, INTERNATIONAL TRADE ADMINISTRATION, (Aug. 25, 2020), https://www.trade.gov/knowledge-product/india-protecting-intellectual-property.
[11] *Valuing Intellectual Property Assets*, WIPO, https://www.wipo.int/sme/en/value_ip_assets/.
[12] DAVID BAINBRIDGE, INTELLECTUAL PROPERTY (9th ed. 2012).

The history of IPRs dates back to 500 years,[13] but in India, IPRs owe their modern history to the Britishers. IPRs in India have been heavily influenced by the statutes of England, for example, the Indian Patent Act was drafted on the recommendations of the Lord Macaulay Commission[14], Indian Copyright Act was closely associated with British copyright law.[15] The first Indian copyright Act was formulated in 1914; it was a simulation of the British Act of 1911 with necessary modifications.[16] Even the new Indian Act of 1957 is heavily influenced by the British Act of 1956.[17] After the independence of India, the Indian legislature transformed the existing IP system and molded it as per the requirements of the Indian society. However, in 1995, after the arrival of the World Trade Organization (WTO), there came a paradigm shift in the then-existing IP scenarios. Trade-related aspects of the intellectual property rights (TRIPS) agreement have become the guiding force behind this paradigm shift, though various developing countries, like India, South Africa etcetera, had heavily opposed these changing dynamics of the international IP system but in the end the TRIPS agreement came and it forced all the member countries of WTO to mend their laws as per the standards of the TRIPS agreement. India has also changed its law in accordance with the same.

1. Patents

The inception point of the patent system is not known to the world.[18] It is one of the oldest manifestations of IP protection in the world. In India, its history can be traced back to the British government. Patents are nowhere defined in the Indian Patents Act, 1970 (Patent Act) but one can say a patent is something which is not latent. The historical name of the Patent was "letters patent".[19] It was issued by the British crown to let the people know that a certain person has ownership of a certain invention. So patent is a document granted to somebody who has created something from an invention. The objective behind granting a patent is to foster economic growth by gratifying the inventiveness of the inventor. The patent document grants exclusivity to the invention by putting a monopoly status on it for a prescribed period. The innovative part of the invention generally is that it provides a novel solution to an existing problem. If the invention[20] meets the conditions of a new invention[21], inventiveness[22] as in it must not be obvious to the experts[23] of the field, it must be capable of getting used for industrial purposes[24] and other specifications[25] as per the Patents Act then such invention might get patented for twenty years.[26]

[13] LYMAN RAY PATTERSON, COPYRIGHT IN HISTORICAL PERSPECTIVE (Nashville: Vanderbilt University Press 1968).
[14] *History of Indian Patent System*, DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE, GOVERNMENT OF INDIA, https://ipindia.gov.in/history-of-indian-patent-system.htm.
[15] Eastern Book Company and others v. D. B. Modak and others, (2005) 13 SCC 802.
[16] MATTHEW THOMAS, UNDERSTANDING INTELLECTUAL PROPERTY (Eastern Book Company 2016).
[17] *Id.*
[18] MATT FISHER, FUNDAMENTALS OF PATENT LAW INTERPRETATION AND SCOPE OF PROTECTION (Hart Publishing 2007).
[19] CRAIG ALLAN NARD, THE LAW OF PATENTS (Aspen Publishers 2008).
[20] The Patents Act, 1970, No. 39, § 2 (j), Acts of Parliament, 1970 (India).
[21] *supra* note 20, at § 2 (l).
[22] Supreme Court in the case of M/s. Bishwanath Prasad Radhey Shyam v. M/s. Hindustan Metal Industries Limited laid down the test of inventiveness *"*It is important that in order to be patentable an improvement on something known before or a combination of different matters already known, should be something more than a mere workshop improvement; and must independently satisfy the test of invention or an 'inventive step'. To be patentable the improvement or the combination *must produce a new result,* or a *new article* or a *better or cheaper article than before*. The combination of old known integers may be so combined that by their working interrelation they produce a new process or improved result. Mere collection of more than one integers or things, not involving the exercise of any inventive faculty, does not qualify for the grant of a patent*."*
[23] People having ordinary skill in the art (PHOSITA).
[24] *supra* note 20, at § 2 (1) (ac).
[25] *supra* note 20, at §§ 3 and 4.
[26] *supra* note 20, at § 53 (1).

One might ask the question why patent an invention when it provides protection only for twenty years and not beyond that? The answer to that would be that a patent does not only incentivize the owner for putting up an invention but also for development of such an invention to a level wherein the owner can commercialize it. When the invention becomes marketable then only it can be available to the public and only after that, it can serve the cause of public good. This leads us to think about the utility of patents in two aspects; the legal aspect and the economic aspect. Within the legal aspect, an invention is registered as a patented invention but does not subsequently become marketable. Within the economic scenario, the patented invention is commercialized and creates not only public good but also turns out to be profitable for the owner of the invention.[27]

2. Trademarks

There existed no trademark law before the year of 1940 in India. The relevant subject matter was dealt with with the aid and assistance of the common law. It was only after the Registration Act of 1875 that some serious consideration over trademarks started. In 1940, the first trademark law was enacted in India. It subsisted till 1958 but soon it was replaced by the present Act of 1999.[28]

As the name suggests, a trademark tells you about the mark[29] of the trade, hence the main function of a trademark is to tell the customers about the source and origin of a certain product.[30] A trademark is defined as a mark that can be presented in a manner that can distinguish between the given mark from existing goods[31] and services[32].[33] There are various goods and services available in the market space and globalization is putting up more and new markets, in such competition it is imperative for a producer to save its products from the nefarious forces of the market. That is where trademarks become very relevant. A trademark differentiates a certain goods or services from the other goods and services. This creates a separate image of the product in the minds of the customers, and this image makes the product sustain itself in this highly competitive market. With a particular image, the customer identifies a particular goods or services. Hence a trademark serves various purposes; it promotes the quality of the goods and services; the distinctiveness of goods and services effectively subsides the costs of searching and shopping and helps in decision-making of the customers.

A consumer remembers a mark based on recollections when she looks at a product.[34] This "recognition" is what constitutes property in the trademarks. The moment this recognition dilutes from the minds of the consumer, a trademark loses its value,[35] in other words, a trademark must be distinctive. The distinctiveness of a mark decides how much a mark is different from other marks. This

[27] *supra* note 8.
[28] THOMAS, *supra* note 16, at 93.
[29] The Trade Marks Act, 1999, No. 47, § 2 (m), Acts of Parliament, 1999 (India) describes mark as, *"... a device, brand, heading, label, ticket, name, signature, word, letter, numeral, shape of goods, packaging or combination of colours or any combination thereof;"*
[30] THOMAS, *supra* note 16, at 98.
[31] *supra* note 29, at § 2 (1) (j).
[32] *supra* note 29, at § 2 (1) (z).
[33] *supra* note 29, at § 2 (zb) has explained trademarks as, "trade mark" means a mark capable of being represented graphically and which is capable of distinguishing the goods or services of one person from those of others and may include shape of goods, their packaging and combination of colours; and-- (i) a registered trade mark or a mark used in relation to goods or services for the purpose of indicating or so as to indicate a connection in the course of trade between the goods or services, as the case may be, and some person having the right as proprietor to use the mark; and (ii) a mark used or proposed to be used in relation to goods or services for the purpose of indicating or so as to indicate a connection in the course of trade between the goods or services, as the case may be, and some person having the right, either as proprietor or by way of permitted user, to use the mark whether with or without any indication of the identity of that person, and includes a certification trade mark or collective mark;
[34] Jagdish Gopal Kamath v. Lime and Chilli Hospitality Services, 2015(7) ALL MR 59.
[35] National Bell Company v Metal Goods Manufacturing Company (Private) Limited and Another, AIR 1964 PUNJAB 77

makes no-distinctiveness of a mark, a ground of refusal from registration.[36] There exist various kinds of marks and each kind of mark carries a specific spectrum of distinctiveness.[37] A mark can be generic, descriptive, suggestive, arbitrary and inventive. Generic marks and inventive marks are the two extremes of the spectrum of distinctiveness. It would lead us to the obvious that a generic mark is the least distinctive and an inventive mark is the most distinctive.

Chapter two of the Act tells us about the conditions for registration and the subsequent chapter tells us about the procedure and duration of registration. Once registered, a trademark subsists for 10 years.[38] However, the same mark can be renewed by the owner by providing the given fee over and over again.[39] This makes a trademark perpetual.

Section 18 of the Act lays down provisions for the registration of trademarks. It says that *any person*[40] who claims *to be the proprietor*[41]either by *use or proposed use*[42] of trademark, by registration. The applicant has to send the application in writing to the registrar, who can accept, refuse or send the application back for making certain amendments. If the registrar accepts the application, the trademark then gets registered as per section 23 of the Act. The registration provides a right to the owner to sue anyone for the infringement of the registered trademark.[43] However, an owner of an unregistered trademark may take remedy under the common law of passing off.[44] The registration gives the owner the exclusive right to use the trademark.[45] If anyone tries to vitiate this exclusivity of trademark then the owner can sue the infringer. The Act specifically provides for the substance of infringement.[46] The registration, thus, acts as "*prima facie evidence"* of the validity of the trademark.[47]

3. Copyright

Copyright is one of the most well-recognized forms of IP. Unlike other forms of IP, this is an automatic right, which means it automatically gets protected the moment it is created. In copyright, the owner has the exclusive right to copy her work. In essence, copyright is a bundle of rights, it accounts for original musical, dramatic, literary, artistic, sound recordings and cinematograph films.[48] In copyright, the whole quest is about who has the right to copy, the Indian Copyright Act tells us specifically the owner of the work has the right to copy.[49] Generally, the author of the work is the owner of the copyright.[50] Technically author is someone *"to whom anything owes its origin; originator; maker; one who completes the work of science or literature"*[51] The definition of author itself tells us about the most essential condition for the existence of copyright, that is, originality. The one from

[36] *supra* note 29, at § 9.
[37] *See* "spectrum of distinctiveness", Abercrombie & Fitch Co. v. Hunting World, Inc 537 F.2d 4 (2d Cir. 1976).
[38] *supra* note 29, at § 25.
[39] *Id.*
[40] Any person includes an individual, firm, association of persons, a company and government.
[41] This means that the representative of the proprietor cannot send application for registration of the trademark.
[42] Use indicates present usage of trademark, proposed mark indicates future use; however in both cases a definite intention to continuously use the trademark is pertinent to show for registration. If the applicant fails to demonstrate the continuation of the use then it might lead to rejection of the application.
[43] *supra* note 29, at § 27.
[44] *Id.*
[45] *supra* note 29, at § 28.
[46] *supra* note 29, at § 29.
[47] *supra* note 29, at § 31.
[48] The Copyright Act, 1957, No. 14, § 13, Acts of Parliament, 1957 (India).
[49] *supra* note 48, at § 17.
[50] *Id.*
[51] Burrow-GilesLithographic Co. v. Sarony, 111 U.S. 53, 58 (1884) cited in Howard B. Abrahams in *Originality and Creativity in Copyright Law*, 55 LAW CONTEMP. PROBL. 1 (1992).

whom the original work germinates is the originator of the work and ownership shall lie with the originator.

The threshold of originality in copyright is not like a novelty in patent. The bar of originality is low and rightly so because copyright works on the principle of "*Idea-expression dichotomy"*[52]. There can be innumerable expressions of one single idea. This raises a very important question, What should be the test of originality? In *University of London Press, Limited* v. *University Tutorial Press Limited*[53] the court pointed out, "The word original does not…mean that the work must be the expression of original or inventive thought. *Copyright Acts are not concerned with the originality of ideas but with the expression of thought*…The originality which is required relates to the expression of the thought. But the Act does not require that the expression must be in an original or novel form, but that the *work must not be copied from another work* - that it should originate from the author."

The Supreme Court in the case of *Eastern Book Company* v. *D.B. Modak*[54] propounded the test of "*skill and judgment"* wherein the court observed that the originality must be determined by skill and judgment of the author, as in the work must be created out of the skill of the author and resulted out of judgment of the author.

4. Commercialization of IP Assets

There are several ways to commercialize one's creation but amongst all assignment and license are the most popular ones. The Indian IP legal space provides for the provisions of assignment and license.[55] An assignment has to be in writing and it can be done wholly or partially both. It is at the will of a patentee to assign as per her will. Assignment can also be given for a particular place, like the whole of India or any part thereof, and for a particular period of time.[56] Assignment is of various types but in IP it is provided for a legal assignment wherein the assignee gets all the rights and the rights then do not go back to the assigner. This is the most important difference between assignment and license, the ownership gets transferred from assigner to assignee in the assignment but in license, it provides valid ground to the license holder to do certain things with the patented invention which would otherwise be invalid and would constitute infringement hence, a license is a contractual right, wherein the licenser provides authority to the license holder to do certain activities with the intellectual creation. It has a limited spectrum of activities. Unlike assignment, the ownership does not get transferred in license. License can be both voluntary and involuntary.[57]

Assignment and licensing provide benefit to both; the owner and the concerned party. For the owner it opens new avenues and new markets which helps her to engender new sources of revenue etc. To the contracting party, it brings profits in the form of savings out of research and development.

III. Principles of Valuation

[52] This principle tries to protect an instance of idea, indication of idea. It does not try to protect the idea itself. The content of copyright is the protection of expression of a certain idea rather than protection of idea. For more *see*, Amaury Cruz, *What's the Big Idea Behind the Idea-Expression Dichotomy? —Modern Ramifications of the Tree of Porphyry in Copyright Law*, 18 FLA. ST. U.L. REV. 221 (1990).

[53] [1916] 7 WLUK 79.

[54] *supra* note 15.

[55] For instance, *supra* note 20, at § 68 (Assignment in Patent Act) and § 84 (License in Patent Act), *supra* note 29, at § 37 (Assignment in Trade Marks Act), *supra* note 48, at § 3 (License in Copyright Act), and § 18 (Assignment in Copyright Act).

[56] *Id.*

[57] *supra* note 20, at §§ 84, 91, 92, 92A & 95.

Property is not limited to tangible assets. Even the transfer of ownership of tangible property entails the transfer of certain rights over and above the physical form. The presence of these intangible aspects of property must be acknowledged to attain a fair value of the property. Business enterprises should then proceed to comprehend the principles of valuation to ascertain the true worth of the property or asset they are investing in.

In simple words, value means the worth of a property or asset in terms of money. However, the process of reaching the appropriate value of a property is not such simple a task as defining it.

When property rights are traded in a free exchange between or among the interested parties, the settled upon rate is the market price plus the purchaser's cost.[58] Both the purchaser and vendor have considered the future monetary advantages of possessing the property rights and have agreed regarding the current worth. However, the future advantages of proprietorship cannot be evaluated without characterizing whose possession is expected as well as the hidden reason for the valuation. The same system can come in handy for estimating the value of intellectual property as well.

For businesses, IP valuation assumes invaluable character. It is because the worth as well as the impact on growth by intangible assets including IP far exceeds the same derived from the tangible assets.[59] And even then, the IP assets seldom find a place in the financial statements prepared by the business entities.[60] As a result of only valuing and disclosing the available tangible assets while leaving out the IP assets provides an inadequate picture of the business entity in question.

Changes in the global economic environment have influenced the development of business models where IP is a central element in establishing value and potential growth. In addition to these systemic changes, international accounting practices place responsibility on firms to recognize and value all identifiable intangible assets of a firm as part of a transaction say for instance, in case of a merger. As a result of these trends, proper valuation of IP, followed by measures to protect that value, has become a key element of the success and viability of a modern firm

To appreciate the concept of valuation, it is imperative to realize that an IP will usually be associated with some physical property which will assist in deriving the correct value of the said IP.[61] The value of an IP is much more than the price paid. It includes all the future commercial benefits that would entail to the IP owner as mentioned above for property rights. Moreover, several considerations[62] affect the value of an IP.

But to begin with, the meaning of market value needs to be analyzed as this is the most frequently utilized method of valuation.[63] Merriam-Webster suggests two synonyms of market value namely, value and fair market value. Fair market value is defined[64] under the Indian Income Tax Act, 1961. The same is defined in the context of capital assets.

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[58] RUSSELL L. PARR, INTELLECTUAL PROPERTY VALUATION, EXPLOITATION, AND INFRINGEMENT DAMAGES (5th ed. 2018).
[59] A HANDBOOK ON VALUATION OF INTELLECTUAL PROPERTY IN EMERGING COUNTRIES LIKE INDIA - ACCOUNTING TO TAKE LEAD ROLE NOW (Committee on Trade Laws and WTO the Institute of Chartered Accountants of India 2007).
[60] Intellectual property, finance and economic development, https://www.wipo.int/wipo_magazine/en/2016/01/article_0002.html (last visited Aug 24, 2023).
[61] Ashwin Madhavan & Rodney D. Ryder, Intellectual Property- Law & Management (Bloomsbury 2014).
[62] Like possibility to expand its use, purpose underlying the valuation, method of valuation in use, rights related with the IP in question etcetera, Robert F. Reilly, *Attributes That Influence Intellectual Property Value*, FORENSIC ANALYSIS INSIGHTS, (SPRING 2015), http://www.willamette.com/insights_journal/15/spring_2015_10.pdf.
[63] *supra* note 8.
[64] Section 2 (22B), Income Tax Act, 1961, No. 43, Acts of Parliament, 1992 (India).

"Fair market value is

i. the *price that the capital asset would ordinarily fetch on sale in the open market* on the relevant date and

ii. where the price referred to in subclause i. is not ascertainable, such price as may be determined in accordance with the rules made under this Act".

The prefix 'fair' in the phrase, fair market value implies the value that a keen buyer would pay to a willing vendor for a property having due respect to its current condition, with all its current benefits and its potential prospects when spread out in its most valuable manner barring any benefits arising out of the reason for which the property is procured.[65]

On the other hand, the Indian Accounting Standards (hereinafter, Ind AS 38)[66] defines fair value[67] as:

"*the price that would be received to sell an asset* or paid to transfer a liability in an orderly transaction between market participants at the measurement date"

Interestingly, paragraph 6 of the Ind AS 38 was amended[68] to reaffirm the existing fact that a lease on certain IP assets like patents would fall under its scope. It reads as under:

"Rights held by a lease under licensing agreements for items such as motion picture films, video recordings, plays, manuscripts, patents and copyrights are within the scope of this Standard…".

However, whether the entire bundle of IP rights fall under the scope of Ind AS 38 is still a difficult question to answer.[69] An asset[70] is defined as "a resource by an entity as a result of past events and *from which future economic benefits are expected to flow* to the entity" under Ind AS 38. While an intangible asset[71] is defined as *"an identifiable non-monetary asset without physical substance".* The definition of intangible asset leads to the inference that all IP rights would fall under its ambit. And paragraph 9[72] of the Ind AS 38 goes on to state that as well. But the very next paragraph[73] goes on to emphasize that *"not all the items described in paragraph 9 meet the definition of an intangible asset, that is, identifiability, control over a resource and existence of future economic benefits".*

The hassle does not end here. Paragraph 18 of the Ind AS 38 states the rule for an asset to be identified as an intangible asset. It is essential for that asset to not only fulfill the criteria set up under the definition of intangible but also to meet the recognition standards of an intangible asset. The recognition criteria[74] as highlighted in Ind AS 38 lays down two requirements:

a) "It is probable that the expected future economic benefits that are attributable to the asset will flow to the entity and

b) the cost of the asset can be measured reliably".

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[65] Raghubans Narain Singh v. State of U.P., AIR 1967 SC 465.
[66] Indian Accounting Standards (Ind AS) 38, The Companies (Indian Accounting Standards) Rules, 2015.
[67] *Id* at Paragraph 8.
[68] The Companies (Indian Accounting Standards) Amendment Rules, 2019.
[69] See, Lee Moerman, *Accounting for Intellectual Property: Inconsistencies and Challenges*, 11 JIPR 243 (2006).
[70] *supra* note 65, at Paragraph 8.
[71] *Id.*
[72] "Common examples of items encompassed by these broad headings are… patents, copyrights…".
[73] *supra* note 65, at Paragraph 10.
[74] *supra* note 65, at Paragraph 21.

Only if all the above-mentioned criteria were fulfilled, IPRs would come under the purview of the Ind AS 38. The accounting treatment of the IP acquired in furtherance of a business agreement or combination can then be done at its fair value[75]. But as of now, it is unclear whether all IP is valued under the same.

IV. Different Methods of IP Valuation

In general parlance, there are three major methods of valuing an IP asset. Every technique may have its own applications for specific purposes. Where the proprietor of IPR wishes to generate revenue, or where they are engaged with a business entity aiming for combination, significant worth should be put on the rights.[76] Even when the concerned IPR is to be used for assignment or similar forms of transfer of some part of rights, the two sides involved in the transaction will need to do a valuation. It is judicious to do an IP valuation to derive value from the concerned IP. It is hence crucial to know about the varied methods to conduct IP valuation. These are discussed at length below.

1. Market Based Method

Analogous to how a market works that is, by the exchange or transaction between parties, Market Approach relies on the accord of parties in the market[77]. The market approach works through a delineated process[78] as mentioned below.

- In the first place, the appraiser chooses the rules for the determination of a manageable agreement or exchange at arm's length. These rules deals or licenses are regularly called practically *comparable uncontrolled transactions* (hereinafter, CUT)[79].

- In the wake of affirming the CUT information, the appraiser changes the CUT costs over to valuing measurements that can be applied to the asset in question. Such estimating measurements could incorporate cost per income, cost per pay, cost per client, cost per elusive resource unit, cost per populace, and cost per account balance.

- Then, the appraiser analyses both the intangible asset at hand and the CUT-related asset, thereby comparing them. In this assessment, the appraiser considers factors, for example, development rates, net revenues, and profits from speculation.

- In view of this relative investigation, the appraiser chooses subject-specific estimating measurements received from the CUT assets.

- At last, the appraiser applies the chosen evaluating metric to the intangible asset to determine its valuation.

Nevertheless, all the steps mentioned above are dependent on various starting points. First, the availability of related assets that can be compared with the IP to be valued. Then, the terms of exchange or market information of that related asset should be at the disposal of the appraiser. To gain such information is not an easy feat. It requires effort, time, and expenses to engage in acquiring the relevant

[75] *supra* note 65, at Paragraph 33.
[76] DAVID BAINBRIDGE & CLAIRE HOWELL, INTELLECTUAL PROPERTY ASSET MANAGEMENT: HOW TO IDENTIFY, PROTECT, MANAGE AND EXPLOIT INTELLECTUAL PROPERTY WITHIN THE BUSINESS ENVIRONMENT (Routledge 2014).
[77] Arundhati Banerjeee et. al., *Valuation of Patent: A Classification of Methodologies*, 42 Research Bulletin 158 (2016).
[78] ROBERT F. REILLY & ROBERT P. SCHWEIHS, GUIDE TO INTANGIBLE ASSET VALUATION (Wiley 2016).
[79] *Id* at 257.

market information.[80] However if such relevant information is available, the market approach can be very effective in determining the value of IP.

Even when it is stated that this approach can yield accurate results, practical difficulties cannot be overlooked. For instance, a business entity is trying to value an IP technology and locates a similar technology used in a different industry. This seems to be a logical foundation to start the analysis and comparison and derive the selling or the market value of the IP technology in hand. However, all similar technologies might not be useful for all industries. Therefore, it can happen that the IP technology to be valued has no purpose in the industry wherein a similar technology is in use. Other factors[81] like growth projections, residual lifetime etcetera must also be considered while selecting the comparable IP. With such a variation, the valuation of the IP technology based on the market value of a similar technology will generate inaccurate results. And it is already known that an IP worth comparing with the IP to be valued is the initial stage of the market-based approach. Thus, it has been warned[82] that all firms or industries utilizing similar IP should be carefully considered before selecting a comparable IP.

Once a comparable IP or intangible asset is reached, certain factors need to be taken care of[83]:

- The comparison must be warranted by the relevant economic standards, for instance, the principle of elasticity[84].

- Furthermore, as already noted above, it must be kept in mind that the market price of the comparable asset would not always be the value of the concerned intangible asset. The price could just be of the product or the tangible asset utilizing such an intangible asset.

- Moreover, certain other commercial considerations such as the title of the comparable asset, benefits accruing through it, its lifespan, and evolving technologies having the potential to replace the comparable asset are necessary for correct analysis.

IP valuation via market approach though sounds efficient on paper has profound issues since the very beginning of it. It is, therefore, crucial to critically analyze the other methods of IP valuation as well.

2. Cost Method

[80] *supra* note 59, at 181.
[81] PARR, *supra* note 58.
[82] JEFFREY A. COHEN, INTANGIBLE ASSETS: VALUATION AND ECONOMIC BENEFIT (John Wiley & Sons, Inc. 2005).
[83] *Id.* at 99.
[84] In economics, elasticity means measuring the alteration in one variable due to the or as a response towards the alteration in some another variable. For instance, elasticity of demand measures the percentage change in the demand due to the percentage change in rice in a given product market.

This approach of valuation depends on the sum that would be needed to supplant the use of a given property[85]. This amount is generally called the *current replacement cost.*[86] The below-mentioned points[87] signify the procedure involved in the cost method.

- According to the viewpoint of a vendor, the value that would be obtained for the property is dependent on the expense for a purchaser to secure or develop a substitute property of practically identical utility, adapted to outdatedness. Outdated nature incorporates actual disintegration, deterioration in mechanical quality, and a drop in monetary value.

- Once the assessment regarding the cost essential to substitute the intangible asset is determined, an analysis as to what degree the substitute property would be providing a similar service as that of the actual asset. With such steps involved, the process involved in the cost method is more extensive than merely calculating depreciation for making a financial account in the business.

The cost method is also suitable for calculating the royalty amount to be charged from a licensee for the use of the intangible asset including IP. The value derived from the cost method is multiplied by the reasonable or fair return on investment to arrive at the total amount of royalty to be paid during the specified time. Moreover, the cost method can be an appropriate means to derive the total damages endured by the actual proprietor of the intangible asset. Hence, with such broad features, the cost method is usually favored for the valuation of an intangible asset or a specific IP.[88]

The cost method is generally acceptable as a method of valuation. However, the conditions[89] which need to be fulfilled to utilize this method should be listed first.

- This method can yield effective results if the IP asset whose value is to be estimated is a new asset that can be substituted for some other similar asset. This assumes importance in the case of IP assets as their value is derived from the exclusive rights provided to them as mentioned above[90]. If the IP asset is old, has obtained exclusive authorized rights and occupies a known position in the market, it can be logically inferred that locating its substitute would be a difficult task. In such a scenario, the cost method would not be of much use.

- Apart from the abovementioned condition, the asset to be valued should be currently in use by the proprietor to exclude the entire creation procedure of that asset.

- The cost method is also unsuitable in cases wherein the purchaser is concerned about the future economic benefits that can be derived from the intangible or IP asset. This is because the cost method focuses on exchange value. Hence, from the perspective of a business interested in buying or merging with another business entity, the cost method of valuing IP assets would not be a feasible option.

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[85] In economics, this is referred to as the substitution principle.

[86] Current Replacement Cost is the expense to build a substitute intangible property which has similar utility as that of the actual property in question. This expense is at the current costs as of the date of the evaluation. The substitutable asset is created utilizing present day materials, principles, plan, design, and nature of workmanship. It ordinarily eliminates all reparable insufficiencies, and outdated nature that are available in the actual property. *See* Dr. John Turner, *Valuation of Intellectual Property Assets Valuation Techniques: Parameters, Methodologies and Limitations*, WIPO ASIAN REGIONAL FORUM ON THE INTELLECTUAL PROPERTY STRATEGY FOR THE PROMOTION OF INNOVATIVE AND INVENTIVE ACTIVITIES (2000), https://www.wipo.int/export/sites/www/sme/en/documents/valuationdocs/inn_ddk_00_5xax.pdf.

[87] Marius Schneider, *Intellectual Property Rights, The New Currency*, 14 J. INTELL. PROP. L. & PRACT. 825 (2019).

[88] Paul Flignor and David Orozco, *Intangible Asset & Intellectual property Valuation: A Multidisciplinary Perspective*, ipthought.com (Jun. 2006),
https://www.wipo.int/export/sites/www/sme/en/documents/pdf/ip_valuation.pdf

[89] REILLY & SCHWEIHS, *supra* note 78.

[90] *supra* note 8.

3. Income Method

This method is the most popular form of valuation when it comes to IP assets.[91] The process of valuation involves estimating the income or benefit that the given IP asset is predicted to generate in the future. This amount is brought in line with the current value of the said IP asset. The essential factors to be kept in mind while using the Income Method are mentioned below[92].

- Since this method estimates the future economic benefits or income of an asset, the IP asset must be either generating income or cash flow. This income can either be through operating the asset in the business or licensing the same to some other entity.

- Until and unless the benefits that can be derived from the IP asset are calculated, its value cannot be derived. This amount can be obtained via a direct method or an indirect method of estimating the net cash flow from the IP asset. The former is used where sufficient information is accessible regarding the IP asset in question which allows thcalculation of the economic benefit directly. The latter is used when specific information regarding the IP asset is not available. Once every facet[93] is taken care of, the direct or indirect method will indicate the benefits that can be derived from the IP asset.

- After the future benefits is estimated, the same is discounted to adjust the risks involved and thereby, derive the current value.

A basic difficulty in using this method is differentiating the cash flow associated with the IP asset from the cash flow linked to the entire business entity. It is still considered the best model out of the three explained above for the valuation of intangible assets. However, the appraiser must use an apt measure of IP income, the correct income prediction period and a proper capitalization rate[94] maintaining consistency with the income used for assessment to derive the appropriate IP valuation.

V. Conclusion

Intellectual property is the "Cinderella of the new economy". In today's political-economic scenario, a country's well-being is dependent on its administration of IP resources. An effective IP policy would be that which also looks after its valuation mechanisms. Unfortunately, for India, this acts as a drawback. The accounting standards dedicated to intangible assets are leaving much for desired. It leaves behind crucial spaces for a compelling valuation of IP resources. In a country like India, this does not do justice to small enterprises and industries. These companies suffer from the institutionalization of such vague valuation policies.

These companies also suffer from their inactivity towards the fortification of their intellectual capital. There exist well-established principles of IP valuation these enterprises should use to enforce their IP resources. The inertia and ignorance of these enterprises towards IP resources are adding to this neglect of IP valuation in the Indian IP scenario.

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[91] *supra* note 11.

[92] Dilip Sharma & Abhijeet Kumar, *Methods for Intellectual Property Valuation*, *in* HANDBOOK OF INTELLECTUAL PROPERTY RESEARCH: LENSES, METHODS, AND PERSPECTIVES 0 (Irene Calboli & Maria Lillà Montagnani eds., 2021), https://doi.org/10.1093/oso/9780198826743.003.0039 (last visited Aug 24, 2023).

[93] Like the economic conditions, impact of the economic condition in the industry of the given IP asset, competition in the market etcetera, *Pricing Intangible Assets: Methods of Valuation of Intellectual Property*, Seminario Sobre Valorizacion De La Propiedad Intelectual (1998), https://www.wipo.int/export/sites/www/sme/en/documents/valuationdocs/vpi_lim_98_2.pdf

[94] Ratio of net income and the present market value.

Earlier IPRs were seen as a protective device to secure an enterprise's intellectual capital. Now IPRs are seen as a vital tool by business enterprises in claiming a secured position in market space. Enterprises use IPRs in structuring their marketing and management policies. Moreover, it is emerging as the most profitable financial asset. The role and importance of IPRs have only increased with time. In these circumstances, Indian enterprises need to come up with flexible administration of IPRs, and they have to buttress their IP valuation policies.

IP portfolio and management are the future of business. Companies/brands have witnessed huge losses and recouped from the same entirely because of the strong IP portfolio they managed to establish. While there have been instances when companies have incurred huge losses because they acquired other companies without diligently assessing IP assets. All of these instances should act as a guiding light for India. India’s business sector is blooming and is constantly becoming a favourable place for doing business. It is thus imperative for Indian companies to acknowledge and imbibe the culture of IP valuation. This will benefit not only the businesses but also the Indian economy in general.

Reference

Howard Abrams, *Originality and Creativity in Copyright Law*, 55 LAW AND CONTEMPORARY PROBLEMS 3 (1992).

Arundhati Banerjee, Rajdeep Bakshi & Manas Sanyal, *Valuation of Patent: A Classification of Methodologies*, 42 RESEARCH BULLETIN 158 (2016).

Amaury Cruz, *What's the Big Idea behind the Idea-Expression Dichotomy? -- Modern Ramifications of the Tree of Porphyry in Copyright Law*, 18 FLORIDA STATE UNIVERSITY LAW REVIEW 221 (1990).

Lee Moerman & Sandra Van der Laan, *Accounting for Intellectual Property: Inconsistencies and Challenges*, 11 FACULTY OF COMMERCE - PAPERS (2006).

Intellectual property rights, the new currency | Journal of Intellectual Property Law & Practice | Oxford Academic, https://academic.oup.com/jiplp/article/14/11/825/5569822 (last visited Aug 24, 2023).

DAVID BAINBRIDGE, INTELLECTUAL PROPERTY (9th ed. 2012).

DAVID BAINBRIDGE & CLAIRE HOWELL, INTELLECTUAL PROPERTY ASSET MANAGEMENT: HOW TO IDENTIFY, PROTECT, MANAGE AND EXPLOIT INTELLECTUAL PROPERTY WITHIN THE BUSINESS ENVIRONMENT (Routledge 2014).

JEFFREY A. COHEN, INTANGIBLE ASSETS: VALUATION AND ECONOMIC BENEFIT (John Wiley & Sons, Inc. 2005).

MATT FISHER, FUNDAMENTALS OF PATENT LAW INTERPRETATION AND SCOPE OF PROTECTION (Hart Publishing 2007).

KAMIL IDRIS, INTELLECTUAL PROPERTY: A POWER TOOL FOR ECONOMIC GROWTH 24 (1st ed., 2003).

Ashwin Madhavan & Rodney D. Ryder, Intellectual Property- Law & Management (Bloomsbury 2014).

CRAIG ALLAN NARD, THE LAW OF PATENTS (Aspen Publishers 2008).

RUSSELL L. PARR, INTELLECTUAL PROPERTY VALUATION, EXPLOITATION, AND INFRINGEMENT DAMAGES (5th ed. 2018).

ROBERT F. REILLY & ROBERT P. SCHWEIHS, GUIDE TO INTANGIBLE ASSET VALUATION (Wiley 2016).

MATTHEW THOMAS, UNDERSTANDING INTELLECTUAL PROPERTY (Eastern Book Company 2016).

History of Indian Patent System, DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE, GOVERNMENT OF INDIA, https://ipindia.gov.in/history-of-indian-patent-system.htm.

Module 11- IP Valuation, WIPO,

https://www.wipo.int/export/sites/www/sme/en/documents/pdf/ip_panorama_11_learning_points.pdf.

Robert F. Reilly, *Attributes That Influence Intellectual Property Value*, FORENSIC ANALYSIS INSIGHTS, (SPRING 2015), http://www.willamette.com/insights_journal/15/spring_2015_10.pdf.

Jeremy Waldron, *Property and Ownership*, *in* THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Edward N. Zalta & Uri Nodelman eds., Fall 2023 ed. 2023), https://plato.stanford.edu/archives/fall2023/entries/property/ (last visited Jul 21, 2021).

India - Protecting Intellectual Property, https://www.trade.gov/country-commercial-guides/india-protecting-intellectual-property (last visited Jul 19, 2021).

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ABSTRACT

The Minister of Education, Culture, Research and Technology of the Republic of Indonesia presented the concept of "Merdeka Belajar – Emancipated Learning" in Education Working Group of G-20. This paper aims to analyze its implementation in form of legal education and the utilization of copyrighted works for legal education purposes based on the principle of fair use. The student–centered learning elaborates as the practical example of "Merdeka Belajar – Emancipated Learning" in legal education. The result shows that the implementation of "Merdeka Belajar – Emancipated Learning" in legal education through student–centered learning support the learning process to be more inclusive, dynamic and collaborative also leads to the development of practical skills such as critical thinking, communication skill, technological skill, and creativity in utilizing digital media. However, even though Indonesia has moved towards a hybrid model of education, there is still significant ambiguity regarding the common online practice of sharing content permissible in the context of educational fair use, therefore, the synergy, partnership, and collaboration between government, academics, and libraries in formulating both legal and digital infrastructures to guarantee that the utilization of learning materials in legal education conducted in compliance with national and international copyright regulations is urgently needed.

Keywords: Educational Fair Use, Emancipated Learning, Legal Education, Student-Centered Learning.

I. Introduction

Based on several cooperation projects, Bedner & Vel elaborate on several major contemporary criticisms of legal education in Indonesia, **First: Formalism,** the doctrinal nature of legal education, and the highly theoretical method leave students with a lack of opportunities and freedom to expose to different perspectives. [1] **Second, their Lack of skills**, as the result of the highly theoretical and doctrinal nature of legal education, does not provide students with relevant practical skills like presenting oral arguments, presenting educational material, writing legal opinions, counseling, interviewing, drafting contracts, and others. **Third, Teaching Methods,** where teaching is mostly done in the form of lecturing to large groups with low levels of interactivity [2] result in a theoretical, dogmatic, and formalistic approach to law. **Fourth, regarding Teaching Materials**, there's conservatism regarding the use of teaching materials such as textbooks, and regulations that are often outdated and less relevant to the development of society

In several speeches, the President of the Republic of Indonesia, Joko Widodo suggested higher education in Indonesia to be more open to the real needs of various sectors needed by the community and industries. [3][4] Later , the President appointed Nadiem Makarim – a business start-up entrepreneur and ex-CEO of Gojek, an Indonesia Decarorn - as the Minister of Education, Culture, Research and Technology [5] who then developed the idea of *Merdeka Belajar – Emancipated Learning* - and *Kampus Merdeka – Independent Campus* which aims to transform education system in Indonesia into emancipative learning that is more inclusive where students not only shape to be academic/human textbook but also build the practical skill and empathy by connecting to society and creating broader access to education as well as supporting learning opportunities for all through collaboration principle as presented by Nadiem Makarim in Education Working Group of G20. [6]

Legal education is the medium for people to enhance their knowledge and understanding of the law and the legal education curriculum is one of the most determinant factors in shaping the competencies of law students. The research from Prof. Anthon F. Susanto, *et.al* [7] elaborates that legal education leads to the development of practical skills based on the value of wisdom, sustainably adapted to global values and paying attention to local aspects, maintaining rationality by building a sense of logic, good practical skills and empathic for the oppressed and marginalized people, therefore, it's essential to build a culture-based curriculum.

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[1] Hikmahanto Juwana, "Legal Education Reform in Indonesia," *Asian Journal of Comparative Law* 1, no. 1 (2006), https://doi.org/10.2202/1932-0205.1016.

[2] Ibid.

[3] Office of Assistant to Deputy Cabinet Secretary for State Documents & Translation, "President Jokowi Calls On Rectors To Facilitate Students To Learn From Experts," *Cabinet Secretary of The Republic of Indonesia*, last modified 2020, accessed December 13, 2022, https://setkab.go.id/en/president-jokowi-calls-on-rectors-to-facilitate-students-to-learn-from-experts/.

[4] Ahda Bayhaqi, "Jokowi Sebut Program Studi Di Kampus Hanya Relevan Sampai Lima Tahun," *Merdeka* (Jakarta, March 11, 2022), https://www.merdeka.com/peristiwa/jokowi-sebut-program-studi-di-kampus-hanya-relevan-sampai-lima-tahun.html.

[5] Freddy H Istanto, "Jokowi Appoints Nadiem Makarim as Education Minister. Can the Gojek Co-Founder Streamline Bureaucracy in Education?," *The Jakarta Post* (Jakarta, October 24, 2019), https://www.thejakartapost.com/academia/2019/10/24/jokowi-appoints-nadiem-makarim-as-education-minister-can-the-gojek-co-founder-streamline-bureaucracy-in-education.html.

[6] Neneng Zubaidah, "Nadiem Paparkan Program Merdeka Belajar Di Education Working Group G20," *Sindonews.Com* (Jakarta, May 19, 2022), https://edukasi.sindonews.com/read/774063/212/nadiem-paparkan-program-merdeka-belajar-di-education-working-group-g20-1652965532?showpage=all.

[7] Anthon Freddy Susanto et al., "Pendidikan Hukum Di Era Digitalisasi," *Litigasi* 23, no. 2 (2022): 234–252, https://journal.unpas.ac.id/index.php/litigasi/article/view/6216/2509.

The legal education system must be improved before it can produce legal scholars that can acknowledge and implement legal supremacy in society by utilizing the strengths of knowledge needed to tackle real problem in society. The legal education curriculum is one of the most determinant factors in transforming the education system and shaping the competencies of law graduates. A culture-based curriculum is needed since legal education is essentially behavioral education. [8] In the age of digital learning, legal education requires reliable digital infrastructure and adequate supporting materials including the utilization of copyrighted materials as the medium to transfer and articulate knowledge to a broader audience with various backgrounds in society in a way that is easily understood.

The utilization of copyrighted works for educational purposes is an important element that has been acknowledged since the early development of the copyright regime through the principle of *fair use* as the core principle in balancing private and exclusive interest and personal rights of the copyright holder and social interest. [9] Educational fair use is also broadly accepted and incorporated in copyright laws around the world including in the Law of Republic Indonesia Number 28 the year 2014 on Copyright (Indonesia Copyright Law).

However, in defining activities that qualified as fair use of copyrighted works, the consideration is merely based on common practices since there are no particular implementing regulations and/or codes of conduct that practically determine the activities considered as educational fair use. [10] This brought a dilemma and problematic condition regarding the utilization of copyrighted materials for legal education activities through digital media.

From the aforementioned conditions, this study aims to provide an insight on the implementation of "*Merdeka Belajar – Emancipated Learning"* through the student-centered learning model in providing legal education for society using digital contributes to promoting educational fair use in Indonesia and the challenges that arises in its implementation.

II. Findings and Discussions

1. Doctrine of Fair Use and Educational Fair Use in Indonesia

The justification of intellectual property protection is based on their nature in encouraging creativity. Intellectual creation is necessary for society's cultural, technological, and economic development. The justification of protection is also based on the human rights foundation[11] for it provides a reward that enables the creator to gain both economic and non-economic benefits by providing the community with the benefits of their creation based on the philosophy of enlightenment. [12]

[8] Ibid.

[9] Ranti Fauza Mayana, Yin Yin Win, and Tisni Santika, "The Legal Concept of Educational Fair Use: A Comparative Study on International Compliance between Indonesia & Myanmar Copyright Law," *NTUT Journal of Intellectual Property Law and Management* 11, no. 1 (2022): 75–88, https://iip.ntut.edu.tw/var/file/92/1092/img/Vol11_No1.pdf.

[10] Ranti Fauza Mayana, Tisni Santika, and Yin Yin Win, "EDUCATIONAL FAIR USE & DIGITAL LEARNING : COMPARATIVE STUDY BETWEEN INDONESIA & MYANMAR," *Litigasi* 23, no. 2 (2022): 217–233, https://journal.unpas.ac.id/index.php/litigasi/article/view/5181.

[11] Peggy Magdalena Jonathans and Yakob Metboki, "Reflecting on EFL Digital Learning in Indonesia : Seeking for E-Learning Reflecting on EFL Digital Learning in Indonesia : Seeking for E-Learning Pedagogy," in *Proceeding of International Seminar on Language, Education, and Culture (ISoLEC 2021)*, 2022, https://www.researchgate.net/publication/357509578_Reflecting_on_EFL_Digital_Learning_in_Indonesia_Seeking_for_E-Learning_Pedagogy.

[12] Kementerian Pendidikan Kebudayaan Riset dan Teknologi, *Statistik Pendidikan Tinggi* (Jakarta: Kementerian Pendidikan Kebudayaan Riset dan Teknologi, 2020).

Broadly, intellectual property covers Copyright (and related right) and industrial property (patents, industrial design, trademarks, service marks, layout designs of integrated circuits, commercial names, and designations, geographical indications, and protection against unfair competition).[13] The rationale of copyright protection broadly covers 3 (three) important aspects: **first,** the acknowledgment of copyright and the protection of the rights of the creator over their creations, **second,** the protection for the manifestation of the ideas, **third**, the role of intellectual property in fostering creativity, generating income and positive contribution to culture and society.[14] Article 1 point 1 Indonesia Copyright Law defines Copyright as:

"An exclusive right of the creator granted automatically based on declaratory principle after the works/creations are fixated / manifested in a tangible form without reducing the restrictions and limitations under the provisions of laws and regulations"

Although copyright is an exclusive right, it's not an absolute right, there are several restrictions for the exclusivity of copyright concerning public needs in terms of *fair use principles*.[15] The *Berne Convention* embodied *the fair use principle* by formulating *"the three-step test"* in the revision of *the Berne Convention 1967* as the assessment for the exception for the copyright, provided they are exceptional, do not infringe on a normal use of the work, and do not unreasonably harm the author's legitimate interests. [16]

The *fair use principle* later applies generally under Article 13 of the *TRIPs Agreement*, article 16 *WIPO Performances and Phonograms Treaty (WPPT)*, and Article 10 World Copyright Treaty (WCT) that provide the possibility for the application of more generous limitations reference to *The Berne Convention's* "balance" between author rights and the larger public interest, particularly in regards to education, research, and information accessibility.

Indonesia *Copyright Law* specifically regulates educational fair use on article 44 verse (1) points a and c stated that if the source is mentioned or properly cited for educational purposes, research, scientific writing, report writing, writing in critique or review of a problem without prejudicing the reasonable interest of the author or the copyright holder, and for talks that are only intended for education and science as long as the utilization do not harm the reasonable interest of the creator in generating economic benefits, then the use, retrieval, and/or change of Works and/or related rights in whole or in part is not considered a violation of copyright and therefore considered as fair use.[17]

Further, for public educational purposes, Article 47 Indonesia Copyright Law allows the reproduction of 1 (one) duplicate of the copyrighted works or part of the copyrighted works without authorization from the Creator or Copyright Holder that may be utilized for educational, instructive or research purposes for the safeguarding, substitution of copy if the copy is lost, harmed or annihilated from the permanent collection. The reproduction for the exchange of communication or information purposes interlibrary, inter-archival institution and between the library and archival institutions are also categorized as fair use.

[13] Taufan Teguh Akbari and Rizky Ridho Pratomo, "Higher Education Digital Transformation Implementation in Indonesia during the COVID-19 Pandemic," *Jurnal Kajian Komunikasi* 10, no. 1 (2022): 52.

[14] "6 Ribuan Sekolah Ditutup Akibat Pandemi Corona Covid-19," *Liputan6.Com* (Jakarta, May 20, 2020), https://www.liputan6.com/news/read/4259413/6-ribuan-sekolah-ditutup-akibat-pandemi-corona-covid-19.

[15] Mayana, Santika, and Win, "EDUCATIONAL FAIR USE & DIGITAL LEARNING : COMPARATIVE STUDY BETWEEN INDONESIA & MYANMAR."

[16] Warren Bebbington, "Leadership Strategies for a Higher Education Sector in Flux," *Studies in Higher Education* 46, no. 1 (2021): 158–165, https://www.tandfonline.com/doi/epdf/10.1080/03075079.2020.1859686?needAccess=true&role=button.

[17] Indonesia Baik & Kominfo, "G20pedia," *G20pedia* (2022): 1–29, https://research.ui.ac.id/research/wp-content/uploads/2022/02/G20pedia.pdf.

Although Indonesian Copyright Law has provided important exceptions of copyright protection for non - commercial, educational and scientific purposes as long as they do not harm the reasonable interests of the creator/copyright holders, the implementing regulations and codes of conduct are not clearly defined due to the relativity and broad possibility of educational purpose implementation in practices. For example, it's not easy to define or draw a precise limit of "certain special cases", "normal exploitation of work" and "legitimate interest of the author" without any relevant and comprehensive implementing regulators, codes of conduct or practical rules in terms of technical and ethical aspects. Therefore it's a particular importance to formulate special provisions and implementing regulations to guide the implementation of fair use principle in teaching, research and other educational purposes in the age of distance learning.

2. Digital Transformation and "Merdeka Belajar – Emancipated Learning" Program: The Transformation of Education System in Indonesia

The rapid transformation of digital innovation has infiltrated the universe of advanced education all through the world, including Indonesia. Digital infrastructure has emerged as an essential component of e-learning and the educational system as a whole because of the national new trend of hybrid or blended learning in Indonesia. E-learning is a cognitive learning process in which learning materials, sounds, images, videos, and any text are created or presented digitally through a digital platform through social interaction. [18]

Based on the data from *Indonesian Higher Education 2020*, there are 4.593 universities and more than 312.890 lecturers that must be shifted to the digital platform to deliver the curriculum properly,[19] unfortunately the adoption of technology in universities is relatively slow in Indonesia. [20] However, the Covid-19 pandemic occurred, 6.462 schools from early childhood education to higher education were closed from March to May 2020, [21], and the digital transformation become urgency to continue and deliver the learning and education process. In short, Indonesia moves towards hybrid delivery of teaching and collaborative blended learning. [22]

Digital transformation becomes one of the agendas of The 2022 G20 Presidency in Indonesia. [23] Based on data released by the Association of Service Providers Internet in Indonesia (APJII), during the 2021 – 2022 period the level of internet penetration in Indonesia is equal to 77.02 percent [24] and the number of internet users in Indonesia is 210.03 million, while the populations in Indonesia recorded at 275.3 million populations, with 69.30 % populations are in productive age (15-64 years).[25]

To support digital learning practice in Indonesia runs well, the Ministry of Education and Culture developed an online learning portal called "Portal Rumah Belajar - Study House Portal", which can

[18] Jonathans and Metboki, "Reflecting on EFL Digital Learning in Indonesia : Seeking for E-Learning Reflecting on EFL Digital Learning in Indonesia : Seeking for E-Learning Pedagogy."
[19] Kementerian Pendidikan Kebudayaan Riset dan Teknologi, *Statistik Pendidikan Tinggi*.
[20] Akbari and Pratomo, "Higher Education Digital Transformation Implementation in Indonesia during the COVID-19 Pandemic."
[21] "6 Ribuan Sekolah Ditutup Akibat Pandemi Corona Covid-19."
[22] Bebbington, "Leadership Strategies for a Higher Education Sector in Flux."
[23] Indonesia Baik & Kominfo, "G20pedia."
[24] Dimas Bayu, "APJII: Pengguna Internet Indonesia Tembus 210 Juta Pada 2022," *DataIndonesia.Id*, last modified 2022, accessed December 15, 2022, https://dataindonesia.id/digital/detail/apjii-pengguna-internet-indonesia-tembus-210-juta-pada-2022.
[25] Direktorat Jenderal Kependudukan dan Pencatatan Sipil Kementerian Dalam Negeri, *Dukcapil Kemendagri Rilis Data Penduduk Semester I Tahun 2022, Naik 0,54% Dalam Waktu 6 Bulan* (Jakarta, 2022), https://dukcapil.kemendagri.go.id/berita/baca/1396/dukcapil-kemendagri-rilis-data-penduduk-semester-i-tahun-2022-naik-054-dalam-waktu-6-bulan#:~:text=Jakarta - Ditjen Dukcapil Kementerian Dalam,tercatat sebanyak 275.361.267 jiwa.

be accessed through https://belajar.kemdikbud.go.id/. This portal provided some excellent features for students and teachers,[26] for example learning resources, a digital classroom, a virtual laboratory, a question bank completed by supporting features like a cultural map, electronic textbook, online space vehicle, language and literature, sustainable professional development, blog, educational game (Edu-game) and augmented reality.

The formulation and the application of learning methods are very important to develop the intellectual and skill development of the student. In early 2020 Nadiem Makarim, the Minister of Education, Culture, Research and Technology of the Republic of Indonesia launched the "Merdeka Belajar – Emancipated Learning" program as a revolutionary program for Indonesia's education system.[27]. In essence, the idea of "Merdeka Belajar – Emancipated Learning" is a response to the requirements of the education system in the era of "Industrial Revolution 4.0" [28] These requirements call for human resources with skills in critical thinking and problem-solving, creativity, and innovation, as well as adequate communication skills and knowledge of information technology, and a teacher must provide students with experiencesthat encourage them to be creative and innovative.[29]

"Merdeka Belajar – Emancipated Learning" program applied to 8 educational activities models, namely: [30]

1 **Internship:** students involved in internship activities at companies, non-profit foundations, multilateral organizations, government institutions, or Start-up Companies. Supervised by lecturer/teacher;

2 **Projects in Villages:** social projects that help people in remote or rural areas build their economies, infrastructure, and other things. Together with officials, cooperatives, or other village organizations, this project can be carried out;

3 **Teaching in School:** In elementary, middle, and high schools, students participate in teaching activities for several months. There are urban and rural types of schools. The Ministry of Education and Culture will be in charge of facilitating this program;

4 **Student Exchange:** Based on a cooperation agreement that the government has made, the students take classes or semesters at universities in both the United States and other countries.

5 **Research,** the students conduct academic research activities, both science and social humanities under the supervision of lecturers or researchers and/or carried out with national research institutions.

6 **Entrepreneurship Activities:** the students develop independent entrepreneurship activities. The students formulate the description/proposals for entrepreneurial activities, supervised by the lecturer/teacher.

[26] Azmil Abidah et al., "The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of 'Merdeka Belajar,'" *Studies in Philosophy of Science and Education* 1, no. 1 (2020): 38–49.
[27] Adison Adrianus Sihombing et al., "Merdeka Belajar in an Online Learning during The Covid-19 Outbreak: Concept and Implementation," *Asian Journal of University Education* 17, no. 4 (2021): 35–48, https://files.eric.ed.gov/fulltext/EJ1328612.pdf.
[28] Muhammad Yamin and Syahrir Syahrir, "Pembangunan Pendidikan Merdeka Belajar (Telaah Metode Pembelajaran)," *Jurnal Ilmiah Mandala Education* 6, no. 1 (2020): 126–136, https://ejournal.mandalanursa.org/index.php/JIME/article/view/1121/1067.
[29] Sihombing et al., "Merdeka Belajar in an Online Learning during The Covid-19 Outbreak: Concept and Implementation."
[30] Kementerian Pendidikan dan Kebudayaan, *Merdeka Belajar : Kampus Merdeka* (Jakarta: Kementerian Pendidikan dan Kebudayaan, 2020), http://merdekabelajar.kemdikbud.go.id/upload/file/102_1638183493.pdf.

7 **Independent study / project study:** students develop a project based on special social topics and develop a collaborative project with other students, guided by a lecturer/teacher.

8 **Humanity project:** social activities for a foundation or humanitarian organization both national and international organizations approved by universities.

The *"Merdeka Belajar-Emancipated Learning"* program requires collaboration and synergy between the state as regulators and relevant stakeholders. They focused on 3 (three) subjects: **First, the Entitled:** the students are the main focus of the program. The students are entitled to rights and options to join the program. **Second, the Facilitators,** there are several main facilitators in the "Merdeka Belajar" Program that provide facilities and support for students in the implementation of the program. The main facilitators are the lecturer, instructor, and any other educational support, the university management, related state institutions, research institutions, community development-related institutions, businesses, industries, and other university partners. **Third, the Regulator** is the nation through the directorate general of higher education Minister of Education, Culture, Research and Technology of the Republic of Indonesia.

Indonesia has adopted several learning methods including Blended Learning and Student-Centered Learning methods since the 2013 national curriculum, and currently, this method is strongly emphasized to be applied as one of the most relevant models for *"Merdeka Belajar – Emancipated Learning"*.[31] Based on the various subject involved in *"Merdeka Belajar – Emancipated Learning"* Program, universities are no longer the single source of knowledge. Students are expected to gain practical knowledge from other facilitators as well as from their own experiences through the program. Considering the wide scope of programs and their broad aims, the universities are required to build N-Helix collaboration with multiple parties.

From the point of view of the students, *"Merdeka Belajar – Emancipated Learning"* demands a proactive shift where several changes are necessary. **First,** students must become more proactive in their learning process; enhance their creative thinking, and do more than just passively receive knowledge from course materials provided by their lecturers. **Second,** students should seek out more reference materials beyond the syllabus and more effectively use online libraries, databases, and sources. **Third,** the student must engage in the relevant activities of articulating their knowledge to the implementation level to upgrade their skill sets for example by visiting the society to examine the real condition where injustice and inequality may visible or conducting critical reading of court's verdicts or join voluntary and public-spirited works in collaboration with *pro bono* institutions.

3. Promoting Educational Fair Use in Legal Education through Digital Media in Indonesia: Opportunities and Challenges

In Indonesia nowadays, legal education has become more democratic and inclusive, even though is still shadowed by a doctrinal and formalistic approach to certain degree. The doctrinal and formalistic approach influenced the teaching paradigm of legal educators and it raises several issues and challenges because the legal education system is designed to be a "factory" producing jurist-bureaucrats or technical lawyers rather than an agent of social change.[32]

Since all products of law are based on social need and legislated through political processes, it should be underlined that law locates not only inside law and the relations of power between legal officials and citizens but also with most other relations in society, therefore legal educators need to be

[31] Amalia Dwi Pertiwi, Siti Aisyah Nurfatimah, and Syofiyah Hasna, "Menerapkan Metode Pembelajaran Berorientasi Student Centered Menuju Masa Transisi Kurikulum Merdeka," *Jurnal Pendidikan Tambusai* 6, no. 2 (2022): 8839–8848, https://jptam.org/index.php/jptam/article/view/3780.

[32] Helen Stacey, *Postmodernism and Law: Jurisprudence in a Fragmenting World* (Ashgate, 2001).

encouraged to teach and inspire their future leaders in a wider social context by adopting progressive approaches that foster the social interaction between legal scholars and the society to infuse a sense of morality and empathy for the society that face real legal and social problems by providing the legal literacy and access to justice.

Current legal education expected to be the example on how higher education program in Indonesia responds to the legal issues and legal problems in Indonesia through its curriculum. Law faculties in Indonesia are gradually shifting to the development of program / learning models that balancing the attention to legal concepts, social context and student skills. Most of student skill upgrading and society engagement measures addressed through Clinical Legal Education Program, Moot Court, Legal Drafting Course, and Contract Drafting Course. The results are varies since law faculties have adopt different stressing points in accordance to their capacities and readiness.

As an effort to minimize or even close the gap between the competence of university graduates and the need of the industry, the Ministry of Education and Culture Research and Technology facilitates university to organize a program called *"Teaching Practitioner"* program. The program delivered through collaboration model of teaching between lecturers and practitioners who have experience and competence in relevant fields to assist the learning process in the classroom. The collaborative teaching model aims to enrich students' knowledge concerning practical aspects in the professional fields. In particular, the implementation of the *"Teaching Practitioner"* program at the law faculty involves practitioners in the profession as notaries, lawyers, legislative drafters and contract drafters to collaborate with the lecturers, especially in practicum subjects such as contract drafting techniques, criminal and civil litigation and techniques for drafting laws and regulations.

The massive advancement of digital technology provides extraordinary facilitation in the implementation of this teaching practitioner program where digital media is widely used as the effective medium for collaborative classes between lectures and practitioners through distance learning model. The Covid-19 pandemic, which caused the closure of schools across the country and forced 68 million students into distance learning [33] [34] accelerated the transition to digital learning in Indonesia.

Distance learning has been implemented in 97,6% of Indonesian schools since March 2020, according to Ministry of Education and Culture Research and Technology data, [35] The transition to digital education in Indonesia has not been smooth; many students in rural areas did not have access to the internet, and many low- income students did not have access to the necessary digital devices.[36]

Besides the pandemic effect, given the circumstances of a growing young population [37] that is becoming increasingly familiar with internet, a move towards digital education is imminent. [38] Since the beginning of the pandemic, education systems have moved predominantly between three models:

[33] UNICEF, "Strengthening Digital Learning across Indonesia: A Study Brief," *Unicef* (2020): 1–14, https://blogs.worldbank.org/eastasiapacific/COVID-19-and-learning-inequities-indonesia-four-ways-bridge-gap%0Ahttps://www.unicef.org/indonesia/media/10531/file/Strengthening Digital Learning across Indonesia: A Study Brief.pdf.

[34] George Variyan and Agus Mutohar, "Reimagining Education in Shadow of COVID-19 Pandemic," *The Jakarta Post* (Melbourne, October 3, 2020), https://www.thejakartapost.com/academia/2020/10/02/reimagining-education-in-shadow-of-covid-19-pandemic.html.

[35] UNICEF, "Strengthening Digital Learning across Indonesia: A Study Brief."

[36] Noah Yarrow and Riaz Bhardwaj, "Indonesia's Education Technology during COVID-19 and Beyond," *World Bank*, last modified 2020, accessed December 20, 2022, https://blogs.worldbank.org/eastasiapacific/indonesias-education-technology-during-covid-19-and-beyond.

[37] Direktorat Jenderal Kependudukan dan Pencatatan Sipil Kementerian Dalam Negeri, *Dukcapil Kemendagri Rilis Data Penduduk Semester I Tahun 2022, Naik 0,54% Dalam Waktu 6 Bulan*.

[38] UNICEF, "Strengthening Digital Learning across Indonesia: A Study Brief."

In-person, remote, and hybrid. [39] After the Covid-19 splurge is under control and Indonesia is entering the new normal, hybrid learning become a more dominant as the method used in ensuring sustainable learning.[40] The term *"hybrid learning"* refers to a method of instruction that combines in-person and online learning to enhance the learning experience for students and guarantee their continued progress. [41] The major shifting to hybrid learning model, the implementation of *"Merdeka Belajar – Emancipated Learning"* program and the criticism to legal education demand the transformation of legal education in Indonesia.

In Indonesia, numerous prominent legal experts and professors are studying and concerned about the transformation of legal education. Legal education in Indonesia has heavily emphasized statutory law for decades. The 1970s were viewed as the "brilliant year" of legitimate training change where the review has started on friendly and humanistic methodology towards the law and the foundation of legitimate examinations communities in the social setting.[42] In a multi-ethnic society with a high social disparity, equal access to justice in Indonesia has been a strong concern. In Indonesia, legal development struggle to catch the agile pace of development within society, especially due to political constraint in the law making process, therefore legal education is needed to bridge the gaps between existing normative legal frameworks, the law making process and the rapid development in society.[43]

There is raising awareness among legal scholars and practitioners of the significance of closing the social justice-legal justice gap. The need of programs that raising legal literacy facilitates the equal access to justice and strengthens public participation is strongly acknowledged as the respond to the shortcomings of various programs for legal development in developing nations.

Nowadays, the transformation of legal education in Indonesia carried through various methods; one of them is *Student-Centered Learning* with interactive and reflective method. Interactive and reflective methods are embodiments of *Student Centered Learning* which open spaces for active participation of students to contribute to the learning process. [44] *Student – Centered Learning* in legal education implemented in a project which aimed at providing education to the general public and/or increasing legal awareness and empowerment in the local community as a whole or for a specific community group, for examples : public legal education such as street law, informative content and videos, webinar, research and reporting project, and volunteer.

Depending upon the project adapted, the student can gain through the involvement in legal education project is gaining broader educational advantages, such as the potential to improve their substantive legal knowledge, emotional intelligence, ethical awareness, and professional responsibility, in addition many valuable skills including designing a project, formulating lesson plan, organizing event, conducting research, team work, collaboration and verbal presentation.[45] *"Merdeka Belajar*

[39] UNESCO, "COVID-19 Response - Hybrid Learning: Hybrid Learning as a Key Element in Ensuring Continued Learning," *UNESCO, in collaboration with McKinsey and Company*, no. July (2020): 35–52.

[40] Ibid.

[41] Paolo Farah and Riccardo Tremolada, "Conflict Between Intellectual Property Rights and Human Rights: A Case Study on Intangible Cultural Heritage," *Oregon Law Review* 94, no. 1 (2016): 125–178.

[42] Otong Rosadi and Awaludin Marwan, "Transformation of Legal Education in Indonesia Based on Social Justice," *Journal of Politics and Law* 13, no. 1 (2020): 143.

[43] S Irianto, "Legal Education for The Future of Indonesia: A Critical Assessment," *The Indonesian Journal of Socio-Legal Studies* 1, no. 1 (2021), https://scholarhub.ui.ac.id/ijsls/vol1/iss1/1/%0Ahttps://scholarhub.ui.ac.id/cgi/viewcontent.cgi?article=1000&context=ijsls.

[44] Kadek Agus Sudiarawan, "Mengenal Karakteristik Clinical Legal Education : Metode Pembelajaran (Hukum) Kolaboratif Di Masa Pandemi Covid-19," *Atnews*, last modified 2022, accessed December 21, 2022, https://atnews.id/portal/news/13181.

[45] Ann Thanaraj, "Understanding How a Law Clinic Can Contribute towards Students' Development of Professional Responsibility," *RechtIdee* 16, no. 1 (2021): 88–111,

Program" through *Student - Centered Learning* expected to be the answer to contemporary criticism regarding formalism and highly theoretical legal education by providing more opportunities and freedom to expose different perspectives as well as provide students with relevant practical like critical thinking, presenting educational materials, problem solving and how to build communication with the society while participating in social justice development.

Student-Centered Learning also provide the solution for the criticism on low levels of interactivity of traditional education methodologies where teachers direct the learning process and student assume a receptive role with the implementation of teaching methods which foster a more active participations from students, placing the teacher as a facilitator of learning who provide student with opportunities to learn independently and from one another. [46] The criticism regarding conservatism teaching materials such as textbooks and regulations that are often outdated and less relevant to the development of society, solved by providing *Student-Centered Instructions* that encourage the students to broadly utilize any supporting tools in developing their project.

Student-Centered Learning has been defined most simply as an approach to learning which learners choose not only *what* to study but also *how* and *why* that topic might be of interest [47] in order to make the students find the learning process more meaningful when topics are relevant to their lives, needs and interests and when they are actively engaged in creating, understanding, and connecting to knowledge. [48] In *Student-Centered Learning*, the main initiatives and responsibilities for learning is in student, therefore, students are responsible for participating actively, positively and ethically in learning environment while the lecturer will be active in providing clear statements of relevant teaching materials, assignment and assessment requirements.

Below are the examples of Student Centered-Instruction in legal education that developed and implemented both in Law Faculty of Padjadjaran University by and Law Faculty of Pasundan University by author and co-author

https://www.academia.edu/81331597/Pelaksanaan_Program_Pemulihan_Ekonomi_Nasional_Akibat_COVID_19_Melalui_Restrukturisasi_Kredit_Perbankan.

[46] Md. Solaiman Jony, "Student Centered Instruction for Interactive and Effective Teaching Learning: Perceptions of Teachers in Bangladesh," *International Journal of Advanced Research in Education & Technology* 3, no. 3 (2016): 172–178, www.ijaret.com.

[47] C Rogers, *As a Teacher, Can I Be Myself? In Freedom to Learn for the 80s* (Ohio: Charles E. Merril Publishing Company, 1983).

[48] Office of the Deputy Vice-Chancellor (Education) and Provost, "LEARNING AND TEACHING PLAN 2000-2002," *University of Adelaide*, last modified 2002, accessed August 15, 2023, https://www.adelaide.edu.au/policies/48/all/?dsn=policy.version;field=data;id=81;m=view.

Table 1:

Student Centered-Learning (Project-Based) Instruction Model 1

- **Subject : Intellectual Property Law**

- **Task Model :**

Project – Based by small group (3 person)

- Lecturer elaborate the case related trademark and industrial design

Supporting Learning Materials:

a. The Decision of Central Jakarta District Court Number 16/Pdt.Sus-Desain Industri/2020/PN Niaga.Jkt.Pst, 08 September 2020

- **The Plaintiff :**

PT. Ayam Geprek Benny Sujono or Ayam Geprek Bensu;

- **The Defendant**

1. Ruben Samuel Onsu;

2. The Government of Republic Indonesia Cq. Ministry of Law and Human Rights Cq. Directorate General of Intellectual Property Cq. Directorate General of Copyright and Industrial Design;

b. The Decision of Supreme Court Number 594.K/Pdt.Sus-HKI/2017, 14 August 2017

- Each group choose a case related to Trademark and /or Industrial Design infringement

- **Output :**

1. **The Report of Case Study, consist of :**

Chapter I : Introduction
1 Background of the Case
2 Statement of Problem
3 Paper Systematic
4 Purpose of Study
Chapter II : Case Analysis

Chapter III : Conclusion and Suggestion

2.Info graphic that highlighted the important points of case study as the part ofstudent participations in public legal education.

Table 2:

Student Centered – Learning (Project-based) Instruction Model 2

Subject : Intellectual Property Law

Started with storytelling by Lecturer, about Intellectual Property Development taking a chapter from a book and popular movie as example :

Part 1 : The Teaching Material:

Monetization of a creative work can be done in many forms. One example of successful management of intellectual capital on a national scale is *"Filosofi Kopi" – The Coffee Philosophy"* originated from a chapter in collection of writings by Dewi Lestari under the pen name "Dee" over the span of a decade (1995-2005) which contains 18 (eighteen) story anthology titles and prose whose script was adapted into a feature film in 2015 directed by Angga Dwimas Sasongko and produced by Visinema Pictures. This film stars prominent Indonesian actor and actresses. This film won the Best Adapted Screenplay award at the 2015 Indonesian Film Festival. The sequel then released on 2017 and received 3 nominations at the 2017 Indonesian Film Festival for the categories of Best Music Director, Best Fashion Designer and Best Artistic Director.

The narration then completed with the reading from the chapter and screening of the trailer of the Movies

The monetization of *"Filosofi Kopi- The Coffee Philosophy"* does not only extend to films, but further exploration and exploitation is also carried out through Intellectual Capital & Intellectual Property Development or simply the development of business ideas that rely on intellectual assets. *"Filosofi Kopi- The Coffee Philosophy"* has also been transformed into a trademark through a Coffee Shop located in the Blok M Square Integrated Area, Melawai, Kebayoran Baru, and South Jakarta and in the Cilandak area, Pasar Minggu, South Jakarta. These two places have quickly gained popularity among coffee connoisseurs because of the strength of the narrative that has been built from the start through stories in novels and films, making consumer engagement towards *"Filosofi Kopi- The Coffee Philosophy"* quite high.

Due to its success as one of the pioneers of Indonesian coffee culture, *"Filosofi Kopi- The Coffee Philosophy"* has opened a branch in Sleman, Special Region of Yogyakarta and Bandung. Apart from branding for coffee shops, *"Filosofi Kopi- The Coffee Philosophy"* also explores branding for fashion apparel. Various models of development *"Filosofi Kopi- The Coffee Philosophy"* as an intellectual asset generates various income streams that play a very important role in determining business sustainability with a strong narrative and brand purpose, preference and partiality for local coffee which is consistently shown in novels, films and the business concept of the coffee shop itself.

The Explanation of Intellectual Property Development by the Lecturer:

From this description it can be seen how an intellectual property / asset becomes a company's core asset which is implemented into various business models through

Intellectual Property Development, which is a process to make Intellectual Property live in many mediums, in various business lines and produce various sources of income while increasing its valuation and encouraging the transformation of an intellectual property which was originally in the form of copyrights on novels to produce derivatives that range from copyrights to films to coffee shop trademarks and fashion apparel which apart from being a source of income and profits also have a broad impact, including in the provision of employment opportunities and the establishment of a coffee culture that supports national coffee products.

Brainstorming and Discussion

Student then asked to elaborate their insight and understanding on the topic of intellectual property development in a short presentation

The Assignment

The student instructed to form a small group (2-3 people) for a project to find and analyze another example of intellectual property development

The Output

Info graphic / educational video/ animation posted on their social media account

The Assessment Method

- Group Presentation
- Questions and Answer
- Discussion

Student Centered-Learning model in legal education aim to shift the model of legal education that previously more concerned to produce exclusive legal scholars with the stressing point to formalistic aspect into produce inclusive legal scholars who engage with their community, embrace their values and trained to do the critical thinking in relation to the real problems in society where injustice and inequality are visible. *Student-Centered Learning* in legal education expected to prepare the students to bear their responsibility to facilitate access to justice in their community and to positioned themselves as "problem solver" rather than merely "legal officers or law enforcers" and when they are in the position of legislators they expected to be able to import people's needs into legislation for the commonand greatest good.

Further, to optimally and effectively implement the doctrine of fair use in educational *fair use* in proportional manner as the supporting element of *"Merdeka Belajar – Emancipated Learning" and "Kampus Merdeka – Independent Campus"*program through *Student-Centered Learning* in digital media it's important to formulate the official guidelines to determine the scope and limit of educational fair use. Due to the broad and dynamic nature of education, the synergy, partnership and collaboration between government, academics and libraries in formulating both legal and digital infrastructures to

guarantee that the utilization of learning materials conducting in compliance with national and international copyright regulations is urgently needed. [49]

Finally, as the progressive approach to legal education, the implementation , development and evaluation of *"Merdeka Belajar – Emancipated Learning" and "Kampus Merdeka – Independent Campus"* program must be exercised consistently because producing the inclusive legal scholars is a huge and gradual project that not achieved by mere reference to the program or the concept, but requires collaborative effort from the participants and supporting elements in the form of adequate teaching materials and reliable digital infrastructures.

III. Conclusion

The *"Merdeka Belajar – Emancipated Learning" and "Kampus Merdeka – Independent Campus"* program is a ground-breaking initiative for Indonesia's educational system. Because Indonesia is facing a national new trend of hybrid or blended learning, learning materials, sounds, images, videos, and any text are constructed or presented digitally via the digital platform. As a result, digital infrastructure has become an essential component of e-learning and the educational system as a whole. Legal education in the age of digital learning necessitates the use of copyrighted materials as a means of transferring and articulating knowledge to a wider audience from a variety of social backgrounds in a way that is simple to comprehend.

The implementation regulations and codes of conduct are not clearly defined due to the relativity and broad possibility of educational purpose implementation in practices, despite the fact that the Indonesian Copyright Law has provided important exceptions to copyright protection for non-commercial, educational, and scientific purposes as long as they do not harm the reasonable interests of the creators or copyright holders. The transformation of legal education in Indonesia was carried out through a variety of methods; one of these is *Student-Centered Learning*, which uses an interactive and reflective approach to create opportunities for students to actively participate in the learning process. By providing students with relevant practical skills like critical thinking, presenting educational materials, problem solving, and how to build communication with society while participating in the development of social justice, the program is anticipated to be the answer to contemporary criticism. It also places the teacher in the role of facilitator of learning and gives students opportunities to learn independently and from one another.

[49] Mayana, Santika, and Win, "EDUCATIONAL FAIR USE & DIGITAL LEARNING : COMPARATIVE STUDY BETWEEN INDONESIA & MYANMAR."

References

Abidah, Azmil, Hasan Nuurul Hidaayatullaah, Roy Martin Simamora, Daliana Fehabutar, and Lely Mutakinati. "The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of 'Merdeka Belajar.'" *Studies in Philosophy of Science and Education* 1, no. 1 (2020): 38–49.

Akbari, Taufan Teguh, and Rizky Ridho Pratomo. "Higher Education Digital Transformation Implementation in Indonesia during the COVID-19 Pandemic." *Jurnal Kajian Komunikasi* 10, no. 1 (2022): 52.

Bayhaqi, Ahda. "Jokowi Sebut Program Studi Di Kampus Hanya Relevan Sampai Lima Tahun." *Merdeka*. Jakarta, March 11, 2022. https://www.merdeka.com/peristiwa/jokowi-sebut-program-studi-di-kampus-hanya-relevan-sampai-lima-tahun.html.

Bayu, Dimas. "APJII: Pengguna Internet Indonesia Tembus 210 Juta Pada 2022." *DataIndonesia.Id*. Last modified 2022. Accessed December 15, 2022. https://dataindonesia.id/digital/detail/apjii-pengguna-internet-indonesia-tembus-210-juta-pada-2022.

Bebbington, Warren. "Leadership Strategies for a Higher Education Sector in Flux." *Studies in Higher Education* 46, no. 1 (2021): 158–165. https://www.tandfonline.com/doi/epdf/10.1080/03075079.2020.1859686?needAccess=true&role=button.

Direktorat Jenderal Kependudukan dan Pencatatan Sipil Kementerian Dalam Negeri. *Dukcapil Kemendagri Rilis Data Penduduk Semester I Tahun 2022, Naik 0,54% Dalam Waktu 6 Bulan*. Jakarta, 2022. https://dukcapil.kemendagri.go.id/berita/baca/1396/dukcapil-kemendagri-rilis-data-penduduk-semester-i-tahun-2022-naik-054-dalam-waktu-6-bulan#:~:text=Jakarta - Ditjen Dukcapil Kementerian Dalam,tercatat sebanyak 275.361.267 jiwa.

Farah, Paolo, and Riccardo Tremolada. "Conflict Between Intellectual Property Rights and Human Rights: A Case Study on Intangible Cultural Heritage." *Oregon Law Review* 94, no. 1 (2016): 125–178.

Helen Stacey. *Postmodernism and Law: Jurisprudence in a Fragmenting World*. Ashgate, 2001.

Indonesia Baik & Kominfo. "G20pedia." *G20pedia* (2022): 1–29. https://research.ui.ac.id/research/wp-content/uploads/2022/02/G20pedia.pdf.

Irianto, S. "Legal Education for The Future of Indonesia: A Critical Assessment." *The Indonesian Journal of Socio-Legal Studies* 1, no. 1 (2021). https://scholarhub.ui.ac.id/ijsls/vol1/iss1/1/%0Ahttps://scholarhub.ui.ac.id/cgi/viewcontent.cgi?article=1000&context=ijsls.

Istanto, Freddy H. "Jokowi Appoints Nadiem Makarim as Education Minister. Can the Gojek Co-Founder Streamline Bureaucracy in Education?" *The Jakarta Post*. Jakarta, October 24, 2019. https://www.thejakartapost.com/academia/2019/10/24/jokowi-appoints-nadiem-makarim-as-education-minister-can-the-gojek-co-founder-streamline-bureaucracy-in-education.html.

Jonathans, Peggy Magdalena, and Yakob Metboki. "Reflecting on EFL Digital Learning in Indonesia : Seeking for E-Learning Reflecting on EFL Digital Learning in Indonesia : Seeking for E-Learning Pedagogy." In *Proceeding of International Seminar on Language, Education, and Culture (ISoLEC 2021)*, 2022.

https://www.researchgate.net/publication/357509578_Reflecting_on_EFL_Digital_Learning_in_Indonesia_Seeking_for_E-Learning_Pedagogy.

Jony, Md. Solaiman. "Student Centered Instruction for Interactive and Effective Teaching Learning: Perceptions of Teachers in Bangladesh." *International Journal of Advanced Research in Education & Technology* 3, no. 3 (2016): 172–178. www.ijaret.com.

Juwana, Hikmahanto. "Legal Education Reform in Indonesia." *Asian Journal of Comparative Law* 1, no. 1 (2006). https://doi.org/10.2202/1932-0205.1016.

Kementerian Pendidikan dan Kebudayaan. *Merdeka Belajar : Kampus Merdeka*. Jakarta: Kementerian Pendidikan dan Kebudayaan, 2020. http://merdekabelajar.kemdikbud.go.id/upload/file/102_1638183493.pdf.

Kementerian Pendidikan Kebudayaan Riset dan Teknologi. *Statistik Pendidikan Tinggi*. Jakarta: Kementerian Pendidikan Kebudayaan Riset dan Teknologi, 2020.

Mayana, Ranti Fauza, Tisni Santika, and Yin Yin Win. "EDUCATIONAL FAIR USE & DIGITAL LEARNING : COMPARATIVE STUDY BETWEEN INDONESIA & MYANMAR." *Litigasi* 23, no. 2 (2022): 217–233. https://journal.unpas.ac.id/index.php/litigasi/article/view/5181.

Mayana, Ranti Fauza, Yin Yin Win, and Tisni Santika. "The Legal Concept of Educational Fair Use: A Comparative Study on International Compliance between Indonesia & Myanmar Copyright Law." *NTUT Journal of Intellectual Property Law and Management* 11, no. 1 (2022): 75–88. https://iip.ntut.edu.tw/var/file/92/1092/img/Vol11_No1.pdf.

Office of Assistant to Deputy Cabinet Secretary for State Documents & Translation. "President Jokowi Calls On Rectors To Facilitate Students To Learn From Experts." *Cabinet Secretary of The Republic of Indonesia*. Last modified 2020. Accessed December 13, 2022. https://setkab.go.id/en/president-jokowi-calls-on-rectors-to-facilitate-students-to-learn-from-experts/.

Office of the Deputy Vice-Chancellor (Education) and Provost. "LEARNING AND TEACHING PLAN 2000-2002." *University of Adelaide*. Last modified 2002. Accessed August 15, 2023. https://www.adelaide.edu.au/policies/48/all/?dsn=policy.version;field=data;id=81;m=view.

Pertiwi, Amalia Dwi, Siti Aisyah Nurfatimah, and Syofiyah Hasna. "Menerapkan Metode Pembelajaran Berorientasi Student Centered Menuju Masa Transisi Kurikulum Merdeka." *Jurnal Pendidikan Tambusai* 6, no. 2 (2022): 8839–8848. https://jptam.org/index.php/jptam/article/view/3780.

Rogers, C. *As a Teacher, Can I Be Myself? In Freedom to Learn for the 80s*. Ohio: Charles E. Merril Publishing Company, 1983.

Rosadi, Otong, and Awaludin Marwan. "Transformation of Legal Education in Indonesia Based on Social Justice." *Journal of Politics and Law* 13, no. 1 (2020): 143.

Sihombing, Adison Adrianus, Santi Anugrahsari, Nining Parlina, and Yuliana Saridewi Kusumastuti. "Merdeka Belajar in an Online Learning during The Covid-19 Outbreak: Concept and Implementation." *Asian Journal of University Education* 17, no. 4 (2021): 35–48. https://files.eric.ed.gov/fulltext/EJ1328612.pdf.

Sudiarawan, Kadek Agus. "Mengenal Karakteristik Clinical Legal Education : Metode Pembelajaran (Hukum) Kolaboratif Di Masa Pandemi Covid-19." *Atnews*. Last modified 2022. Accessed

December 21, 2022. https://atnews.id/portal/news/13181.

Susanto, Anthon Freddy, Rosa Tedjabuwana, Hesti Septianita, and Mohammad Alvi Pratama. "Pendidikan Hukum Di Era Digitalisasi." *Litigasi* 23, no. 2 (2022): 234–252. https://journal.unpas.ac.id/index.php/litigasi/article/view/6216/2509.

Thanaraj, Ann. "Understanding How a Law Clinic Can Contribute towards Students' Development of Professional Responsibility." *RechtIdee* 16, no. 1 (2021): 88–111. https://www.academia.edu/81331597/Pelaksanaan_Program_Pemulihan_Ekonomi_Nasional_Akibat_COVID_19_Melalui_Restrukturisasi_Kredit_Perbankan.

UNESCO. "COVID-19 Response - Hybrid Learning: Hybrid Learning as a Key Element in Ensuring Continued Learning." *UNESCO, in collaboration with McKinsey and Company*, no. July (2020): 35–52.

UNICEF. "Strengthening Digital Learning across Indonesia: A Study Brief." *Unicef* (2020): 1–14. https://blogs.worldbank.org/eastasiapacific/COVID-19-and-learning-inequities-indonesia-four-ways-bridge-gap%0Ahttps://www.unicef.org/indonesia/media/10531/file/Strengthening Digital Learning across Indonesia: A Study Brief.pdf.

Variyan, George, and Agus Mutohar. "Reimagining Education in Shadow of COVID-19 Pandemic." *The Jakarta Post*. Melbourne, October 3, 2020. https://www.thejakartapost.com/academia/2020/10/02/reimagining-education-in-shadow-of-covid-19-pandemic.html.

Yamin, Muhammad, and Syahrir Syahrir. "Pembangunan Pendidikan Merdeka Belajar (Telaah Metode Pembelajaran)." *Jurnal Ilmiah Mandala Education* 6, no. 1 (2020): 126–136. https://ejournal.mandalanursa.org/index.php/JIME/article/view/1121/1067.

Yarrow, Noah, and Riaz Bhardwaj. "Indonesia's Education Technology during COVID-19 and Beyond." *World Bank*. Last modified 2020. Accessed December 20, 2022. https://blogs.worldbank.org/eastasiapacific/indonesias-education-technology-during-covid-19-and-beyond.

Zubaidah, Neneng. "Nadiem Paparkan Program Merdeka Belajar Di Education Working Group G20." *Sindonews.Com*. Jakarta, May 19, 2022. https://edukasi.sindonews.com/read/774063/212/nadiem-paparkan-program-merdeka-belajar-di-education-working-group-g20-1652965532?showpage=all.

"6 Ribuan Sekolah Ditutup Akibat Pandemi Corona Covid-19." *Liputan6.Com*. Jakarta, May 20, 2020. https://www.liputan6.com/news/read/4259413/6-ribuan-sekolah-ditutup-akibat-pandemi-corona-covid-19.

Digital Innovations in the Legal Mechanism of Copyright Authentication (Practical Aspect): Can A Non-Functioning Token Be a Guarantor of Intellectual Property? (NFT on the Example of Ukraine)

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Abstract

Digital objects, owing to their capacity for cost-free replication and widespread utilization, have witnessed a gradual erosion of value. This phenomenon has underscored the pressing need to address intrinsic quandaries within the digital landscape, particularly those pertaining to ownership and remuneration. In this regard, the emergence of Non-Fungible Token (NFT) technology has assumed a pivotal role as a catalyst for ameliorating these longstanding issues.

This study endeavors to scrutinize the legal attributes inherent in NFT agreements within the context of their utilitarian potential in the resolution of disputes concerning the ownership of assets duly certified by these tokens through smart contracts. As an illustrative case study, the investigation posits an examination of the tokenization of postage stamp rights, assessing its legal viability with reference to the legislative initiative put forth by Ukraine in 2022.

It is imperative to underscore that the acquisition of an asset, such as a work of art, through an NFT transaction does not ipso facto entail the transfer of copyright or other specialized entitlements to the NFT holder, unless such a transfer is explicitly and comprehensively formalized within the bounds of a smart contract. The fundamental nature of rights associated with NFT objects remains a matter of contention. In this discourse, it is judicious to uphold the conventional understanding of property rights as a means of adjudicating disputes involving NFTs. This approach enables us to infer the relative legality of NFT transactions within the framework of consensual property rights transfer, and, under specific conditions, within the realm of casual transfers, while categorically precluding their permissibility under an abstract property rights framework.

In essence, an NFT, within the narrow parameters defined by the involved parties, functions as a cryptographic certificate or patent validating the authenticity of a specific digital object, instantiated in the form of an NFT. This certificate possesses the legal potential to serve as probative evidence of ownership in a legal proceeding. Notably, Ukraine's legislative initiative in 2022 seeks to codify the concept of a "digital postage stamp" as a digital facsimile of a postage stamp image, designed to ascertain its rightful possessor. This initiative holds the potential to set a legal precedent for the utilization of NFT technology at the governmental level in the determination of ownership within the virtual domain.

Keywords: intellectual property, right of ownership, smart contract, tokenized asset, cryptocurrency.

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I. Introduction

Our contemporary environment is replete with intellectual property, manifested through the medium of websites, literary works, cinematic and televised productions, and the distinctive branding associated with our attire and sustenance. Notably, intellectual property, particularly in its digital incarnation, confronts a heightened state of susceptibility, being susceptible to uncompromising utilization, duplication, or deployment without requisite authorization. Consequently, there exists a burgeoning imperative to establish robust property rights pertaining to virtual entities as an instrumental mechanism for countering infringements within the realm of intellectual property, notably copyright, within the unique context of the virtual sphere.

Non-Fungible Tokens (NFTs) represent a relatively obscure and rapidly evolving phenomenon, underpinned by their technological framework, with the inherent capability to validate proprietary rights. Notably, NFTs introduce an intriguing paradigm for the preservation of intellectual property. Their emergence has broadened the parameters of digital assets, extending the encompassment of these assets beyond the realm of digital currency[2]. Effectively, NFTs encapsulate various distinctive assets within the category of digital collections[3]. In the context of China, NFTs are commonly referred to as digital collections, while Alibaba classifies them as virtual digital commodities. [4]

This advancement exemplifies the characteristics of modern blockchain-centered remedies, serving as a topic of intense deliberation not exclusively in the sphere of commercial networking platforms and governmental forums, but also within the realm of scholarly investigation. A multitude of interested parties actively contribute to the creation of Non-Fungible Tokens (NFTs), with some enthusiastically participating in auctions and others awaiting their opportunity for procurement. Nevertheless, a subset of individuals maintains reservations pertaining to the perceived efficacy and conceivable fraudulent activities linked with NFTs.[5]

This pioneering innovation represents a contemporary blockchain-based solution that engenders vigorous discourse not solely within the spheres of commercial networking platforms and governmental corridors, but also garners significant attention within academic research circles. A diverse array of stakeholders are actively engaged in the creation of Non-Fungible Tokens (NFTs), with some individuals enthusiastically participating in auctions and others patiently awaiting their turn for procurement. Nevertheless, a subset of individuals harbors reservations concerning the perceived utility and potential fraudulent practices associated with NFTs.

NFTs, being an integral facet of the cryptocurrency domain, grapple with analogous challenges, notably the issues of pronounced volatility and security concerns [6]. A significant proportion of projects launched in 2021 experienced a decline in 2022 [7], attributed in part to factors such as the rise in interest

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[2] Michael Dowling, *Is Non-Fungible Token Pricing Driven by Cryptocurrencies?*, 44 FINANCE RESEARCH LETTERS 102097 (2022); Qin Wang et al., *Non-Fungible Token (NFT): Overview, Evaluation, Opportunities and Challenges*, (2021), http://arxiv.org/abs/2105.07447 (last visited Apr 11, 2023).

[3] Seyed Mojtaba Hosseini Bamakan et al., *A Decentralized Framework for Patents and Intellectual Property as NFT in Blockchain Networks*, (2021), https://www.researchsquare.com/article/rs-951089/v1 (last visited Apr 11, 2023).

[4] Dandan He et al., *The Development of Digital Collection Platform under Responsible Innovation Framework: A Study on China's Non-Fungible Token (NFT) Industry*, 8 JOURNAL OF OPEN INNOVATION: TECHNOLOGY, MARKET, AND COMPLEXITY 203 (2022).

[5] *Id.*

[6] Will Canny, *Morgan Stanley Says NFTs Next to Watch After UST Collapse*, (2022), https://www.coindesk.com/business/2022/05/16/morgan-stanley-says-nfts-next-to-watch-after-ust-collapse/ (last visited Apr 8, 2023).

[7] Zaghum Umar et al., *The Return and Volatility Connectedness of NFT Segments and Media Coverage: Fresh Evidence Based on News About the COVID-19 Pandemic*, 49 FINANCE RESEARCH LETTERS 103031 (2022).

rates by the US Federal Reserve and disruptive incidents involving Terra's LUNA platform and the FTX exchange. [8]

Data from NFTGO indicates a substantial decline in the aggregate volume of NFTs during May 2022, contracting by more than 50% from $57.5 billion to $27.35 billion [9]. Concurrently, despite an increase in the number of OpenSea users during the same period, the sales volume decreased from 86.39 million to 23.74 million [10].

In a notable case, the NFT associated with Jack Dorsey's inaugural tweet on Twitter, which was sold for nearly $3 million in March 2021, was offered for auction by Sine Estawi, CEO of the Malaysian blockchain company Bridge Oracle in 2022. However, it failed to garner offers exceeding $14,000 and remained unsold. [11]

The NFT market is poised to undergo further evolution, with a growing number of individuals and organizations exploring its potential applications across diverse industries. Concurrently, regulatory scrutiny of NFTs is expected to intensify, which could impact their development and expansion [12]. Consequently, as NFTs gain broader adoption, akin to the early days of cryptocurrencies, they are likely to attract heightened regulatory attention. The degree of regulation may initially diverge from one country to another, with some nations fostering favorable conditions for NFTs while others may choose to impose outright prohibitions [13].

The issue of securing ownership rights for postage stamps in their capacity as artistic objects has long been a subject of consideration, especially in the context of recent advancements in digital technologies. The advent of information and communication technologies has brought about innovation and stability to the field of philately, making fundamental expertise in stamp collection easily accessible, efficient, and cost-effective through the medium of the Internet.

To preserve the historical significance of postage stamps as representations of postal heritage and national historical documents, digitization projects hosted on library websites are leading the charge, offering high-quality scans and identification data. This aligns with the broader initiative to establish "digital libraries" aimed at conserving art, culture, and heritage. Notably, Ujwala Anil Nawlakhe and Mangala Anil Hirwade's research highlights the role of philatelic libraries as custodians of art, culture, and heritage. Among the assessed libraries, 76% publish their philatelic periodicals, 57% document

[8] Anthony Clarke, *7 Biggest Crypto Collapses of 2022 the Industry Would like to Forget*, COINTELEGRAPH (2022), https://cointelegraph.com/news/7-biggest-crypto-collapses-of-2022-the-industry-would-like-to-forget (last visited Apr 8, 2023); Sean J. Coughlin & Akum K. Singh, *A Look at the Cryptocurrency Collapse of 2022: Part 1*, BRESSLER 1 (2023), https://www.bressler.com/publication-1310 (last visited Apr 8, 2023); David Gura, *2022 Was the Year Crypto Came Crashing down to Earth*, NPR, Dec. 29, 2022, https://www.npr.org/2022/12/29/1145297807/crypto-crash-ftx-cryptocurrency-bitcoin (last visited Apr 8, 2023).

[9] Byterum, *Global NFT Market Overview*, NFTGO.IO (2022), https://nftgo.io (last visited Apr 8, 2023).

[10] OpenSea, DAPPRADAR (2023), https://dappradar.com/multichain/marketplaces/opensea/ (last visited Apr 8, 2023); OpenSea monthly active traders (Ethereum), OPENSEA (2023), https://dune.com/queries/37674/74643 (last visited Apr 7, 2023).

[11] Meghan Bobrowsky, *Jack Dorsey Tweet NFT Once Sold for $2.9 Million, Now Might Fetch Under $14,000*, WALL STREET JOURNAL, Apr. 16, 2022, https://www.wsj.com/articles/jack-dorsey-tweet-nft-once-sold-for-2-9-million-now-might-fetch-under-14-000-11650110402 (last visited Apr 8, 2023).

[12] What will happen with NFT in 2023 — Bitmedia Blog, BITCOIN ADVERTISING NETWORK – START BITCOIN ADS TODAY (Feb. 3, 2023), https://bitmedia.io/blog/nft-future-2023 (last visited Apr 7, 2023).

[13] Dominic Chalmers et al., *Beyond the Bubble: Will NFTs and Digital Proof of Ownership Empower Creative Industry Entrepreneurs?*, 17 JOURNAL OF BUSINESS VENTURING INSIGHTS e00309 (2022).

their collections through indices, bibliographies, glossaries, and reference materials, and 86% maintain catalogs of their resources. [14]

Professor Vaishali Khaparde's work, "Postage Stamps and Digital Philately in Europe" (2020), provides an evaluation of the World Association for the Development of Philately (WADP), which offers a free numbering system (WNS) for authentic postage stamps issued by member countries and territories, notably European nations. The document underscores the transformative influence of information technology on the hobby of stamp collecting, evolving it into digital philately. The development of information and communication technology further accelerates the transition into virtual philately, thereby preserving postage stamps as records of postal heritage and national origin. [15]

The Universal Postal Union (referred to as DPG) has initiated a blockchain project within its POST (DPG) group, aiming to establish a digital marketplace for the placement, trade, and tracking of crypto stamps. This project is endorsed by STAMPSDAQ, a startup specializing in the creation, development, and operation of a digital token marketplace employing blockchain technology for transactions encompassing the issuance, trade, collection, and payment for crypto tokens. The primary objective of DPG, comprising approximately 40 members representing postal services and private companies globally, is to promote innovation and the integration of digital postal services. [16]

Paul Donohoe, the Head of Digital Economy and Trade at DPG, underscores the transformative impact of the crypto stamp market, opening up the realm of postal collections to a novel demographic and introducing them to the digital sphere. He delineates a work plan comprising three principal areas of focus: technical construction of a blockchain for cryptocurrencies and the establishment of a unified marketplace, resolution of pertinent political and legal issues to ensure the security of the blockchain for all postal member countries within the DPG, and the inception of the first crypto stamp and the introduction of postal services offering their own crypto stamps to the market. [17]

Aim and Methodology. During the course of a comprehensive literature review, a noticeable research void has come to our attention concerning the lawful utilization of Non-Fungible Tokens (NFTs) within the context of current or impending intellectual property (copyright) legislation. Specifically, this gap pertains to the elucidation of the rights held by contemporary NFT token holders, who serve as certifiers of intellectual property rights (particularly copyrights), and the practical application of these rights in the context of contentious situations where they seek to assert their claims.

On one hand, the predominant body of scholarly investigations tends to assert, often without an established regulatory framework, that NFT tokens, in various interpretive forms, unreasonably affirm property rights, encompassing intellectual property rights like copyrights.

On the other hand, a minority of studies that do acknowledge the fact that NFT tokens currently lack the capacity for official ownership validation fail to address the fundamental inquiry: What legal relevance do NFT tokens possess as a mechanism for safeguarding the interests of their owners, within the absence of a regulated framework?

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[14] Ujwala Anil Nawlakhe & Mangala Anil Hirwade, *Study of Worldwide Philatelic Libraries*, 20 WORLD LIBRARIES (2013), https://worldlibraries.dom.edu/index.php/worldlib/article/view/435 (last visited Apr 9, 2023).

[15] Rohini Giridhari Landge & Vaishali Khaparde, *Postage Stamps and Digital Philately of Europe Countries*, 40 LIB. PROG. 12 (2020).

[16] UPU's blockchain project brings philately into the digital world, (2020), https://www.upu.int/en/News/2020/12/UPU%E2%80%99s-blockchain-project-brings-philately-into-the-digital-world (last visited Apr 8, 2023).

[17] POST Group, POST, https://www.upu.int/en/Universal-Postal-Union/About-UPU/Cooperatives-Boards/-POST-Group (last visited Apr 8, 2023).

This concern is salient because individuals who hold NFT tokens, under the assumption that they represent tangible assets, may endeavor to systematically transact these tokens. This scenario raises at least two pivotal legal inquiries: 1) Can the seller assert valid ownership of the assets endorsed by the NFT when offering them for sale? 2) If the seller indeed possesses ownership rights, as in the case of an artist's initial sale, does the transfer of the NFT token also entail the transfer of copyright for the certified object?

These issues necessitate adjudication within property law, aiming to clarify whether the NFT token holder genuinely obtains ownership rights and whether the mechanisms for transferring ownership are congruent with the decentralized blockchain environment. As our assessment indicates, in the vast majority of instances, there is an absence of a legal framework addressing the issues we have raised. In cases where regulatory frameworks do exist, they may still be in the process of development or altogether neglected by governmental authorities.

This study, in particular, endeavors to explore the legal character of NFT tokens, encompassing the potential functions they may serve in the context of resolving property rights disputes within the prevailing legal void.

Furthermore, as an illustrative case study, this research proposes an examination of the tokenization of postage stamp rights and assesses its legal viability, using a legislative initiative within a European nation - Ukraine - as an exemplar. Ukraine introduced a legislative initiative at the close of 2022 aimed at tokenizing the ownership of digital postage stamps, thereby offering a pragmatic case for our analysis.

This is an interdisciplinary study involving legal studies, information sciences and legal informatics. This paper draws insights from a variety of sources: (1) technical reports and technical documents from projects such as Ethereum and similar blockchain platforms; (2) academic articles; and (3) interviews posted in public sources. Last but not least, the paper is based on the author's empirical experience gained during three years of research on the topic, which included attending conferences, workshops and meetings within the blockchain industry and academia. An interpretive approach was used to explore this persistent issue, which is under-researched. The methodological basis of the study includes a combination of philosophical, general scientific and special legal methods of scientific knowledge. The following system of methods of scientific cognition was used in the course of the study: general scientific - deduction and induction, synthesis and analysis, scientific abstraction, analogy, analytical and dialectical, systematic approach; special - legal methods of cognition, such as formal legal, legal forecasting, retrospective and comparative legal method, method of comparison, systemic and structural; methodological substantiation of the essence, nature and structure of the terminology which is the object of the study. The chosen research methodology meets the tasks set and contributes to the creation of an optimal structure of the conclusions obtained and allowed to identify the main problems.

Limitations of the Study. The study examines only the theoretical basis for confirming ownership of virtual objects with the help of NFT. The study does not address the transfer of ownership of tangible objects (real estate, land, etc.) using NFTs. This paper does not address the issues related to countering money laundering with the help of NFTs.

II. Theoretical Principles of Legal Regulation of Intellectual Property (Copyright)

Intellectual property laws and their associated enforcement mechanisms are encountering escalating challenges within the context of a global economy undergoing rapid digital transformation. In particular, copyright laws, a subset of intellectual property regulations, necessitate adaptation to the

dynamics of the digital economy, striking an equitable equilibrium between the interests of creators and those of intermediaries. [18]

It is imperative to acknowledge that the NFT-driven concept of "ownership" is still in the nascent stages of integration within the legal frameworks of various nations. Consequently, it constitutes an emerging and evolving sphere of jurisprudence. [19]

Professor Sylvia Kierkegaard emphasizes the paramount significance of drawing upon international conventions, with a particular focus on the Berne Convention and the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement, as these conventions serve as pertinent benchmarks in the realm of copyright law. The Berne Convention stipulates a comprehensive range of rights for authors, encompassing reproduction, performance, broadcasting, translation, adaptation, cinematography, as well as translation and cinematographic rights.

It is worth noting that copyright systems can be categorized into two distinct models: 1) the Anglo-American copyright system; 2) the Continental European copyright system, grounded in natural law principles.[20] Copyright, as a whole, predominantly revolves around economic interests, primarily vested in producers or owners at large. Its origin lies not in the personal creative pursuits of the author, but rather in a framework designed to incentivize state engagement within the realms of academia, artistry, and economics, facilitating the utilization of the resulting outcomes.

As articulated in Article III of the Universal Copyright Convention (UCC), there are no specific formalities to contend with, and copyright protection takes effect upon the creation of a work, as delineated in Article 6 of the UCC. With regard to computer programs, Article 7 of the Rules for the Protection of Computer Programs outlines that the owner of a copyright in a computer program has the option to register with a recognized computer program registration institution under the aegis of the Copyright Administration Department of the State Council. The registration certificate issued by the software registration institution serves as preliminary evidence of the registered works. It is noteworthy that the current legislation, in contrast to the 1991 Software Implementation Rules, does not mandate registration. However, it allows for registration as a potential means to facilitate evidentiary aspects in legal disputes.

A. NFT In the Context of US Copyright (For Example, In Court Decisions)

The copyright framework in the United States bestows upon copyright proprietors five distinct exclusive rights, encompassing reproduction, distribution, adaptation, performance, and display, as delineated in Article 106 of the U.S. Copyright Act.

The disposition of physical works protected by copyright is governed by 17 U.S.C. § 109, specifically the first sale doctrine, which obviates the necessity of obtaining permission from the artist. However, a significant ruling was pronounced in 2001 by the U.S. Copyright Office, contending that the concept of first digital sale (17 U.S.C. § 109) is inapplicable due to the intrinsic nature of digital works as copies (U.S. Copyright Office, DMCA Section 104 Report (2001)). Subsequently, in 2013, a similar interpretation was affirmed in the legal case of Capitol Records LLC v. ReDigi Inc. (Capitol Records LLC v. ReDigi Inc., 934 F. Supp. 2d 640 (S.D.N.Y. 2013)). It is vital to emphasize that

[18] Severin Bonnet & Frank Teuteberg, *Impact of Blockchain and Distributed Ledger Technology for the Management of the Intellectual Property Life Cycle: A Multiple Case Study Analysis*, 144 COMPUTERS IN INDUSTRY 103789 (2023).
[19] Catherine Flick, *A Critical Professional Ethical Analysis of Non-Fungible Tokens (NFTs)*, 12 JOURNAL OF RESPONSIBLE TECHNOLOGY 100054 (2022).
[20] New challenges for copyright protection – Co-Reach in IPR in New Media Workshop II, 27 COMPUTER LAW & SECURITY REVIEW 416 (2011).

copyright law stipulates that a work must possess tangible or physical attributes to be covered by the first sale doctrine [21].

Under the purview of copyright law, it is permissible to transfer any or all of the exclusive rights vested in a copyright owner. However, such a transfer generally necessitates written documentation duly signed by the owner of the transferred rights or an agent authorized by the owner, as articulated in 17 U.S.C. § 204(a) (2018). It is essential to acknowledge that the conveyance of rights on a non-exclusive basis does not mandatorily require a written agreement, and a non-exclusive license to operate is exempted from the provisions of 17 U.S.C. § 204(a). Such a grant of a non-exclusive license may be oral or inferred through conduct. Additionally, the transfer of copyright ownership can be registered with the Copyright Office, in accordance with 17 U.S.C. § 205(a).

An intriguing legal development emanated from the case of In re Avalon Software Inc., where the court invoked precedent from numerous cases and concluded that a security interest in copyright attains perfection solely through filing with the Copyright Office (In re Avalon Software Inc., 209 B.R. 517 (Bankr. D. Ariz. 1997)). Furthermore, the court articulated that the ultimate perfection depends on the registration of the work (Id. at 522). However, the Ninth Circuit Court of the United States deemed this position untenable in the context of unregistered copyrights. The Ninth Circuit Court opined that security interests in registered copyrights achieve perfection solely through the submission of an application to the Copyright Office. A noteworthy facet of the court's judgment was its assertion that the perfection of unregistered copyrights is subject to state law (In re World Auxiliary Power Co., 303 F.3d 1120, 1128 (9th Cir. 2002)).

In essence, the legal debate pertaining to copyright in the United States has recently centered on the following key aspects: 1) The transfer of non-exclusive rights does not necessitate a written agreement; 2) The transfer of exclusive rights mandates a written agreement; 3) Registration with the Copyright Office is obligatory when the copyright was originally registered with the same office.

Within the context of U.S. copyright law, possession takes precedence over the filing of registration with the Copyright Office. Consequently, the utilization of Non-Fungible Tokens (NFTs) as evidence of ownership for virtual assets presently lacks efficacy in the United States. This is chiefly due to the challenges associated with ascertaining the unique identity of digital assets, such as digital images, and the difficulty of moving them to a repository without the assurance of multiple identical copies. This hinders the application of the aforementioned principle of U.S. copyright law and precludes the utilization of the first digital sale doctrine (17 U.S.C. § 109). The sole recourse for NFT owners in the United States is to register, with the Copyright Office, objects authenticated by NFT tokens.

B. Copyright Protection in China

In 2006, China introduced the Regulation on the Protection of the Right to Communicate in Information Networks. This regulation draws its foundation from two key sources: 1) the U.S. Digital Millennium Copyright Act of 1998; 2) the EU Directive 2001/29/EC, which pertains to the harmonization of specific aspects of copyright within the information society.

Within the Copyright Law, a comprehensive spectrum of copyright privileges is delineated. Some of these rights align with the provisions of the Berne Convention, particularly encompassing the rights of reproduction, performance, broadcasting, translation, adaptation, cinematography, in addition to the

[21] R. Anthony Reese, *The First Sale Doctrine in the Era of Digital Networks*, (2003), https://papers.ssrn.com/abstract=463620 (last visited Apr 12, 2023).

rights of translation and cinematographic expression. Moreover, there exist other rights, including distribution, display, compilation, film exhibition, and transmission through information networks.

Obtaining a license or purchasing a copyright may be accomplished by entering into a contractual agreement with the copyright owner. The license or purchase is effective immediately upon execution of the contract and does not require registration with any government agency, unless the nature of the work falls within the scope of certain restricted technologies. The Copyright Act contains a list of twelve acts that constitute fair use. The types of acts that are considered fair use in China are similar to those in Europe. In addition, the Copyright Law allows certain types of works to be used without permission as long as royalties are paid to the copyright owner. China's copyright law protects against the distribution of a work on information networks without permission or remuneration. In addition, technological protection measures may be used to restrict unauthorized access to copyrighted works, including software and audio and video recordings. China also recognizes the secondary liability of ISPs for copyright infringement. A copyright holder may request an ISP to disable links or access to allegedly infringing works or products hosted on the ISP's network. If the ISP complies, it will not be liable for secondary infringement. However, if the ISP knew or should have known that the allegedly infringing works or products constituted infringement, the ISP would remain subject to secondary liability for the underlying infringement.

C. Peculiarities of Copyright Law: Other Countries

Under the purview of German copyright legislation, the recognized term for the holder of copyright is the "creator" of a work, as outlined in Article 7 of the German Copyright Act (CA). This legal construct denotes the absence of a conventional "owner" of copyright. Furthermore, German law adheres to the "Scho¨pferprinzip," or the creator principle, which stipulates that only natural persons can be acknowledged as authors, while legal entities may only attain copyright through inheritance, as specified in Article 28 of the German CA.

In the context of French copyright law, it is essential to note that the property right associated with copyright, vested in the author, encompasses the rights of performance and reproduction, as articulated in L. 122-1, 122-2, and 122-3 of the Intellectual Property Code of France. [22]

III. Some Issues of The Legal Nature of Transactions with NFT And Its Current Practical Use as A Legal Tool for The Protection of Rights

Historically, dating back to the Roman law era, civil rights have conventionally been classified into "in rem" and "ad personam" rights. The "in rem" right is one that is enforceable against the entire world, thus it holds validity against all individuals in a general sense, a concept referred to as "erga omnes."

The nature of the right associated with Non-Fungible Tokens (NFTs) assumes a pivotal role in shaping its legal framework, especially when addressing disputes in the existing regulatory vacuum. When couched in the context of the civil law tradition, this signifies that the right extends beyond being merely personal, involving interactions between specific individuals (relative). Instead, it exhibits an inherent "presence," being enforceable against all others or, at the very least, a significant and substantial group of third parties (absolute).

This is commonly referred to as a "right in rem" in civil law parlance. It's important to note that this characterization emphasizes that the essence of the right is not the identification of a specific

[22] New challenges for copyright protection – Co-Reach in IPR in New Media Workshop II, *supra* note 19.

person with an obligation but rather the focus is on the object itself. However, it's worth highlighting that this description is essentially a turn of phrase, as objects are not imbued with duties; duties are intrinsic to individuals. What this expression conveys is that the right is directed against a potentially unlimited and unidentified collective of other parties who are obliged to refrain from infringing upon the specified object. Comparative analysis also reveals that the number and nature of property rights tend to be constrained, even though this isn't an absolute rule but rather a guiding principle. [23] [24]

The scope of objects over which one can assert ownership rights is similarly circumscribed, and these limitations are delineated in both the number and character of rights. The nature of the object qualifies the right of ownership, a concept referred to as the "numerus clausus" of legal objects. [25]

For instance, the most comprehensive right associated with land pertains to absolute fee simple ownership, while the most comprehensive right pertaining to movable property is the right of title, often equated with the concept of "strongest possession."

Intellectual property introduces distinctions based on the manner in which human creativity is expressed, yielding rights such as copyright (authorship) and patent holder rights, among others. In line with the "numerus clausus" principle for property rights and objects of right, property law stipulates that only specific categories of individuals may assume the role of right holders. The eligible subjects of property rights encompass natural or legal persons within the jurisdiction. This applies to both those who may serve as the subjects of property rights (the right holders) and those against whom property rights may be asserted (the debt holders). [26]

The precise nature of the rights associated with NFT objects, namely tokens, remains an area of ambiguity and contention. The fundamental question revolves around whether tokens represent rights "in rem" (erga omnes) or "ad personam" (ad personam) rights.

In light of the absence of a comprehensive academic or logically coherent explanation regarding the novel legal character of tokens, it would be prudent to adhere to the conventional understanding of property rights when addressing disputes.

As of the present, it is reasonable to assert that NFTs are legal documents rather than rights in the traditional legal sense [27]. "Ownership" of crypto art, for instance, does not confer any substantive rights beyond the ability to claim ownership of the work. It does not encompass ownership of copyright, the issuance of a physical certificate, or exclusivity in viewing the image online. Instead, it amounts to a record in the public blockchain database signifying purported ownership of the work, often linked to a specific URL [28].

A. The Constitutional Foundations and Principles of Transfer of Property Rights Vary from Country to Country

[23] B. Akkermans, *The Principle of Numerus Clausus in European Property Law*, 2008, https://cris.maastrichtuniversity.nl/en/publications/5f05ac50-733d-45c8-b230-6ff1d83aa8fd (last visited May 14, 2023).
[24] Sjef van Erp, *Land Registration and 'Disruptive' (or 'Trustworthy'?) Technologies: Tokenisation of Immovable Property*, (2019), https://papers.ssrn.com/abstract=3441938 (last visited Apr 14, 2023).
[25] Sjef van Erp, *Ownership of Data: The Numerus Clausus of Legal Objects*, BRIGHAM-KANNER PROPERTY RIGHTS CONFERENCE JOURNAL 235 (2017).
[26] van Erp, *supra* note 23.
[27] He et al., *supra* note 3.
[28] *Id.*

Numerous legal systems worldwide classify the transfer of property into three primary categories: the consensual system, the causal system of traditions (incorporating legal title and modus operandi), and the abstract system of traditions. These foundational approaches have served as the basis for shaping corresponding civil law systems, which are often associated with alternative designations such as French law, Roman-Dutch law, and German law. [29]

The consensual system stipulates that a straightforward agreement between involved parties suffices for the transfer of property. Illustrative instances include Article 1376 of the Italian Civil Code, Article 1196 of the French Civil Code, and Article 18(1) of the Sale of Goods Act 1979; it's noteworthy, however, that this system does not extend to real estate transactions.

In the context of the accessory system, it is plausible to consider an agreement between the creator (artist) and the purchaser utilizing an NFT token as a legally valid form. In this scenario, alongside the fundamental tenets of the accessory system, the European Commission's essential principle of technological neutrality can be factored in. Essentially, this principle precludes state discrimination among technologies [30]. Scholars discern no inherent obstacles in applying traditional contract law principles to smart contracts, encompassing the tenets of private autonomy, freedom of contract, and pacta sunt servanda [31].

It's crucial to underline that the aforementioned legal mechanism exhibits elements of a judicious legal approach for transactions facilitated by NFTs, particularly concerning the initial sale originating from the creator (artist). The rationale behind this assertion will be expounded upon shortly.

The causal system of traditions, characterized by the presence of a legal title (e.g., a sales or gift contract) and the transference of asset possession to another party (traditio), typically necessitates a form of physical delivery or "instrumental delivery," such as transfer through a notarized instrument. This system finds applicability in countries like the Netherlands (Article 3:84, Article 3:89 BW), Spain (Article 609.2, Article 1462 CC), and similar jurisdictions.

When interpreting this system within the context of agreements involving NFTs, it becomes apparent that a written agreement is requisite. This agreement can be executed either in physical or electronic form, with the latter allowing for remote completion facilitated by valid digital signatures. A properly executed written agreement, in this case, can coincide with the transference of an NFT token.

Conversely, the abstract system entails the transfer of ownership being predicated on the mutual consent of involved parties, irrespective of the validity of the underlying legal agreement (e.g., a sales or gift contract). This legal system is observed in countries like Germany (§929 BGB), Austria (§428 ABGB), South Africa, and others. The contractual validity in rem is evaluated from the perspective of the perfection of intent (§119, 123 BGB) embodied in the declaration of intent (Willenserklärungen) requisite for concluding a contract in rem, as well as its adherence to the law (§ 134 BGB) and public morality (§ 138 BGB). It's imperative to note that this legal framework does not acknowledge intangible entities as property. [32]

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[29] О.А. Халабуденко, *Консенсуальна система переходу права власності vs. система традиції: компроміс в модельних правилах європейського приватного права the DCFR* (2016), http://dspace.onua.edu.ua/handle/11300/8780 (last visited May 14, 2023).

[30] A new framework for electronic communications services- l24216, EUR-LEX (2003), https://eur-lex.europa.eu/EN/legal-content/summary/a-new-framework-for-electronic-communications-services.html (last visited May 10, 2023).

[31] Delber Pinto Gomes, *Contratos Ex Machina: Breves Notas Sobre a Introdução Da Tecnologia (Blockchain e Smart Contracts)*, REVISTA ELECTRÓNICA DE DIREITO–OUTUBRO (2018).

[32] Халабуденко, *supra* note 28.

Without delving into the virtual nature of the objects that form the focal point of our analysis and the rights that are transferred through NFTs, we endeavor to extend the abstract system to transactions involving NFTs. In this context, it becomes apparent that a written agreement concerning the transfer of ownership and an additional concurrence for the transference of the object may be warranted.

B. Important Prerequisites in NFT Transactions

In the realm of NFTs, to some extent, a heightened awareness of copyright is being fostered [33]. It is reasonable to posit that NFTs are structured upon incentives and collaborative efforts involving creators and users with the aim of safeguarding intellectual property rights [42], particularly within the domain of art.

In the sphere of crypto art, an implicit contract is established: the acquired item is one of a kind. The artist generates only a single instance of these tokens, and the sole entitlement conferred upon the purchaser of crypto art is the ability to claim ownership of the work. It's imperative to acknowledge that this is not a legal entitlement and holds no authority beyond societal conventions. Nonetheless, the value of crypto art is rooted in the artist's creation of scarcity [34].

The verification of the seller's legitimate ownership of the NFT before the sale and purchase transaction is pivotal for the entire process. Thus, upon procuring an NFT, the new owner gains the privileges associated with the use of the NFT token, though this doesn't extend to the underlying certified asset (intellectual property rights) [35].

Conventionally, the involvement of a notary is instrumental in facilitating the resolution of these concerns, a practice integral to the conclusion of legal transactions in many nations. Notarization is embedded in the civil laws of 86 countries and is recognized in 22 of the 28 European Union member states, serving the specific purpose of validating the legal correctness of transactions and verifying the identity and legal capacity of the involved parties. [36]

Even the relatively less prominent role of information within smart contracts in NFT transactions can be harnessed to substantiate rights in contentious situations. For example, the capacity of NFTs to provide a digital record of ownership may find utility as a means of demonstrating ownership, especially within the legal vacuum surrounding NFT regulation [37]. This utilization can manifest itself during dispute resolution proceedings in courts, leveraging the inherent attributes of NFTs, notably their verifiability.

Verifiability constitutes a foundational capability that offers defense against fraudulent activities such as counterfeiting, tampering, denial of service, repudiation, and other security breaches [38]. The application of blockchain technology endows these attributes with reliable timestamps, the potential for smart contracts, and proof of existence. The application of these inherent blockchain characteristics to the domain of intellectual property contributes to enhanced copyright protection [39].

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[33] He et al., *supra* note 3.
[34] Aaron Hertzmann, *Why Would Anyone Buy Crypto Art – Let Alone Spend Millions on What's Essentially a Link to a JPEG File?*, THE CONVERSATION (2021), http://theconversation.com/why-would-anyone-buy-crypto-art-let-alone-spend-millions-on-whats-essentially-a-link-to-a-jpeg-file-157115 (last visited Apr 12, 2023).
[35] Omar Ali et al., *A Review of the Key Challenges of Non-Fungible Tokens*, 187 TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE 122248 (2023).
[36] Rosa M. Garcia-Teruel & Héctor Simón-Moreno, *The Digital Tokenization of Property Rights. A Comparative Perspective*, 41 COMPUTER LAW & SECURITY REVIEW 105543 (2021).
[37] Chalmers et al., *supra* note 12.
[38] Wang et al., *supra* note 1.
[39] Bamakan et al., *supra* note 2.

The smart contract, an essential component in the creation of an NFT token, which operates in natural language (as opposed to digital programming code within the NFT token), can be presented as evidence in a court of law, underlining the technical capacity to prove its existence and the ensuing consequences through the transfer of the NFT token. This transfer symbolizes the conveyance of ownership of the certified object.

Traditional patent and trademark registration processes are typically protracted and resource-intensive endeavors. Securing copyright or trademark registration can span several months, while obtaining a patent may extend over years. Conversely, NFT technology offers an avenue to expedite this process, bolstered by a high level of confidence and intellectual property rights protection assurance. NFTs can facilitate intellectual property protection as applicants await formal governmental approvals. [40]

IV. Digital Postage Stamps in Ukraine: Legal Regulation Based on NFTs as Part of Virtual Assets

On February 17, 2022, the Parliament of Ukraine passed Law No. 2074-IX, known as the "On Virtual Assets",[41] which was subsequently ratified by the President of Ukraine on March 15, 2022. This legislation effectively legitimizes the operation of cryptocurrencies within Ukraine, establishing a legal framework for their circulation. As per Section VI, Clause 1 of the "Final and Transitional Provisions" of Law No. 2074, this law will come into effect under the following conditions: a) upon the enactment of amendments to the Ukrainian Tax Code related to the taxation specifics of virtual asset transactions, and b) upon the establishment of the State Register of service providers involved in virtual asset transactions.

In Ukraine, the groundwork has been laid through legislative initiatives for the integration of NFTs at the national level. [42]

A corresponding legislative proposal, Draft Law No. 8280 of 13.12.2022 "On Amendments to the Law of Ukraine "On Postal Service" (regarding the regulation of the issue of digital stamps) (hereinafter - Draft Law No. 8280), was introduced to the Verkhovna Rada by a group of Members of Parliament on December 13, 2022 [43].

The explanatory memorandum accompanying Draft Law No. 8280 emphasizes that contemporary technology constitutes one of several tools employed by society to address its challenges. Specifically, in the operations of the national postal service, there arises a necessity to incorporate digital stamps as a technological complement to traditional postage stamps. As technological advancements continue, safeguarding copyright pertaining to postage stamp designs necessitates the introduction of the concept of a "digital postage stamp." This digital counterpart will serve as a replica of a postage stamp image, decoupled from the physical postage stamp itself. The explanatory memorandum further outlines the objective of the proposed legislation as advancing the postal service sector in Ukraine, particularly through the incorporation of digital postage stamps. This implementation is expected to foster the

[40] *Id.*
[41] Про віртуальні активи, (2022), https://zakon.rada.gov.ua/go/2074-20 (last visited Apr 15, 2022).
[42] В Україні з'явиться новий віртуальний актив – цифрова поштова марка, ЗАКОН І БІЗНЕС (2022), https://zib.com.ua/ua/154130.html (last visited Jan 26, 2023).
[43] Проект Закону про внесення змін до Закону України "Про поштовий зв'язок" (щодо врегулювання питання випуску цифрової марки), (2022), https://itd.rada.gov.ua/billInfo/Bills/Card/40988 (last visited Jan 26, 2023).

growth of the postal industry while concurrently preserving the copyright associated with postage stamp designs. [44]

Table 1 offers a comparative overview of the amendments suggested by Draft Law No. 8280 in relation to existing legislation.

Table. 1. Comparative table to the draft law "On Amendments to the Law of Ukraine "On Postal Service" (regarding the issue of digital postage stamps) [45]

Current version	Draft law No. 8280
The Law of Ukraine "On Postal Service"	
Article 1: Definition of terms. *There is no*	Article 1. Definition of terms. **digital postage stamp is a unique (non-interchangeable) virtual asset that certifies property rights to a digital image of a postage stamp or a derivative work from the image of a postage stamp, as an object of civil rights, defined by individual characteristics, and cannot be replaced by a similar virtual asset without changing its value and/or essence**.
Article 18. Postage Stamps Postage stamps, including those printed on postal envelopes and postal cards, and electronic stamps are a means of payment for postal services for the transfer of letters and postal cards provided by the designated postal operator. The postage stamps, stamped envelopes and postage cards are put into circulation and withdrawn from circulation by the designated postal operator. Postage stamps are sold at nominal value, while marked envelopes and postage cards are sold at retail value set by the designated postal operator. The distribution of postage stamps, marked envelopes and postage cards by business entities, regardless of their organizational and legal form and form of ownership, is carried out in the volumes and assortment specified in the agreements concluded with the designated postal operator at a price not lower than the nominal value or the value set by the designated postal operator.	Article 18. Postage Stamps Postage stamps, including those printed on postal envelopes and postal cards, and electronic stamps are a means of payment for postal services for the transfer of letters and postal cards provided by the designated postal operator. The postage stamps, stamped envelopes and postage cards are put into circulation and withdrawn from circulation by the designated postal operator. Postage stamps are sold at nominal value, while marked envelopes and postage cards are sold at retail value set by the designated postal operator. The distribution of postage stamps, marked envelopes and postage cards by business entities, regardless of their organizational and legal form and form of ownership, is carried out in the volumes and assortment specified in the agreements concluded with the designated postal operator at a price not lower than the nominal value or the value set by the designated postal operator.

[44] Пояснювальна записка до проекту Закону України «Про внесення змін до Закону України «Про поштовий зв'язок» (щодо врегулювання питання випуску цифрової поштової марки)», (2022), https://itd.rada.gov.ua/billInfo/Bills/pubFile/1571354 (last visited Apr 8, 2023).

[45] Порівняльна таблиця до проекту закону «Про внесення змін до Закону України «Про поштовий зв'язок» (щодо врегулювання питання випуску цифрової поштової марки), (2022), https://itd.rada.gov.ua/billInfo/Bills/pubFile/1571352 (last visited Apr 8, 2023).

The electronic stamp is created by the software and hardware of the designated postal operator, is accounted for on its balance sheet and belongs to it until its graphic image is applied to letters and postal cards of the consumer of postal services. The designated postal service operator issues postage stamps, marked envelopes and postage cards using special security elements according to the subject matter and samples agreed with the Editorial and Artistic Council on the issue of postage stamps, marked envelopes and postage cards in Ukraine, the composition, functions, rights and obligations of which are determined by the central executive body that ensures the formation and implementation of state policy in the field of postal services.	The electronic stamp is created by the software and hardware of the designated postal operator, is accounted for on its balance sheet and belongs to it until its graphic image is applied to letters and postal cards of the consumer of postal services. The designated postal service operator issues postage stamps, marked envelopes and postage cards using special security elements according to the subject matter and samples agreed with the Editorial and Artistic Council on the issue of postage stamps, marked envelopes and postage cards in Ukraine, the composition, functions, rights and obligations of which are determined by the central executive body that ensures the formation and implementation of state policy in the field of postal services. **A digital postage stamp is an object of fine art and is not a means of payment for postal services for the forwarding of written correspondence provided by the designated postal operator.** **The procedure for using a digital postage stamp** **is determined by the designated postal operator.** **postal service operator.**

As illustrated in Table 1, it becomes evident that this particular type of NFT should not be categorized as a postage stamp; rather, it should be classified as an artistic artifact—a digital rendition of a postage stamp's image.

Furthermore, Draft Law 8280 does not delineate the specific procedures for the utilization of the "digital postage stamp." It is anticipated that these regulations will be established through subsidiary legal provisions by the national postal operator. This approach aligns with Article 8(2.1) of the Universal Postal Convention, which states that "Postage stamps shall be issued and placed in circulation exclusively by an authority of a member country or territory in accordance with the Acts of the Union." [46]. Consequently, the property rights associated with the digital image of a postage stamp or any derivative works stemming from the postage stamp image, recognized as objects of civil rights, will vest in the designated postal operator. In this context, the national operator is Ukrposhta [47], which will hold the prerogative to manage the NFT postage stamp as it deems fit.

To distinguish an "electronic stamp" from a "digital postage stamp," it is noteworthy to consider the existing version of paragraph 12 of Article 1, Part 1, of the Ukrainian Law on Postal Services. This provision defines an "electronic stamp" as a postage stamp affixed to letters and postal cards in the form of graphic information, containing details about the postal item and confirming payment for

[46] Convention Manual, (2018), https://www.upu.int/UPU/media/upu/files/UPU/aboutUpu/acts/manualsInThreeVolumes/actInThreeVolumesManualOfConventionEn.pdf (last visited Apr 8, 2023).

[47] Про національного оператора поштового зв'язку, (2002), https://zakon.rada.gov.ua/go/10-2002-%D1%80 (last visited Apr 8, 2023).

postal services offered by the designated postal operator [48]. This definition underscores the fundamental distinctions in properties and objectives between an "electronic stamp" and the proposed concept of a "Digital Postage Stamp" outlined in Draft Law 8280. The latter does not function as a means of payment for postal services related to the conveyance of written correspondences, as does an electronic stamp. Instead, the nature of the NFT, specifically the "digital postage stamp," is fundamentally centered on the certification of property rights pertaining to an artistic work represented as a postage stamp.

V. Discussion and Generalization

1. The official Ethereum blockchain website asserts that NFTs can be employed to establish ownership over unique assets, whether they are digital or physical in nature. It also maintains that creators can retain ownership of their works and directly claim royalties upon resale [49]. The Solana blockchain's official website echoes these sentiments, underscoring the significance of uniqueness and ownership in the digital realm [50].

Moreover, a substantial body of scientific literature published in peer-reviewed journals reiterates the following points:

– NFTs confer rights to digital property [51];

– NFTs function as tradable rights to digital assets, encompassing images, music, videos, and virtual creations, with ownership recorded in smart contracts on a blockchain [52];

– Non-fungible tokens (NFTs) demonstrate ownership of digital items akin to the ownership of crypto assets [53];

– Tencent regards NFT as evidence of virtual rights and interests.

– NFT leverages blockchain technology to ensure the uniqueness, authenticity, and durability of assets, effectively addressing copyright concerns. NFTs hinge on Ethereum smart contracts for ascertaining ownership of creators' works, as the blockchain tags digital collections [54].

Nevertheless, these claims are not substantiated due to the absence of regulatory and legal documentation, either at the state level or within commonwealths such as the European Union, governing the consolidation of property rights through NFTs within the aforementioned blockchains. [55]

2. It is imperative to note that Ethereum, Solana, and other blockchains do not guarantee the authenticity of virtual objects transacted via NFTs. In essence, anyone can tokenize another person's virtual object or asset, potentially infringing upon copyright holders' rights and ensnaring unsuspecting NFT buyers in such scams [56].

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[48] Про поштовий зв’язок, (2001), https://zakon.rada.gov.ua/go/2759-14 (last visited Apr 8, 2023).
[49] Non-fungible tokens (NFT), ETHEREUM.ORG (2023), https://ethereum.org (last visited Apr 10, 2023).
[50] There are no bad questions about... NFTs, SOLANA (2023), https://solana.com/ru/learn/nfts (last visited Apr 10, 2023).
[51] Sen Li & Yan Chen, *How Non-Fungible Tokens Empower Business Model Innovation*, BUSINESS HORIZONS (2022), https://www.sciencedirect.com/science/article/pii/S000768132200132X (last visited Apr 11, 2023).
[52] Dowling, *supra* note 1.
[53] Ali et al., *supra* note 34.
[54] He et al., *supra* note 3.
[55] Ali et al., *supra* note 34; Chalmers et al., *supra* note 12.
[56] He et al., *supra* note 3.

These conclusions align with Usman W. Chohan's study "Non-Fungible Tokens: Blockchains, Scarcity, and Value," which affirms that NFT buyers do not inherently acquire ownership of the original objects, nor do they possess means to ensure that the digital file will not be reproduced or used by others. Consequently, owning an NFT does not equate to exclusive access to the original digital file [57].

Instances have arisen where NFTs representing photographs or reproductions have been duplicated, contributing to copyright violations [58]. Numerous artists worldwide have reported that their works were pilfered and sold on NFT platforms without their consent, underscoring the uncontested capability of anyone to create NFTs. As a result, the ownership conveyed by an NFT pertains not to the artwork itself, but rather to the token. [59]

Ambiguities exist regarding the scope of property rights associated with NFTs, particularly concerning whether buyers acquire solely property rights or moral rights. [60]

An analogy can be drawn to the historical case of George S. Parker, who employed spurious documents to "sell" the Brooklyn Bridge at the turn of the century. Parker's documents, much like NFTs, purported to confer ownership of something, but lacked legal validity within the prevailing regulatory framework. [61]

Furthermore, buyers should question sellers regarding their ownership of the virtual object being sold, as well as the supporting evidence. If the object in question carries copyright, the seller should have legal documents confirming the transfer of copyright from the creator, typically in written form. Analogously, a transfer of copyright from the seller to the buyer necessitates proper documentation. Nevertheless, the mechanisms for establishing and transferring property rights in the virtual realm through NFTs remain non-existent.

The trading of NFTs lacks uniform regulation. Regulatory interventions are vital for safeguarding intellectual property rights, building user trust when transacting on NFT platforms. Absent such confidence in the protection of intellectual property rights, users may hesitate to adopt this technology, despite its potential advantages. [62]

3. It is imperative to acknowledge that acquiring an NFT for an asset, such as a work of art, does not inherently entail the transfer of copyright or other special rights to the NFT owner unless this is explicitly outlined and agreed upon as part of a smart contract. [63]

Given the unresolved and contentious nature of NFT object rights, it is judicious to endorse traditional property rights understandings in dispute resolution. Legal interpretations categorize property transfer into three systems: the causal consensual system, the causal system of traditions (legal title and modus), and the abstract system of traditions.

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[57] *Id.*

[58] Wajiha Rehman et al., *NFTs: Applications and Challenges*, *in* 2021 22ND INTERNATIONAL ARAB CONFERENCE ON INFORMATION TECHNOLOGY (ACIT) 1 (2021).

[59] James Purtill, *Artists Keep Finding Their Work on NFT Auction Sites — and They Never Agreed to the Sale*, ABC NEWS, Mar. 15, 2021, https://www.abc.net.au/news/science/2021-03-16/nfts-artists-report-their-work-is-being-stolen-and-sold/13249408 (last visited Apr 11, 2023).

[60] Bamakan et al., *supra* note 2.

[61] Chalmers et al., *supra* note 12.

[62] Ali et al., *supra* note 34.

[63] Flick, *supra* note 18.

Within the consensual system, it is plausible that the primary transaction between the author (artist) and the NFT buyer constitutes a valid form, aligning with the principle of technological neutrality advocated by the European Commission.

Under the causal system of traditions (legal title and modus operandi), transactions involving NFTs necessitate a written agreement. This agreement can be executed in either a physical or electronic form, with the potential for remote execution, complete with appropriate digital signatures. Notably, smart contracts can facilitate this process, enabling NFT transfer.

The abstract system, which does not recognize intangible assets as property, poses challenges for adaptation in the context of NFT transactions.

When purchasing an NFT, it is vital to understand that, in the event of a dispute over the object it certifies, establishing ownership becomes imperative, and the current legal framework is insufficient for this purpose. Consequently, the question arises: What precisely does an individual possess upon acquiring an NFT? At the point of purchase, one essentially holds nothing more than an enhanced ability to assert ownership through legal recourse, differentiating them from the owner of a ".jpg" image. This differentiation hinges on the more favorable prospects of proving ownership via court proceedings, adhering to the prevailing rules governing ownership within the specific jurisdiction where the dispute is adjudicated.

A smart contract, a prerequisite for creating an NFT token, framed in natural language rather than a digital programming code, can serve as evidence in a court of law. These claims find support in the official Ethereum blockchain website's assertion that transaction histories are publicly verifiable, rendering ownership history nearly impervious to manipulation. [64]

This discussion presents a plausible theory: NFT tokens could effectively participate in a court dispute over ownership of a virtual object. It is highly probable, given the evolving legal landscape, that judicial precedents will emerge for establishing ownership of virtual objects based on NFT tokens.

4. It is essential to emphasize the specific function of NFTs, exemplified by postage stamps. This function pertains to the certification of ownership rights concerning postage stamps as artistic works. This should not be conflated with "digital postage stamps," which serve a distinct purpose from NMTs.

Digital stamps function as the digital counterparts of conventional postage stamps, serving as proof of payment for postage services. They represent an evolution of printed receipts for prepaid logistics services, effectively mirroring the functions of postage stamps. This function fundamentally diverges from the role of NMTs in certifying ownership rights pertaining to postage stamps as artistic works.

5. In Ireland [65] and the UK, there exists an extant "digital postage stamp," which utilizes QR codes on postage stamps, exhibiting functional similarities to Ukraine's current "electronic stamp" [66]. Their primary function is to validate the payment of postal services. It is noteworthy that these implementations differ significantly from the proposed "digital postage stamp" outlined in Draft Law 8280.

Ukraine, a member of the Universal Postal Union (UPU) since 1947, is taking steps to safeguard copyrights associated with the images of postage stamps issued, including those by the national postal

[64] Non-fungible tokens (NFT), *supra* note 48.
[65] Brian O'Donovan, *An Post Launches New Digital Stamp*, RTE (2022), https://www.rte.ie/news/business/2022/1012/1328565-digital-stamps-an-post/ (last visited Apr 9, 2023).
[66] Про поштовий зв'язок, *supra* note 47.

operator Ukrposhta. The legislative endeavor aims to formalize the concept of a "digital postage stamp," which would constitute a digital reproduction of a postage stamp image and serve to ascertain its rightful owner. Should Draft Law 8280 receive approval, it could establish a legal precedent for utilizing NFT technology at the state level to establish ownership within the virtual domain.

VI. Conclusion

1. Electronic cadastral systems are widely adopted by numerous countries; however, they have traditionally coexisted with paper-based transactions for their document processing. In these systems, though title and ownership rights are electronically recorded, they often play a secondary role to paper-based transactions.

The global legislative process is focused on harnessing the full potential of blockchain technology, including the unique characteristics of NFT technology. The objective of this legislative effort is to establish a regulatory framework designed to govern the transfer of ownership of digital objects, including tangible assets, based on NFT tokens.

NFTs represent a promising digital component of the legal framework within the virtual realm, aimed at formalizing property rights on a solid legal foundation. Information regarding ownership, for instance, can be embedded in the metadata of a digital object, secured through cryptographic methods. In this system, the genuine owner has the option to create an NFT token, effectively transferring the corresponding rights to the digital object. Consequently, the NFT token can serve as a legal mechanism for indicating the current owner of a digital object.

2. In a narrow contractual context, NFT essentially functions as a cryptographic certificate or patent for a specific digital object, issued in the form of an NFT token. Notably, there are no inherent limitations preventing the creation of multiple distinct NFT tokens for the same digital object. In cases of disputes, the only recourse is to establish the rightful owner of the contested digital object through legal proceedings.

The NFT token is not officially recognized as a form of ownership confirmation for a digital object under the purview of legislation, including copyright laws, in any country or union of countries. However, it holds the potential to be acknowledged as evidence of ownership of a digital object within the framework of legal precedents. The NFT serves as a record of the moment when the NFT token owner lays claim to ownership. Presently, it primarily represents a "claim" of ownership, and it holds the prospect of legal precedents recognizing ownership rights, especially within the existing legislative vacuum regarding its regulation.

3. The concept of digitizing postage stamps and incorporating NFT technology is not novel and was a topic of discussion in 2020 within the Universal Postal Union (UPU). At the UPU level, the issue of safeguarding property rights for digital postage stamp images remains unresolved. Consequently, UPU member states, such as Ukraine, have commenced independent efforts to address this challenge at the national level, both legally and technically.

The Ukrainian Draft Law No. 8280 of 2022, while not without legal technical flaws, introduces an innovative approach for validating ownership of digital postage stamp images using NFT technology. This could potentially set a legal precedent in Ukraine for the utilization of NFT technology at the state level to establish ownership within the virtual realm, particularly in the domain of intellectual property rights, including copyright.

References

A new framework for electronic communications services- l24216, EUR-LEX (2003), https://eur-lex.europa.eu/EN/legal-content/summary/a-new-framework-for-electronic-communications-services.html (last visited May 10, 2023).

Aaron Hertzmann, *Why Would Anyone Buy Crypto Art – Let Alone Spend Millions on What's Essentially a Link to a JPEG File?*, THE CONVERSATION (2021), http://theconversation.com/why-would-anyone-buy-crypto-art-let-alone-spend-millions-on-whats-essentially-a-link-to-a-jpeg-file-157115 (last visited Apr 12, 2023).

Anthony Clarke, *7 Biggest Crypto Collapses of 2022 the Industry Would like to Forget*, COINTELEGRAPH (2022), https://cointelegraph.com/news/7-biggest-crypto-collapses-of-2022-the-industry-would-like-to-forget (last visited Apr 8, 2023); Sean J. Coughlin & Akum K. Singh, *A Look at the Cryptocurrency Collapse of 2022: Part 1*, BRESSLER 1 (2023), https://www.bressler.com/publication-1310 (last visited Apr 8, 2023); David Gura, *2022 Was the Year Crypto Came Crashing down to Earth*, NPR, Dec. 29, 2022, https://www.npr.org/2022/12/29/1145297807/crypto-crash-ftx-cryptocurrency-bitcoin (last visited Apr 8, 2023).

B. Akkermans, *The Principle of Numerus Clausus in European Property Law*, 2008, https://cris.maastrichtuniversity.nl/en/publications/5f05ac50-733d-45c8-b230-6ff1d83aa8fd (last visited May 14, 2023).

Brian O'Donovan, *An Post Launches New Digital Stamp*, RTE (2022), https://www.rte.ie/news/business/2022/1012/1328565-digital-stamps-an-post/ (last visited Apr 9, 2023).

Byterum, *Global NFT Market Overview*, NFTGO.IO (2022), https://nftgo.io (last visited Apr 8, 2023).

Catherine Flick, *A Critical Professional Ethical Analysis of Non-Fungible Tokens (NFTs)*, 12 JOURNAL OF RESPONSIBLE TECHNOLOGY 100054 (2022).

Convention Manual, (2018), https://www.upu.int/UPU/media/upu/files/UPU/aboutUpu/acts/manualsInThreeVolumes/actInThreeVolumesManualOfConventionEn.pdf (last visited Apr 8, 2023).

Copyright Protection in China A Guide for European SMEs, 8 (2020), https://intellectual-property-helpdesk.ec.europa.eu/system/files/2020-10/EN_Copyright_guide_Aug_2010.pdf (last visited Sep 22, 2023).

Dandan He et al., *The Development of Digital Collection Platform under Responsible Innovation Framework: A Study on China's Non-Fungible Token (NFT) Industry*, 8 JOURNAL OF OPEN INNOVATION: TECHNOLOGY, MARKET, AND COMPLEXITY 203 (2022).

Delber Pinto Gomes, *Contratos Ex Machina: Breves Notas Sobre a Introdução Da Tecnologia (Blockchain e Smart Contracts)*, REVISTA ELECTRÓNICA DE DIREITO–OUTUBRO (2018).

Dominic Chalmers et al., *Beyond the Bubble: Will NFTs and Digital Proof of Ownership Empower Creative Industry Entrepreneurs?*, 17 JOURNAL OF BUSINESS VENTURING INSIGHTS e00309 (2022).

James Purtill, *Artists Keep Finding Their Work on NFT Auction Sites — and They Never Agreed to the Sale*, ABC NEWS, Mar. 15, 2021, https://www.abc.net.au/news/science/2021-03-16/nfts-artists-report-their-work-is-being-stolen-and-sold/13249408 (last visited Apr 11, 2023).

Meghan Bobrowsky, *Jack Dorsey Tweet NFT Once Sold for $2.9 Million, Now Might Fetch Under $14,000*, WALL STREET JOURNAL, Apr. 16, 2022, https://www.wsj.com/articles/jack-dorsey-tweet-nft-once-sold-for-2-9-million-now-might-fetch-under-14-000-11650110402 (last visited Apr 8, 2023).

Michael Dowling, *Is Non-Fungible Token Pricing Driven by Cryptocurrencies?*, 44 FINANCE RESEARCH LETTERS 102097 (2022); Qin Wang et al., *Non-Fungible Token (NFT): Overview, Evaluation, Opportunities and Challenges*, (2021), http://arxiv.org/abs/2105.07447 (last visited Apr 11, 2023).

New challenges for copyright protection – Co-Reach in IPR in New Media Workshop II, 27 COMPUTER LAW & SECURITY REVIEW 416 (2011).

New challenges for copyright protection – Co-Reach in IPR in New Media Workshop II, *supra* note 19.

Non-fungible tokens (NFT), ETHEREUM.ORG (2023), https://ethereum.org (last visited Apr 10, 2023).

Omar Ali et al., *A Review of the Key Challenges of Non-Fungible Tokens*, 187 TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE 122248 (2023).

OpenSea, DAPPRADAR (2023), https://dappradar.com/multichain/marketplaces/opensea/ (last visited Apr 8, 2023); OpenSea monthly active traders (Ethereum), OPENSEA (2023), https://dune.com/queries/37674/74643 (last visited Apr 7, 2023).

POST Group, POST, https://www.upu.int/en/Universal-Postal-Union/About-UPU/Cooperatives-Boards/-POST-Group (last visited Apr 8, 2023).

R. Anthony Reese, *The First Sale Doctrine in the Era of Digital Networks*, (2003), https://papers.ssrn.com/abstract=463620 (last visited Apr 12, 2023).

Rohini Giridhari Landge & Vaishali Khaparde, *Postage Stamps and Digital Philately of Europe Countries*, 40 LIB. PROG. 12 (2020).

Rosa M. Garcia-Teruel & Héctor Simón-Moreno, *The Digital Tokenization of Property Rights. A Comparative Perspective*, 41 COMPUTER LAW & SECURITY REVIEW 105543 (2021).

Sen Li & Yan Chen, *How Non-Fungible Tokens Empower Business Model Innovation*, BUSINESS HORIZONS (2022), https://www.sciencedirect.com/science/article/pii/S000768132200132X (last visited Apr 11, 2023).

Severin Bonnet & Frank Teuteberg, *Impact of Blockchain and Distributed Ledger Technology for the Management of the Intellectual Property Life Cycle: A Multiple Case Study Analysis*, 144 COMPUTERS IN INDUSTRY 103789 (2023).

Seyed Mojtaba Hosseini Bamakan et al., *A Decentralized Framework for Patents and Intellectual Property as NFT in Blockchain Networks*, (2021), https://www.researchsquare.com/article/rs-951089/v1 (last visited Apr 11, 2023).

Sjef van Erp, *Land Registration and 'Disruptive' (or 'Trustworthy'?) Technologies: Tokenisation of Immovable Property*, (2019), https://papers.ssrn.com/abstract=3441938 (last visited Apr 14, 2023).

Sjef van Erp, *Ownership of Data: The Numerus Clausus of Legal Objects*, BRIGHAM-KANNER PROPERTY RIGHTS CONFERENCE JOURNAL 235 (2017).

There are no bad questions about... NFTs, SOLANA (2023), https://solana.com/ru/learn/nfts (last visited Apr 10, 2023).

Ujwala Anil Nawlakhe & Mangala Anil Hirwade, *Study of Worldwide Philatelic Libraries*, 20 WORLD LIBRARIES (2013), https://worldlibraries.dom.edu/index.php/worldlib/article/view/435 (last visited Apr 9, 2023).

UPU's blockchain project brings philately into the digital world, (2020), https://www.upu.int/en/News/2020/12/UPU%E2%80%99s-blockchain-project-brings-philately-into-the-digital-world (last visited Apr 8, 2023).

Wajiha Rehman et al., *NFTs: Applications and Challenges*, *in* 2021 22ND INTERNATIONAL ARAB CONFERENCE ON INFORMATION TECHNOLOGY (ACIT) 1 (2021).

What will happen with NFT in 2023 — Bitmedia Blog, BITCOIN ADVERTISING NETWORK – START BITCOIN ADS TODAY (Feb. 3, 2023), https://bitmedia.io/blog/nft-future-2023 (last visited Apr 7, 2023).

Will Canny, *Morgan Stanley Says NFTs Next to Watch After UST Collapse*, (2022), https://www.coindesk.com/business/2022/05/16/morgan-stanley-says-nfts-next-to-watch-after-ust-collapse/ (last visited Apr 8, 2023).

Zaghum Umar et al., *The Return and Volatility Connectedness of NFT Segments and Media Coverage: Fresh Evidence Based on News About the COVID-19 Pandemic*, 49 FINANCE RESEARCH LETTERS 103031 (2022).

В Україні з'явиться новий віртуальний актив – цифрова поштова марка, ЗАКОН І БІЗНЕС (2022), https://zib.com.ua/ua/154130.html (last visited Jan 26, 2023).

О.А. Халабуденко, *Консенсуальна система переходу права власності vs. система традиції: компроміс в модельних правилах європейського приватного права the DCFR* (2016), http://dspace.onua.edu.ua/handle/11300/8780 (last visited May 14, 2023).

Порівняльна таблиця до проекту закону «Про внесення змін до Закону України «Про поштовий зв'язок» (щодо врегулювання питання випуску цифрової поштової марки), (2022), https://itd.rada.gov.ua/billInfo/Bills/pubFile/1571352 (last visited Apr 8, 2023).

Пояснювальна записка до проекту Закону України «Про внесення змін до Закону України «Про поштовий зв'язок» (щодо врегулювання питання випуску цифрової поштової марки)», (2022), https://itd.rada.gov.ua/billInfo/Bills/pubFile/1571354 (last visited Apr 8, 2023).

Про віртуальні активи, (2022), https://zakon.rada.gov.ua/go/2074-20 (last visited Apr 15, 2022).

Про національного оператора поштового зв'язку, (2002), https://zakon.rada.gov.ua/go/10-2002-%D1%80 (last visited Apr 8, 2023).

Про поштовий зв’язок, (2001), https://zakon.rada.gov.ua/go/2759-14 (last visited Apr 8, 2023).

Проект Закону про внесення змін до Закону України “Про поштовий зв’язок” (щодо врегулювання питання випуску цифрової марки), (2022), https://itd.rada.gov.ua/billInfo/Bills/Card/40988 (last visited Jan 26, 2023).

Criminal Copyright: How Far Is It Criminal?

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ABSTRACT

The idea of criminal copyright as an orientation for academic quest in order to calibrate the efficacy of criminal provisions under the Copyright Law seems chimerical, not because there are little or no avenues to deliberate upon the theme logically but because of little intellectual investment for a systematic study and analysis of the more profound meaning and rationale forming a justificatory framework to convincingly comment upon the evolving status of the degree of potency of criminal recourses to issues of copyright infringement in the global IPR regime. It is unfortunate but true that copyright experts and enthusiasts seldom discuss and deliberate upon the nuances of the effects of criminalized approach to the infringement of copyright and other related rights in the bigger canvas of balance between owners' versus users' rights. There has been a global tendency to criminalize copyright infringement, but there have been a few debates and discussions on whether there are enough justifications to do so. This paper attempts to critically analyse the jurisprudential validity of criminalizing acts of copyright infringement, emphasizing the historical reasons for the emergence of global criminal copyright jurisprudence. Moreover, the researcher intends to explore whether the application of the canons of criminal jurisprudence is principled enough in cases of copyright infringement.

Keywords: Criminal, Copyright, Infringement, Property, Digital.

I. Global Copyright: A Statutory Creation Conferring Property-Alike Rights

Copyright is a creation of statute that confers property-alike rights on the copyright owners. A survey of the genesis of copyright laws across the globe, particularly in the UK and the US, reveals that it emanated for the enforcement of private rights ceremonially enforced through the civil or administrative framework. Primarily, copyright infringement cases were redressed by injunctions and statutory damages. As a matter of convention and popular praxis, the rights' holders' fraternity activized the processual components of the civil arm of the courts for seeking pecuniary remedies.

II. Globalization, Digital Explosion & Criminal Copyright Regime

The civil remedy remained the most sought-after avenue for redress till the beginning of the digital age, where the potentiality and possibility of unauthorized reproduction and distribution of copyrighted materials by infringers navigated within the manual sphere of reproduction and distribution. Possibly, the most antiquated copyright case can be traced back to the Irish land, which had witnessed a dispute with regard to the ownership of Cathach, an Irish manuscript. The king of the land settled the dispute saying, "To every cow belongs her calf; therefore to every book belongs its copy." The history of copyright protection began to emerge with the invention of the printing machine, which made it possible to duplicate literary works by a mechanical process.[1]

The printing press was invented by Johannes Gutenberg in Germany around 1440.[2] The invention of the printing press (with moveable wooden or metal letters) in the mid-fifteenth century, a new form of reproduction equipment, gave rise to the original need for copyright protection. Before the invention of the printing press, infringing most types of copyrighted works was impossible or required investing many hours of physical labour – thus, making infringement unprofitable and time-consuming. The printing press enabled faster and cheaper production of some works – raising overall revenue. While authors and rights holders could now earn more money, it also opened the gateway for increased infringement.

Technological developments put forward new challenges for the copyright regime, in an economic sense, if the expected return for a new work did not exceed the expected cost of its creation.[3] Therefore, the typicality of the pre-digital age is the physicality of the process and product of infringement. However, rapid technological development and the increasing wave of globalization and accessibility rendered the copyright regime pretty intriguing, especially when copyright law interacted with digital technology resulting in a new form and mode of copyright infringement often termed 'digital piracy.' The shrinking of the global space with enhanced technological accessibility and faster connectivity has led to newer, innovative, unpredictable, faster, and cheaper ways of copyright infringement resulting in colossal revenue losses, failed business models, consumer loss, and erosion of motivation for intellectual creations.[4] These factors provided ample reasons to business leaders, copyright holders, authors, and other intellectual property creators to lobby intensely with the respective governments of the world to introduce criminal copyright legislation. The stakeholders hoped that the policy of criminalization of copyright law would be able to grapple with the increasingly confounding problem of extra-territorial implications of copyright infringement. Mounting challenges of legal quagmire relating to pinning down and bringing online infringers to

[1] AUGUSTINE BIRRELL, SEVEN LECTURES ON THE LAW AND HISTORY OF COPYRIGHT IN BOOKS (1899).
[2] Singh, Justice Pratibha, *Historical Development Of Law Of Copyright - Intellectual Property - India*, https://repository.nls.ac.in/cgi/viewcontent.cgi?article=1029&context=ijlt (last visited Oct 5, 2021).
[3] ELDAR HABER, CRIMINAL COPYRIGHT (2018).
[4] Eldar Haber, *Internal Reasoning for Criminal Copyright*, CRIMINAL COPYRIGHT 104 (2018), https://www.cambridge.org/core/books/criminal-copyright/internal-reasoning-for-criminal-copyright/66BF2FBFD4C36DDD505F3350E1668A9D (last visited Dec 23, 2021).

book in boundless cyberspace gradually became a grave matter of concern.[5] Another reason, among several others, which seemed to work in favour of policy considerations for criminalization in the copyright framework, is the general lack of moral condemnation or sense of guilt as a common perception associated with acts of copyright infringement.[6] Digital technology developments, 'no/lesser guilt' perception with regard to copyright infringement, and sweeping globalization seemed to be the key drivers for the increased frequency and quantum of copyright infringement, and this became one of the dominant rationales for the introduction of criminalization of copyright infringement across the length and breadth of the entire globe.[7] The criminalization of copyright is also a veritable mechanism in the context of the copyright expansion framework. Recently, a raging debate has been brewing in academic quarters across the globe: criminalization versus decriminalization of the copyright law.

III. Criminalization versus Decriminalization: A Brief Narrative

Those who favour criminalization of copyright law believe copyright wars are being fought at their peak now[8] as technological explosion has made it increasingly difficult to identify and prosecute a highly nebulous congregate of faceless infringers using their crafty minds in real-time across multiple jurisdictions while committing a deliberate infringement of copyrighted works and materials of bona fide creators. Therefore criminal deterrence is the most viable option to prevent such costly delinquencies. A contrarian perspective has currently developed to convince the world that the ground reality is the disturbing tendency to over-criminalize copyright law through legislation and under-enforce them in various jurisdictions.[9] Therefore, instead of mindless and indiscriminate criminalization, a rational approach is the demand of the time to make criminalization of copyright wrongs cogent, coherent, and comprehensive.

IV. Historical Background of Copyright Law in India

India is famous for its rich cultural heritage, be it music, art, paintings, and literary works. India has perennially remained a potent force in the arena of copyright. The series of activities that come under the realm of copyright law is prevalent in India and are expanding fast. India is counted among the top seven publishing nations of the world, and the lion's share of such publications are in English. India is one of the largest markets for cassettes, CDs, and films produced, exceeding 600 million per annum.[10]

As already stated above, the most real global need for copyright laws was felt with the invention of the copiers and printers.[11] It is commonly believed that the evolutionary trajectory of copyright law has been in three essential stages[12] in India.

Copyright was introduced in India with the advent of the first enactment on Copyright by British East India Company in 1847. At this juncture, the statute on copyright was markedly different

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[5] Lydia Pallas-Loren, *Digitization, Commodification, Criminalization: The Evolution of Criminal Copyright Infringement and the Importance of the Willfulness Requirement*, 77 WASH. U. L.Q 835 (1999).
[6] Geraldine Szott Moohr, *The Crime of Copyright Infringement: An Inquiry Based on Morality, Harm, and Criminal Theory*, 83 BOSTON UNIVERSITY LAW REVIEW 731 (2003).
[7] Haber, *supra* note 4.
[8] HABER, *supra* note 3.
[9] Eldar Haber, *THE CRIMINAL COPYRIGHT GAP*, INTELLECTUAL PROPERTY SCHOLARS CONFERENCE (IPSC) PAPER 5 (2014).
[10] Ashwin Ramakrishnan, *Towards an Effective Regime against Online Copyright Infringement in India*, 2016.
[11] Berne Convention et al., *History of Copyright Law in India* (2019), https://www.bananaip.com/ip-news-center/history-of-copyright-law/.
[12] *Id.*

than what it is today. The copyright duration under the old statute was the whole life of the author plus seven years *post-mortem auctoris.* However, under no circumstances the total term of the copyright should exceed a period of 42 years. The concept of compulsory licensing by the government was not new. The government could intervene to exercise this right if the copyright owner refused to publish the works in case of the author's death. The copyright registration system with the 'Home Office' was prevalent in those days. This was the first stage in a nutshell.[13]

India witnessed the second stage of the development of copyright statute in the year 1914. There was a striking resemblance of the 1914 copyright statute of India with the United Kingdom Copyright Act, 1911. However, the most conspicuous change that was introduced in the copyright statute of British India was the maiden approach to introduce 'criminal sanction' for the infringement of copyrighted works. The period from 1914 to 1957 was marked by a slew of statutory amendments of the copyright statute of 1914 enacted in the British India. This was the second stage.[14]

Thereafter India stood testimony to the third stage of the development of Copyright law in 1957. The 1957 Copyright statute was enacted to accommodate the provisions and crucial directives of the Berne Convention to which Independent India was a signatory. After independence, India thought it imperative to infuse the international perspective in the framing of the Indian Copyright law to give it a more global and contemporary outlook. The Independent India enacted this piece of Copyright legislation, and we all are still regulated by it, subject to subsequent amendments.[15]

V. Brief Overview of Criminal Provisions under the Copyright Act, 1957

One of the significant subsets of Intellectual Property Rights (IPR) is copyright and another sub-domain of Copyright law is "Criminal Copyright". The global convergence on the apprehensions about the swift proliferation of the risk of copyright infringement by rogue infringers has been unprecedented since the onset of digital era. As stated above, criminal sanctions for copyright infringement were introduced in the Copyright Act, 1914 itself by the British.[16] Therefore the global anxiety for copyright infringement with consequential global consensus for copyright criminalization had left their indelible imprint upon the copyright regime of the Indian subcontinent as well.

Sections 63 to 70 under Chapter 13 of the Copyright Act, 1957 contemplate criminal provisions for the offences related to infringement of copyrighted works. The major penal provisions under the Act are:

1. Section 63: It states that when a person knowingly (deliberately) infringes or abets infringement of copyright upon any work or any of the neighboring rights such as performers' rights, broadcast reproduction rights etc., such person can be incarcerated for a minimum of 6 months and a maximum of 3 years. Moreover, such person can be fined any amount subject to the discretion of the court between Rs. 50,000 to Rs. 3, 00,000.[17]

2. Section 63A: This section introduces the concept of enhanced penalty for an aggravated form of the same offence delineated under section 63 of the Act. In this case, the tenure of incarceration

[13] *Id.*
[14] *Id.*
[15] *Id.*
[16] *Id.*
[17] Criminal liabilities and remedies for copyright infringement in India - iPleaders, https://blog.ipleaders.in/criminal-liabilities-remedies-copyright-infringement-india/ (last visited Jul 25, 2022).

ranges between one to three years, and the quantum of pecuniary sanction range between Rs 1 lakh to Rs. 2 lakhs.[18]

3. Section 65A: This section was inserted by the Copyright (Amendment) Act of 2012. It introduces the concept of Technological Protection Measures (TPM) in parity with the US Copyright Law and international IPR obligations. This section penalizes circumvention of effective technological measures that may be applied to copies of a work to protect any of the rights conferred under the Act (for instance, copyright, performance rights, etc). Under this section, incarceration may extend to two years plus fine.[19]

4. Section 65B: It penalizes unauthorized removal or alteration of "rights management information" with imprisonment for a maximum duration of 2 years plus a fine.[20]

Notably, Sections 65A & 65B were inserted into the Copyright Act, 1957 vide Copyright (Amendment) Act, 2012. The contents of these sections have deliberately been framed loosely and flexibly so that the judiciary may, on a case-to-case basis, display its creative wisdom by adapting to Indian conditions in order to serve the ends of justice.[21]

Other relevant criminal provisions under the Copyright Act, 1957 comprise penalties for offences like possessing or making plates to make infringing copies of works (Section 65), using infringing copies of a computer program (Section 63B), and making false entries in the Register of Copyrights (Section 67).[22]

The provisions stated above, and the criminal remedies contemplated therein apply to both digital & traditional platforms with equal force.

Section 64(1) lays down that any police officer not below the rank of sub-inspector may exercise the power of seizure to confiscate infringing copies of work without even a warrant. The offence under this section is cognizable and non-bailable. Section 64(2) of the Act gives an opportunity to the accused to apply to the magistrate within 15 days of such seizure to restore the seized copies. This provision does not facilitate or permit infringement in any manner by the accused.

VI. Relevant Case Laws:

1. Krishika Lulla & Others. vs. Shyam Vithalrao Devkatta & Anr (Desi Boys Case)[23]

This landmark case is popularly known as the 'Desi Boys' case. This case is considered to have set a benchmark relating to infringement cases in film titles and plots. In this case, the plaintiff had written a story titled 'Desi Boys' and registered its synoptic version with the Film Writer's Association. Subsequently, he forwarded the synopsis to his friends and acquaintances. On a subsequent date, he came across the trailer and promotion of the Bollywood movie 'Desi Boyz'. He realized that he could not bring an allegation of infringement over his ideation or storyline under copyright law as copyright protects the expression of ideas in some manifest forms, not ideas *per se*. Therefore, he had filed an FIR for copyright infringement in the title 'Desi Boys' under section 482 of

[18] *Id.*
[19] Copyright infringement and remedies in India - Lexology, https://www.lexology.com/library/detail.aspx?g=96a0fc1e-d8de-4efe-9f7b-d9ed17752bc4 (last visited Jul 25, 2022).
[20] Criminal liabilities and remedies for copyright infringement in India - iPleaders, https://blog.ipleaders.in/criminal-liabilities-remedies-copyright-infringement-india/ (last visited Jul 25, 2022).
[21] *Id.*
[22] Copyright infringement and remedies in India - Lexology, *supra* note 19.
[23] Criminal liabilities and remedies for copyright infringement in India - iPleaders, *supra* note 20.

the Criminal Procedure Code, Section 63 of the Copyright Act, and Section 420 of the IPC. In this case, the moot issue was whether the title of a literary work is copyrightable on a standalone basis. The Supreme Court rejected the contention and held that the title of a film does not come under the purview of literary work.[24]

2. Cheria P Joseph vs. Prabhakaran[25]

In this case, the complainant brought an allegation against the accused of infringing a part of the copyright in the complainant's book. It was alleged that certain extracts of the book of the accused written in Malayalam were, in actuality, a copy of the book written by the complainant and that they were translated and kept for sale without the permission or knowledge of the complainant and the accused by so doing has infringed the copyright in those books thereby committing an offense punishable under Section 63 of the Act. The court held that "clear and cogent proof of knowledge is necessary to establish the commission of an offence." It was further held that a criminal court would not give its verdict on the issue of copyright infringement if the same is lying with a civil court for a final decision.

3. R.G Anand vs. M/s Deluxe Films[26]

This case marks a notable contribution of the Supreme Court of India in underscoring the highly nuanced yet relevant fact that copyright protects an expression but not an idea. The apex judiciary of India made it categorically explicit that no copyright subsists in an idea, plot, theme, narratives or legendary facts.

The court introduced some litmus tests[27] in a lucid style which can be objectively applied to find out whether there is an actual case of copyright infringement.

a) There is no case of copyright infringement if a concept used is identical but depicted or portrayed in a different manner.

b) Whether the spectator develops a definite opinion and receives the unmistakable impression that out of two relatable works in question, the later work seems to be a copy of the earlier (original) after reading or seeing both the works.

c) When there are substantial differences or unintended similarities as a result of pure coincidence in the published work, it is not to be construed as an instance of copyright infringement.

d) If a member of the audience after viewing a film thinks that the entire film is a predominantly a duplication of the original play, copyright infringement has been proved.

4. Eastern Book Company vs. D.B. Modak[28]

This case sets a new parameter for ascertaining the concept of originality in order to calibrate the possibility of claiming copyright protection under the Copyright Act, 1957. It was held by the

[24] Criminal liabilities and remedies for copyright infringement in India - iPleaders, *supra* note 17.
[25] Criminal liabilities and remedies for copyright infringement in India - iPleaders, *supra* note 20.
[26] Analysis Of R.G. Anand V. M/S Deluxe Films And Its Relevance In Recent Times - Copyright - India, https://www.mondaq.com/india/copyright/1149674/analysis-of-rg-anand-v-ms-deluxe-films-and-its-relevance-in-recent-times (last visited Oct 9, 2023).
[27] *Id.*
[28] Anushka Bharwani, *Eastern Book Company and Ors. vs D.B. Modak and Ors.*, LAW TIMES JOURNAL (2020), https://lawtimesjournal.in/eastern-book-company-and-ors-vs-d-b-modak-and-ors/ (last visited Oct 9, 2023).

Supreme Court of India that a derivative work which is just not a exact copy of the original work but which involves application of individual skill & judgement, labor and a certain degree of ingenuity involves a certain and minimum degree of creative element in it and such derivative work in such circumstances may be considered to be copyright worthy.

5. Super Cassettes Industries Ltd. v. MySpace Inc[29]

In this case, the immunity of online social networking sites and such other kindred groups have been substantially enhanced in a progressive judgment of the division bench of the Delhi High Court on 23rd December 2016 where the court held that a social networking site is liable to take down a copyright violated content within 36 hours of *actual knowledge* (and not general awareness as provided under Section 51(a)(ii) of the Copyright Act, 1957) of such violation.

This judgment reversed an earlier 2012 judgment pronounced by the single bench of the same court which had arbitrarily increased the liability of 'My Space' by holding it legally accountable as an internet intermediary despite the fact that such digital intermediary did not have any actual knowledge of such infringement. Thus the division bench judgement of the Delhi High Court fortified the 'safe harbor immunity' provided to intermediaries under Section 79 of the Information Technology Act, 2000.

VII. Copyright Infringement: The Criminal Angle

It is an established fact that copyright had a civil recourse almost at a global scale for a remarkable period. However, with increasing digitization & commodification[30] of society, a growing tendency to criminalize copyright wrongs was noticed. The prime reason for the evolution of the criminal copyright regime in the US, to begin with, can be ascribed to the swift technological transformation and the increasing ease and accessibility to cyberspace by all and sundry. These sporadic but related developments have provided a favorable atmosphere for the potential infringers to resort to quick, effective, and economically distressing infringement and allied wrongs relating to copyrighted works. It was felt imperative to apply the strategy of criminalization to use it as a model of deterrence to stymie the tendency to infringe the copyright of supposedly original works. Criminalization *per se* is not a mere strategy that can be applied anywhere. To criminalize an act, there has to be a proper application of theories of crime to the impugned act, and only if one can produce a sound justification for the application of those theories of criminal jurisprudence can there be proper rationale to justify the application of the tenets of criminalization. To what extent does copyright infringement convincingly provide such a justificatory framework to call for criminalization of the same is a highly valid but, at the same time, nebulous inquiry. The forthcoming paragraphs of the article will focus on the general theories of crime and then attempt to link the theoretical vindications to acts of copyright infringement.

VIII. When does a civil wrong become a criminal offence?

The seminal understanding was all about wrongs committed by humans. The bifurcation of wrongs between civil and criminal was a much later development. If we trace the antiquated concept of wrongful human conduct, the idea of *the 'bot'* and *'botless'* nature of wrongs proved instrumental

[29] My Space Inc. vs Super Cassettes Industries Ltd. | wilmap, https://wilmap.stanford.edu/entries/my-space-inc-vs-super-cassettes-industries-ltd (last visited Oct 9, 2023).

[30] Lydia Pallas Loren, *Digitization , Commodification , Criminalization : The Evolution of Criminal Copyright Infringement and the Importance of the Willfulness Requirement*, 77 WASHINGTON UNIVERSITY LAW REVIEW 835 (1999).

in discerning between civil and criminal wrongs. The bot system emphasized the imperative necessity of the accused to compensate the victim for any infringement of the latter's right, a duty imposed upon the former based on social and moral codes prescribed by the king. The early Anglo-Saxon jurisprudence contained minute details of compensation which, if paid by the accused, would absolve him of all his liabilities due to his wrongful conduct and relegate him to a position of 'no fault'. If the accused refused or failed to compensate the victim, the king declared the former as an outlaw, and anyone could chase and kill that person. With the gradual passage of time, it was realized that certain offenses were so grave that even compensation would not serve any valid purpose. Such offences were classed as botless offences in which the death penalty or mutilation of limbs of the accused remained the only available option. Later this classification of bot and botless wrongs was replaced by civil and criminal wrongs.[31] The basic rationale for imputing criminality to a particular human act/omission is the degree of shock that a given community or society experiences. When the wrongful conduct of an individual is of such a nature and to such a degree that it stupefies the society at large, the conduct is considered to be criminal. Criminal wrongs are considered to be wrongs against the community at large while civil wrongs are considered to be wrongs against individuals. A criminal act is also called an 'offence', because such an act offends or challenges the command/authority of the law of the sovereign or the ruler, *i.e.,* the State.[32] It can be thus inferred that a conduct which otherwise remains within the realms of civil wrong and civil liability, crosses that boundary and steps into the frontiers of criminal wrong and criminal liability when the consequential impact of the impugned conduct gets so enlarged that it can no more be considered to impact only the immediate victim but the society at large. When a person incurs civil liability, s/he ends up paying a type of penalty in most cases. It is a monetary amount which the court thinks is justified for one to pay for their wrong. There is usually no imprisonment in case of civil wrongs. Criminal liability usually results in either imprisonment or fine, or both. This difference between the two liabilities is determined by the very nature of the wrongs.[33]

IX. Legal Erudition & Theoretical Absolution for Criminal Copyright Infringement

The moot purpose for criminal law is to maintain a just, peaceful and stable society by controlling human aberrations and criminally blameworthy proclivities. Thus criminal law plays a crucial role in achieving social control through a robust punitive framework that takes within its fold matters of denunciation, deterrence, incapacitation and rehabilitation/reformation of offending members of the society. Retribution and consequentionalism in the context of harm and morality are imperative ground-works for justifying criminalized copyright infringement. Retributivist approach nurtures vindictive orientation while a consequentionalist harps on the teleological precepts of jurisprudence of ethics. Consequentionalism, as the name suggests, holds that the consequences of one's conduct are the real and ultimate parameter to judge about the rightness or wrongness of the impugned conduct. Retributive theory is a post-mortem (backward looking) approach which depending upon past conduct decides the future course of punishment. But consequentionalist is forward looking and justifies punishment only where wrongdoing results in negative effects.[34]

X. Criminal Legal Apparatus: Whether A Tool to Impede Copyright Infringement or A Stark Incompatibility with Criminal Copyright Regime

[31] N.V. PARANJAPE, CRIMINOLOGY, PENOLOGY & VICTIMOLOGY (2018).
[32] The Difference Between A Civil Wrong And A Criminal Wrong - CLATalogue, https://lawctopus.com/clatalogue/the-difference-between-a-civil-wrong-and-a-criminal-wrong/ (last visited Aug 14, 2022).
[33] *Id.*
[34] Maria C. Dugas, *The Theroretical Case Against Criminalized Copyright Infringement in Canada*, 2017.

This research paper will initially attempt to posit criminal legal apparatus as a pseudo-effective tool to contain tendencies for copyright infringement and thereafter will explore the crevices and leaks in such an inherently and deeply flawed approach by highlighting the glaring lack of incompatibility of criminal copyright with some of the founding principles of criminal legal theory. The enduring tussle between criminalization and decriminalization of the copyright law both at the global and national contexts impels a questioning and rational mind to make an attempt to examine and analyse whether some of the foundational tenets of criminal jurisprudence apply to the concept of copyright. Such an analysis will possibly aid one to infer the theoretical viability of criminalization of copyright infringement and other copyright related wrongs. It is quite an accepted fact that in order to criminalize copyright wrongs, the principles of criminal law and the fundamental policies and philosophies of criminal jurisprudence should necessarily apply to copyright related offences.

The popular justification to criminalize copyright infringement stems from the serious harm and loss caused to the copyright owners and the society at large owing to the inherent immorality of the act of copyright infringement. The staple perspective of the proponents of this approach is that deterrence is the key to prevent and reduce copyright infringement and such degree of deterrence can only be contemplated when one links the copyright infringement regime to criminal legal apparatus with deterrence as a viable tool. This necessarily alludes to Law and Economic Theory, and utilitarianism.[35] The alleged immorality of the acts of copyright infringement does not find much justificatory support of the academic fraternity almost globally, given the preponderant societal obsession with the idea that copyright infringement is not wrong. However, whether such act is immoral or not is subject to a whirlpool of debates and dithering.[36] There is a general consensus that copyright infringement for profit and commercial motive is morally wrong though it is largely unclear whether the same degree of immorality can be imputed to cases of copyright infringement for personal use.[37]

The harms caused to copyright owners/authors through indiscriminate acts of copyright infringement are substantial loss of revenue and restricted control of the copyright owner/author upon his own work. Cases of lost revenue occur when the public chooses to access a free, copy of the work (an unlawful copy variant) instead of paying for a lawful one. The 'accumulative' harm of several unauthorized copies of copyrighted work may be quite significant.[38] When the copyright owner is rendered incapable of regulating his own works (like producing, publishing, performing or controlling access of others to such works) owing to unauthorized copying by copyright infringers, such owners or copyright holders perceive loss of effective control over the original works. The adherents of the criminal copyright approach believe that copyright infringement causes great societal loss as it not only causes economic loss to rightful creators of intellectual works but it also gradually kills the motivation and drive to contribute to the stock of intellectual creations. Such inertia and passivity among the intellectuals will tragically deprive the larger society of new ideas and information thereby frustrating and eroding the entire copyright regime.[39]

The legal and economic perspectives are quite apprehensive that if copyright infringement is allowed undeterred, it may lead to destruction of the ideal climate for intellectual creations.[40] Therefore it is absolutely vital to introduce efficacious deterrence models that can effectively curb

[35] By Richard A Posner, *The Law Economics Movement*, 77 1 (1987).
[36] Geraldine Szott Moohr, *THE CRIME OF COPYRIGHT INFRINGEMENT: AN INQUIRY BASED ON MORALITY, HARM, AND CRIMINAL THEORY* (1998).
[37] I. Trotter Hardy, *Criminal Copyright Infringement*, 11 WILLIAM AND MARY BILL OF RIGHTS JOURNAL 312 (2002).
[38] Moohr, *supra* note 36.
[39] Moohr, *supra* note 6.
[40] I. Trotter Hardy, *Criminal Copyright Infringement*, 11 WILLIAM AND MARY BILL OF RIGHTS JOURNAL 315 (2002).

such pernicious inclination.[41] Though copyright regime does contemplate civil sanctions but they are arguably becoming incrementally insufficient and in some cases even inappropriate to contain acts of rogue infringers. The ever expanding cyber space with blurred contours is making it difficult to trace/detect cyber presence of online infringers thereby automatically underscoring the growing significance of criminal model of sanctioning copyright infringers.[42]

A belief has gradually started to grow that criminal conviction of copyright infringers has greater deterrence value and "is appropriate for activities that would otherwise be difficult to deter."[43] The latent threat in criminal sanctions and awarding criminal penalty to infringers who are nabbed is believed to enhance deterrence and this led to almost an irrevocably grounded thought among the various stakeholders of intellectual property in general and copyright holders in particular that criminal remedies are the most effective responses to acts of copyright infringement.[44]

XI. Copyright Infringement & Criminal Jurisprudence: Moot Contestations

In this paper, the author will argue against the Criminal Legal Theory and Law and Economic justifications for imputing criminality to acts of copyright infringement. In addition to it, the author will also attempt de-constructing the component premises of criminal legal theory: the morality school, the harm school, the harm principle and the principle of restraint and thereafter try to discern and discover whether these schools and principles justify criminalization of copyright infringement. The various theories of crime which have assumed almost an unqualified predominance as staple conceptions of criminal jurisprudence need a brief discussion and analysis.

XII. The Morality Vindication for Criminalization

Lord Devlin, one of the dominant voices of the Morality School quite vociferously claims that the undisputed role of criminal law is enforcement of morality.[45] Criminal law is fundamentally based upon moralistic foundation of a society as criminalization to a large extent is influenced by the sociological forces and triggers of a given community. The societal conception and belief of what is right and wrong go a long way in shaping the criminal legal foundation of a given society.[46] Immoral acts are inherently wrongful in nature and are said to bear criminal culpability and hence need to be criminalized. Quite often, we tend to categorize morality into public and private morality and it's the former that is usually subjected to legal intervention. Public morality is essentially a society induced standard whose parameters are set by the society on the basis of subjective factors like popular social practices, prevailing value system in the society, all of which are pretty relative and varies from society to society. The fundamental social values may be bifurcated into generic values which are essential for the existence of any society and values which are considered to be necessary for the existence of any particular society. Certain essential values like the sanctity of life, the inviolability of the person, the virtue of truth, and the necessity of order are so much needed that any breach of these values become an immediate context for criminalization of the impugned conducts. Such breaches correlate to crimes of violence, fraud, and crimes against the peace, order, and good governance of society.[47] The morality principle neatly constructs the context for

[41] *Id.*
[42] Michael M Dubose, *Criminal Enforcement of Intellectual Property Laws in the Twenty-First Century*, 29 COLUMBIA JOURNAL OF LAW & THE ARTS 481 (2006).
[43] I. Trotter Hardy, *Criminal Copyright Infringement*, 11 WILLIAM & MARY BILL OF RIGHTS JOURNAL 305, https://www.justia.com/intellectual-property/copyright/criminal-copyright-infringement/ (last visited Jul 22, 2021).
[44] Hardy, *supra* note 40.
[45] Ronald Dworkin, *LORD DEVLIN AND THE ENFORCEMENT OF MORALS*, 986 YALE LAW JOURNAL (1966).
[46] *Id.*
[47] Dugas, *supra* note 34.

criminalizing any act or omission which tends to encourage any kind of immorality. Therefore, it is quite obvious that criminal jurisprudence intends to criminalize all such conducts which the actors indulge in with a blameworthy attitude of mind. The wrongful act or wrongful omission (*actus reus*) must have a necessary concordance with a guilty mind (*mens rea*) to result in crime. It is noteworthy to state here that mental fault can be of dual types- subjective fault and objective fault. In case of the former, it is relatively convenient to reconcile the morality principle of crime. People who choose to be immoral have to bear the consequences in the form of punishment. However, in the latter case, the reasonable or prudent man's test is applied and the degree of criminality of a person is measured on the basis of how a reasonable man would have acted under like circumstances. The objective fault ground is a lower standard. Criminal negligence is based on objective standard. It usually marks the departure of the alleged wrong-doer from the reasonable man's standard. Those who depart significantly from this standard of care are not moral actors, and hence they deserve to be identified as criminals and penalized.[48]

XIII. The Harm Vindication for Criminalization

The dominant voices of the "Harm" School like John Stuart Mill, H.L.A. Hart and Fienberg strongly believed and maintained that immorality as a sole factor is not a sufficient justification to warrant the State's interference with individuals through the coercive power of the criminal law.[49] According to Mill, the only legitimate ground to exercise State sponsored power over any social member through the instrumentality of the criminal legal apparatus is to prevent any possibility of probable infliction of harm upon others. The very idea of criminalizing any conduct of an individual is a serious one and such an endeavor should not be attempted unless the conduct ought to be criminalized has the potential of causing serious harm to others. The conceptual meaning of harm is capacious of diverse interpretations. Harm generally refers to "a set-back to a person's interests, measured with respect to some baseline."[50] Harmful conduct involving criminal culpability includes actual or threatened harm, interference with individual's property and putting into threat the collective safety or integrity of the society.[51] If we compare and contrast the harm and the morality principles, we can interestingly observe that the harm principle curtails the unconditional application of the morality factor as the sole component for criminalization. The additional relevant factor that needs to be considered along with morality is infliction or threat of infliction of harm to others in a given society. Thus the harm principle adds harm as an additional filter to the common baseline requirement of immorality to criminalize any conduct.

XIV. Criminal Copyright and Criminal Jurisprudence: Moot Contestations

In this part of the paper, the author argues that criminal legal theory does not vindicate criminalized infringement. The author attempts to cogently argue that copyright infringement neither involves the minimum degree of immorality nor the requisite level of harm so as to warrant its criminalization. Moreover, even the deterrence rationale for criminalization seems farcical and improbable. To begin with the immorality test so far as copyright infringement is concerned, there seems to be no consensus that infringement of copyright is inherently immoral in character. The reason why copyright infringement is not considered to be an immoral act *per se* and hence a criminal act because unlike theft or conversion, such acts or conducts do not rob the original creator or owner from the possessory/physical control over his original creation. The Supreme Court of USA

[48] *Id.*
[49] John Gray, *John Stuart Mill on Liberty, Utility, And Rights*, AMERICAN SOCIETY FOR POLITICAL AND LEGAL PHILOSPHY (1981).
[50] Hamish Stewart, *The Limits of the Harm Principle*.
[51] *Id.*

has ruled that copyright infringement is not fraud.[52] The court gave the logic that copyrights are creation of statutes and hence are different from possessory interests to tangible property. Copyright infringement does not deprive one of the physical controls over his work of creation and such infringement involves more intricate quagmire of interests than mere theft/conversion or fraud. In order to apply morality principle to cases of copyright infringement it is required to prove that there is enough societal consensuses in favor of advancing the morality argument for cases of copyright infringement. However, there seems to be insufficient data to support such inference.[53] Three surveys conducted in US and one Danish study on this issue reveal that theft or conversion of tangible goods is not socially construed as equivalent to cases of copyright infringement or piracy. Stuart P. Green and social psychologist Matthew Kugler conducted an empirical study in 2010 with the objective of determining whether society agrees that the means by which "theft" is committed and the form of the stolen property is irrelevant to blameworthiness and punishment. The study revealed that the social perception is strongly divided between cases of real theft & mere file sharing. Their data revealed that theft of tangible goods are seen and perceived by the society as involving relatively more blameworthy attitude of mind than theft of intangibles. Similarly, Siegfried released "Student attitudes on software piracy and related issues of computer ethics" in 2005. In this study more than 220 students from two US universities were interviewed about how they felt about software piracy and what is their attitude about downloading pirated music among others. The majority (nearly 80% of the total population) displayed no moral compunctions for downloading music freely from the internet without due authorization of the owner. This perception bolsters the idea that copyright infringement or digital piracy is never looked at with equal seriousness and as one involving similar degree of moral turpitude as in cases of theft or conversion of tangibles.[54] The Danish study which centered on assessing the degree of societal preparedness to hold any copyright infringement as of a *non-serious* nature asked fundamental questions on morality and ethics and inquired from the participants in the study as to which laws they believed to have social acceptability with regard to their breach. The study showed that almost 70% of those who were brought under the purview of survey found acts of unauthorized downloading to be socially acceptable. If we attempt to analyse the cumulative impact of these studies referred above, we can well infer that despite Denmark's entertainment industry's aggressive efforts to stop copyright infringements and to spread awareness among the general public about the criminality involved in acts of copyright infringements, societal consensus that copyright infringement is not immoral has remained more or less intact. This reality surfaces the inability of law to imbibe morality in the psyche of the general public.[55] The above stated surveys do not lead one to conclude that copyright infringement is not immoral from societal angle. However, they do show that there is no unanimity that copyright infringement is immoral, despite aggressive lobbying efforts to suggest the contrary.[56] Copyright infringement cannot be criminalized because of the strongly divided social perceptions with regard to infringement of intangibles and theft of tangibles. The popular belief of the society no way permits criminalizing copyright infringement as the society does not view theft of a car and copyright infringement as one and the same which should be met with similar legal consequences. Penney and others have maintained that copyright infringement is *malum prohibitum*, not *malum in se*. This means that copyright infringement is considered to be a wrong because the law of the land technically says it so. Such acts do not suffer from any intrinsic criminal culpability. Usually a nation is historically observed to have a tendency of criminalizing acts and conducts which are at odds with societal moral

[52] Dowling v. United States :: 473 U.S. 207 (1985) :: Justia US Supreme Court Center, https://supreme.justia.com/cases/federal/us/473/207/ (last visited Dec 5, 2022).
[53] Dugas, *supra* note 34.
[54] Robert M Siegfried, *Student Attitudes on Software Piracy and Related Issues of Computer Ethics*, 11530 1.
[55] Dubose, *supra* note 42.
[56] Ken Burleson, *Learning from Copyright's Failure to Build Its Future*, 89 INDIANA LAW JOURNAL 1299 (2014).

compass.[57] In these cases, law does not reflect the fundamental social values but tends to teach or impose some favored values to the society. This seems incorrect. Criminal law should enforce morality, not teach it. The society has a responsibility to teach moral values to its members. If the society is failing in that responsibility, we cannot assign such responsibility upon the legal apparatus of that society. This will be a sheer incongruence.

XV. Harm resulting from criminalization far outweighs the harm caused by Copyright Infringement

Usually in order to calculate the harm caused to copyright owners owing to copyright infringement 3 variants of harm may be contemplated: 1) Lost revenue 2) Lost control over copyright owner's own work and 3) loss of creative endeavor owing to economic loss resulting in reduced accessibility of the general public to creative outputs. There is no denying the fact that each of the above categories does involve certain degree of harm but the arguable point to consider here is whether such quantum and degree of harm is sufficient to warrant criminalization of copyright infringement. Since there is a glaring absence of shared belief, perspective or social consensus as to criminal nature of copyright infringement among a substantial global population, it is considered by many to be unwise and unfair to criminalize acts of copyright infringement through statutory expressions. This mindset looks more realistic when it is seen that there is no convergence of minds with regard to the fact that acts of copyright infringements are morally damaging as they tend to flout foundational social values.

To begin with, it is extremely difficult to quantify or monetize harms related to copyright infringement and most often than not, they are overstated.[58] It is quite an uphill task to calculate lost revenue of a copyright owner for acts of infringement by the alleged offenders. The conventional way to calculate the loss is by multiplying the monetary value of the copyrighted content with the number of infringing copies. For instance, let us assume that the legal downloading of a music album is Rs 50. The alleged infringer makes it available free of cost on the internet. Now, let us assume that 50 people have downloaded an infringing copy. In that case, the aggregate lost revenue owing to such infringement to the copyright owner is Rs 50 x 50 = Rs 2500. However, the difficulty with the lost revenue approach is that it overstates the economic loss and thereby gives a heightened sense of harm for copyright infringement which may give a distorted view of the reality. The lost revenue approach does not take into account the crucial fact that some individuals out of those 50 who had downloaded the pirated or free version would never have paid Rs 50 for the music album. If that is the case, then the copyright owner has not suffered any economic loss in respect of those who would never have bought the album @ Rs. 50. The lost revenue narrative gains enhanced relevance in the context of aggregate harm. Harm resulting owing to one infringer may be trivial but when it is a case of cumulative harm by multiple infringers, the financial interest of the copyright owner gets substantially adversely impacted.

Secondly, the harm caused to the copyright owners owing to loss of control over their copyrighted work due to infringement is not sufficient to warrant criminalization of copyright infringement. Though it is true that copyright owners have rights over their copyrighted content in terms of access regulation and control with regard to reproduction and dissemination of work, these rights are neither absolute nor unconditional. The rights of the copyright owners are appropriately limited by corresponding rights of the users and it is this balance that copyright law aims to achieve and maintain. Authors at the most are able to exercise control over their work through non-criminal

[57] Dugas, *supra* note 34.
[58] Burleson, *supra* note 56.

measures such as Digital Rights Management (DRM) and Technological Protection Measures (TPMs).[59]

Thirdly, whether cases of copyright infringement by rogue infringers actually kill the incentive and enterprise of potential intellectual contributors is quite a controversial issue and pretty difficult task to quantify. Burleson argues, "the apocalyptic rhetoric" that copyright infringement will annihilate the creative endeavor is a myth; File- sharing has continued for over a decade but new artists still continue to emerge and thrive."[60]

The contentious point is whether the protective regime created by copyright law is protective enough to persuade invention and creativity and whether circumvention of such a regime through copyright infringement is strong enough to kill that creative zeal or spirit. There is no conclusive thesis available globally which can link copyright infringement to lack of creative endeavor and hence resultant loss/stoppage of intellectual inputs. To construct a narrative as a justificatory outline for criminalization on such highly vague and contested premise is no doubt a virulent praxis. Therefore, if the filtered understanding is such that copyright regime does not in reality create any conducive ecosystem for intellectual endeavor nor does absence of such an ecosystem kill any creative zeal, the basis for criminalizing conduct of copyright infringement becomes tenuous and questionable. Then we can say, that in effect, we are criminalizing conduct that does not actually disrupt the copyright regime, and therefore, in reality, does not cause harm to society. Moreover, copyright infringement does not cause or threaten to cause physical harm to individuals. The nature of harm or loss is essentially pecuniary or financial in character. It is true that copyright infringement does hurt the moral sensibility of the original creators or copyright owners[61] but to address such civil injury or tortious liability, restorative justice in the form of pecuniary compensation to the aggrieved person through the functioning of civil and tort laws seem more rational and relevant.

XVI. How far the justification of criminalized copyright infringement as an instrument of deterrence effective?

Law and economic theory no doubt has a rational & historical nexus with Intellectual Property law. The conventional objective of copyright regime is to balance the opposing objectives of creative zeal and public access to knowledge and information. If one attempts to focus upon the true vindication, if any, for using the justificatory framework of criminalization as deterrence for copyright infringement, it may seem that such justification is quite tenuous. The predominant economic rationale for criminalized infringement is the expectation that deterring some harmful copyright infringement may compel potential infringers to behave more responsibly. Criminalized infringement may have some deterrent privileges. It may increase public awareness that copyright infringement is forbidden under the law of the land and this could reduce the rate of infringement. Criminal sanctions may impel the potential infringers to think that it is virtually a risky enterprise to resort to copyright infringement when the contemplated wrong (copyright infringement) is about to cost more than the economic benefit that may possibly accrue to the potential infringer as a result of copyright infringement. This reasoning closely corresponds to the 'external control' theory of criminal jurisprudence[62] in which potential infringers make a cost-benefit analysis, the cost being the criminal sanctions and the benefit being the privilege that he may obtain by indulging in such

[59] Dugas, *supra* note 34.
[60] Burleson, *supra* note 56.
[61] Christopher Buccafusco & David Fagundes, *The Moral Psychology of Copyright Infringement*, 100 MINNESOTA LAW REVIEW 2433 (2016).
[62] Geraldine Szott Moohr, *Defining Overcriminalization Through Cost-Benefit Analysis: The Example of Criminal Copyright Laws*, 54 AMERICAN UNIVERSITY LAW REVIEW, http://digitalcommons.wcl.american.edu/aulr (last visited Jul 21, 2021).

wrongful conduct. This reasoning assumes that potential infringers will act in rationally calculated ways, which is increasingly false online.[63] Such over-simplistic assumption miserably overlooks the crucial fact that humans tend to show aberrative behavior or not neatly follow the rational man's calculation in observing a given law of the land when underlying social norms do not support the law. [64] The immorality associated with copyright infringement does not meet with social disapprobation in a similar manner like theft or felony. Therefore the immorality in case of copyright infringement is not triggered by social consciousness (as there is no societal consensus that copyright infringement is immoral) but seems to be largely imposed by law. Imposition by law no doubt is a great force but when the societal understanding tends to militate against the rationale of statutory imposition, such an imposition becomes weak and the justification for such an imposition too meets the same destiny.

Apart from the fact that copyright infringement is not construed as an immoral act or socially abhorrent act *per se* to the same degree as theft or murder owing to which the justification to criminalize acts of copyright infringement seems frail, such criminalization also entails a substantial quantum of costs associated with its detection, enforcement, prosecution and sanction.[65] Thus direct & significant monetary costs are involved in such criminalization project. Moreover, such a tendency to criminalize copyright infringement seems to over-deter lawful uses of copyright protected contents. Thus the fine balance that the entire gamut of copyright regime aspires to maintain gets lopsided owing to faulty criminalization with misplaced thrust. The chilling impact of criminalization of copyright infringement proves immensely deleterious to both the incentive and access objectives. The incentive purpose is compromised because such criminalization tends to impede users from developing on existing works to create innovative socially relevant contents. The access object too is vitiated because users are again deterred from licitly accessing copyrighted contents out of fear and anxiety that their use may be treated as illegal and hence punitive in character. Buccafusco & Masur aptly acknowledge that there is what can be called an "efficient level of copying," where some copyright may be socially beneficial.[66] It is interesting to note that sometimes infringement of copyright protected contents may enhance the popularity & recognition of certain works which go a long way in benefitting the copyright owner financially.[67]

The criminalization project at a global scale with regard to conduct of copyright infringement also deeply affects the integrity, credibility and soundness of the criminal justice system. The significant point that criminalizing copyright infringement does not correspond to societal consensus (the popular belief that copyright infringement is not intrinsically criminal in nature) is a crucial matter that tends to emasculate the criminalization rationale. Such a lack of social agreement jeopardizes the legitimacy and reliability of law in a given society. The aggregate harm approach which tends to penalize a single infringer for several minute *de minimus* infringements seems to further jeopardize the integrity of the criminal justice system and delivery of justice. This is usually done because it is extremely difficult to trace or detect copyright infringers, more so, in the highly volatile and nebulous world of cyber crimes. Therefore, whenever anyone is nabbed, charged and finally convicted for copyright infringement, sanction is applied as a tool of general deterrence. Thus over-dosage of criminal sanctions seems arbitrary and oppressive and violates the proportionality principle which is one of the cardinal pillars of criminal justice and penology.[68] Hence, it can quite logically be inferred that the costs associated with criminalizing copyright infringement far

[63] Moohr, *supra* note 36.
[64] Moohr, *supra* note 62.
[65] Christopher Buccafusco & Jonathan S. Masur, *Innovation and Incarceration: An Economic Analysis of Criminal Intellectual Property Law*, 87 SOUTHERN CALIFORNIA LAW REVIEW 275 (2014).
[66] *Id.*
[67] Buccafusco and Fagundes, *supra* note 61.
[68] Moohr, *supra* note 36.

outweighs the benefits from them. As such, the justification for criminalization as an efficacious tool for deterrence looks fragile.

XVII. Criminalization of Copyright Infringement and Doctrine of Restraint: Incompatible Propositions

The doctrine of restraint is a limitation on the State's power to implement the coercive sanctions of the criminal law of the land in order to enforce a certain kind of human behaviour in a given society. The proponents of this doctrine strongly believe that criminal law with its sanctioning power may run berserk unless tamed and used in most appropriate circumstances and in order to use criminal sanctions it is utmost necessary to make a proper classification of conducts into criminal and otherwise. The doctrine argues for a careful examination of the "appropriateness, the necessity, and the efficacy of putting the criminal law into force. Criminal sanctions should be avoided where less stringent and less coercive means are available to address problems. Criminal law along with its sanctioning tools should be implemented only in compelling cases of unavoidable necessity and not otherwise. In the context of copyright regime, criminalized infringement can hardly be justified from the perspective of the doctrine of restraint. At the very outset, it can be suitably argued that there are adequate civil remedies for copyright infringement. Moreover, the act of copyright infringement is not considered to be inherently immoral. There is as such no social consensus about the immorality of an act of copyright infringement. Copyrights are fundamentally individual economic rights. The protection of these rights is the sole responsibility of the copyright holders. Infringement of copyright is a personal problem that needs to be tackled at an individual level. It is not a wrong against the society for which criminal law needs to be activized. It is quite implausible and hence to a large extent untenable under the criminal legal theory to resort to criminal sanctions/remedies/enforcement mechanisms in cases of copyright infringement where sufficient non-criminal measures are readily available in the alternative. Criminal copyright infringement is not appropriate, necessary, effective, nor an unavoidable necessity.

XVIII. Copyright "Propertization" and the Copyright "Criminalization" are Creations of Market Convenience

The widespread tendency to criminalize copyright infringement has been attributed to the ongoing global process of copyright propertization. The moment the legal system begins to treat copyright as a property, the need to protect its ownership becomes necessary and expansion of copyright through broadening of the exclusive rights arc through criminalization seems to be the surest consequence. Thus copyright propertization plays a crucial role in copyright criminalization.[69] Copyright is considered to be an intellectual property which is of an intangible nature. Copyright was considered to be a pure property at the very outset if one dates back to the 18th century. The application of the concept of property to the idea of copyright has indubitably augmented the justificatory aptitude to criminalize acts of copyright infringement. If copyright is considered to be a variant of intangible property, the fundamental premise that copyright is a kind of property makes criminalizing copyright infringement theoretically unproblematic and convenient. [70] The developmental stages reflecting the onward march of global copyright regime with gradual emphasis upon copyright propertization is further buttressed by the attribution of property terminologies into the Intellectual Property (IP) literature in general and into Copyright in particular. It is quite conceivable that repeated use of terminology in close proximity with a relatable concept has the incredible power of shaping human perceptions about a particular concept and can influence

[69] HABER, *supra* note 3.
[70] *Id.*

legislative and judicial minds as well. The continual use of the term property in close alignment with copyright creates a highly favorable ground to accommodate the meaning of property seamlessly with copyright as a variant of intellectual property. Thus usage of property terminologies in IP matters creates a highly opportune normative foundation to link criminalization with acts of copyright infringement.[71] The term intellectual property quite spontaneously encapsulates the term and meaning of intangible property though not emphatically negating the possibility of such property being considered real property. Hence, human perception has, over the ages, quite conveniently accepted such property as real property. Eminent scholars from across the globe maintain that the intellectual property" attained formal international recognition in 1893 with the formation of the United International Bureau for the Protection of Intellectual Property (BIRPI), which was established to administer the Berne and Paris Conventions.[72] The phrase "intellectual property" was first[73] expressed in *Davoll v. Brown*, an 1845 circuit court case and on the basis of it; it has been inferred by various scholars that the expression "intellectual property" is of relatively recent origin as compared to the expressions copyright and patents. Justin Hughes on the other hand says that the term intellectual property or artistic property was used to denote copyright throughout the 19th century way before the advent of WIPO.[74] The twin expressions "piracy" and "plagiarism" seem to denote deeply embedded property conception. Any unauthorized use of copyrighted content is termed as piracy. This term has been conceptualized as an instrument for the purpose of copyright propertization. It is interesting to note that though initially piracy meant large scale sale of counterfeit copies, nowadays, the connotative ambit of the term has expanded and it denotes every such act or conduct that involves act of copyright infringement. Another term called "plagiarism" whose epistemological basis is the Latin expression 'plagiori' (from trap or snare) meant stealing of slave/child. Plagiarism is usually considered to be an offence and the one who commits such act of plagiarism is considered to be a criminal. Thus use of these kinds of property terms alongside intellectual property in general and copyright in particular play a very significant role in normalizing a mindset that perpetuates a notion of semblance between acts of copyright infringement and real property offences like theft.

XIX. Is Copyright truly a "Property" to warrant Criminalization of Copyright Infringement?

It will be quite interesting to note that the property conception of intellectual property is essentially a capitalist imperative and a Eurocentric narrative. The capitalist ideology of self-aggrandizement with strident assertion of an individualist pursuit in the context of the Enlightenment and Industrial Revolution is one of the most compelling factors that energized the sudden shift of mainstream discourse from privilege to property and led to the quick commodification of supposed intangible rights associated with the creations of labor and art.[75] Capitalists have a predominant proclivity towards exclusivity and tradability of all such commodities (tangible as well as abstract or intangible) that are capable of exchange. Ownership includes taking control of not only tangible items of trade and business exchangeable for profit but also the intangible items like ideas, schemes, products and even relationships with the public, or "goodwill."[76] Such extension of the property concept to include even intangible or abstract items makes it theoretically and euphemistically highly convenient to criminalize infringement of those intangible rights thereby making it logically tenable to identify infringers of such intangibles as thieves and pirates. The business community for the sake

[71] *Id.*
[72] *Id.*
[73] The term "intellectual property" was used in 1845 in *Davoll et al. v. Brown*, 1... | Hacker News, https://news.ycombinator.com/item?id=17801506 (last visited Sep 21, 2023).
[74] HABER, *supra* note 3.
[75] DAVID VAVER, INTELLECTUAL PROPERTY LAW: COPYRIGHT, PATENTS, TRADE-MARKS (2000).
[76] *Id.*

of their interests laid down the justificatory anvil to criminalize acts of copyright infringement among others. The crucial fact that copyright unlike other real properties are non-rivalrous in character is at best considered by the trading class as pettifoggery of the jurists and legal fraternity at best.[77] The uncontested matter is that intellectual property has earned the legit status of a new genre of wealth and what is wealth for the society must be commodifiable, scalable and quantifiable.[78] Any attempt to deconstruct the idea of intellectual property to decipher as to what extent the components of 'intellectuality' and 'property' constitute the entire gamut of rights termed as intellectual property rights, is deliberately undermined because these strands of thoughts and potential philosophisation tend to tether uncomfortably with capitalist societies driven by ideological perceptions of private property, profit, enterprise, monetary incentive, acquisitive mentality, fences and markets.[79]

The reasons why copyright as a class of intellectual property is property-alike at the most but not exactly identical to the traditional conception of property and hence it is erroneous to consider IP rights as relatable to property rights may be highlighted and briefly explained below:

1. Copyright is not property; it simply defines an array of exclusive rights which are available to the originators/creators/authors for a limited duration of time. The concept of property springs from natural law theory. But copyright as a variant of intellectual property right is nothing more than a statutory right under the various jurisdictions of the globe. In India, Copyright is a statutory right under the Copyright Act, 1957. Unlike real property, copyright is neither exclusive nor absolute. Copyrights are delimited by statutory commands. The ambit of the bundle of exclusive rights given to the copyright holder depends upon how the judiciary interprets the relevant statutory expression. Copyrights countenance two-degree limitations- firstly, applicability of copyright for a fixed/limited tenure (which means for the life of the author plus a certain number of years *post mortem auctoris*) after which the creation passes into the public domain for free use which is quite *un*-property like as property never passes into public domain but passes from one generation to the next and is a perpetual right. Secondly, copyright is limited in its scope and ambit by the statute. The copyright holders legally have only those rights which are conferred by the statute.[80]

2. The idea of theft and copyright infringement are not identical or analogous. If we extend the idea of copyright as property and on that basis take theoretical comfort in considering copyright infringement as similar to physical theft of property, such synchrony is no doubt, an unsound imposition. Copyright infringement and theft are starkly antagonistic paradigms.[81] In order to hold theft and copyright infringement as proximately comparable or relatable concepts, two assumptions need to be clarified. One, that is, tangible and intangible property is parallel and second, the corresponding assumption that copyright infringement and theft are parallels. To begin with, tangible property refers to that entire class of property that can be perceived by the sense of touch. For instance, land, car, book, compact disk etc. On the other hand, intangible property refers to that class of property that cannot be perceived by the sense of touch. For instance, an idea or a song sung by a singer. There are several commonalities between tangibles and intangibles like both the categories of property can be bought, sold, owned and even independently valued.[82] But these similarities are reasons not strong enough to justify analogizing tangibles and intangibles. The signature difference between the two is: intangibles are 'non-rivalrous' while tangibles are 'rivalrous' in nature. Tangible property and intangible property are not one and the same.[83] If a gold necklace is stolen from a

[77] *Id.*
[78] *Id.*
[79] *Id.*
[80] Dugas, *supra* note 34.
[81] *Id.*
[82] VAVER, *supra* note 75.
[83] Steven Penney, *CRIME, COPYRIGHT, AND THE DIGITAL AGE*, 2004.

person's secret vault, he/she cannot get to use it as it is capable of being used one at a time so much so that if it gets into the hands of another person, it immediately goes out of the physical purview of the first person. If a loaf of bread is eaten, it is gone for good. It can no more be consumed by someone else. This is what we understand by rivalrous character. On the other side, if someone sings a song on a stage, the song is not devoured for good but it is yet capable of being sung and heard by someone else. This is intangible property and is non-rivalrous in character.[84] Hence tangible property is rivalrous and because of this feature, it naturally calls for enhanced protection against theft. But intangible property is non-rivalrous and hence does not need the same degree of protection like tangible property.[85] Again one can interestingly note that copyright infringement and theft are not identical concepts. The legal meaning of theft, almost across all the jurisdictions of the globe refers to the central issue of loss of physical control of the owner over the stolen property. On the contrary, in case of infringement of any copyrighted content by someone can only result in loss of revenue of the copyright owner and nothing more. The copyright holder still retains control over the product engendered by intellectual labor. Theft of a conventional property denudes the owner of the proprietary interest in that stolen property but copyright infringement does not lead to deprivation of such proprietary interest and at most causes potential reduction in profit which is purely an intangible harm.[86] Conversion of copyright is not technically feasible as the owner never suffers real deprivation in case of copyright infringement.[87] Moreover, the sanctions for theft and copyright infringement in almost all penal and copyright legislations across the globe are never identical which corroborates the view that copyright infringement can never be similar to theft.

3. Copyright Propertization is assumptive and its criminalization is circuitous & problematic. A mere assumption that copyright is property makes it theoretically convenient to build a skeletal assertion for its criminalization in case of copyright infringement. Once copyright infringement is constructed as theft or piracy obviating any further exploration of the essentials of propertization of copyright as an intellectual property, it becomes quite opportune to prevaricate any such theoretical deliberation on the question whether copyright is actually a property to warrant criminalization of its infringement.[88] It becomes quite easy to directly bring allegation of theft or stealing against the alleged infringer in case of copyright infringement and hold such persons as thieves or pirates for indulging in a morally reprehensible and criminally blameworthy act or conduct without any intellectual resistance.[89] Equating infringement with theft evades several crucial realities[90] and gives an impression of forced oversimplification of both the concepts for a pernicious motive to promote crass capitalist and consumerist agenda through erroneous construction of an arbitrary narrative of copyright propertization. The idea of exploring similitude between copyright infringement and theft is not legally tenable. But it undoubtedly manufactures a socio-cultural narrative of shame and disdain towards copyright infringers almost to the same extent and degree as would be in the case of thieves and pirates of physical property. Such whitewashing to deliberately blur the nuances and subtleties between copyright infringement and theft has been persistent by the business community across the globe to fructify their insidious motive to commodify and monetize every tradable item irrespective of the fact whether it is a 'true' property or not.[91]

[84] Dugas, *supra* note 34.
[85] Penney, *supra* note 83.
[86] Irina D. Manta, *The Puzzle of Criminal Sanctions for Intellectual Property Infringement*, 24 (2) HARVARD JOURNAL OF LAW & TECHNOLOGY 1 (2011).
[87] Buccafusco and Masur, *supra* note 65.
[88] Dugas, *supra* note 34.
[89] Dubose, *supra* note 42.
[90] Moohr, *supra* note 6.
[91] Dugas, *supra* note 34.

XX. Recent Proposal & Initiative by the Government of India to Decriminalize the Copyright Act, 1957 in particular and IP Laws in general: Jan Vishwas Bill 2023

The idea of an enabling business atmosphere is, no doubt, an essential and indispensable ingredient to create a highly convenient and conducive investible climate in a given country. The Indian government has expressed its unflinching commitment to the idea of 'Ease of Doing Business' (EODB) by recently introducing the Jan Vishwas Bill 2023 in India.[92] The Bill proposes to reduce punishments and decriminalize minor offences across roughly 42 statutes including the major statutes of the IP laws. The Bill is introduced with a vision to promote India as a major economic and financial hub. The prime legislative intent that underpins the Jan Vishwas Bill 2023 is to endorse the ease of doing business in India through the principle of 'minimum government, maximum governance'.[93] However, the decision of the Indian government to decriminalize some of the provisions of various statutes forming the major plank of the Indian IP laws have also met with strident criticism by various stakeholders. It is feared that the consequential benefits of such decriminalization will reach the bigger business houses while the small and medium scale enterprises will countenance adverse ramifications so far as competition, public health and consumer welfare are concerned.[94] Even the Federation of Indian Chambers of Commerce & Industry (hereinafter referred to as FICCI) had vehemently opposed the idea of Indian government to decriminalize some of the criminal provisions of the IP statutes in India when it had given its recommendations against decriminalization back in 2019 to the Indian government.[95] They had warned against the possible loss of pecuniary incentive and authorial motivation to engage in works of creative pursuits owing to the leanings of the Indian government towards a growing culture of phased decriminalization of some of the IP offences in general and offences pertaining to copyright infringement in particular.[96] The FICCI was quick to warn against such proposed decriminalization of some of the serious economic offences relatable to organized crimes contemplated under the criminal provisions of the Copyright Act, 1957 on the ground that it would weaken the incentive to invest in India.[97] The governmental sentiment of grand decriminalization project which finds unprecedented resonance in the Jan Vishwas Bill 2023 is not without its own share of criticisms based upon economic and business logic. Mindless emphasis upon the monolithic conception of business expedience directed towards decriminalizing some of the copyright provisions in India may certainly prove beneficial to big business houses but not for the small and medium scale enterprises. The rationale advanced in favor of decriminalization is that small businesses in the context of copyright regime in India and practically across the entire globe usually receive arbitrary and unfounded threats of criminal action by the copyright owners (the copyright owners have a tendency to extort license fees by ensnaring and threatening users with dire consequences).[98] Therefore, the copyright owners tend to abuse their power and this can adversely affect ease of doing business. Such power in the hands of the copyright owners can thwart creativity and impede access to knowledge. Hence, a rationalized criminalization approach is the need of the time where it is necessary to classify different types of copyright infringement and to criminalize only cases of mass piracy and not routinized infringements.[99] The

[92] Aparajita Lath, *Jan Vishwas Bill 2023: Small Businesses, Competition and Public Health Set up to Lose?*, SPICYIP (2023), https://spicyip.com/2023/08/jan-vishwas-bill-2023-small-businesses-competition-and-public-health-set-up-to-lose.html (last visited Sep 18, 2023).
[93] *Id.*
[94] *Id.*
[95] FICCI, *Proposed Decriminalization of Offenses Under Copyright Act ' 1957*, 1 (2019).
[96] *Id.*
[97] *Id.*
[98] Lath, *supra* note 92.
[99] Aparajita Lath, *Bill to Decriminalise IP Offences Misses the Mark and Dilutes Significant Provisions*, SPICYIP (2023), https://spicyip.com/2023/01/bill-to-decriminalise-ip-offences-misses-the-mark-and-dilutes-significant-provisions.html (last visited Sep 18, 2023).

Bill removes Section 68 of the Copyright Act, 1957 which penalizes with incarceration, persons who make false statements for the purpose of deceiving or influencing any authority or officer. It remains logically untenable as to why this provision should be removed. Deceiving or making false statements to an authority is, no doubt, a serious issue which should not be decriminalized. Therefore, the researcher can attempt to surmise from the above discussions that neither over-criminalization nor de-criminalization of the copyright provisions can serve any desirable purpose. A middle path needs to be adopted like rationalized criminalization and extremities are to be avoided in order to balance the owners' and users' rights through the statutory copyright regime.

XXI. Concluding Observations

The above discourse attempts to cite and explain some crucial narratives about what the copyright regime principally intends to do and how criminalization of copyright infringement logically proves to be largely incompatible and unacceptable in the context of some essential principles of criminal jurisprudence or criminal legal theory. It is quite understandable from the above discussions that some principles of criminal legal theory like doctrine of harm, doctrine of restraint, copyright propertization, and deterrence model of sanction are increasingly refuting their applicability to cases of copyright infringement further fortified by glaring lack of societal consensus with regard to the intrinsic criminality involved in acts of copyright infringement. Copyright infringement at the most can be said to be *malum prohibitum*, not *malum in se*.[100] The threat and rapid urge to criminalize copyright infringement was more a prod by the business community than the larger society almost across the globe, owing to the challenge thrown by the interference of the digital technology in the creative process and augmenting the ease and scale of copying thereby multiplying the chances of loss to the copyright owners for copyright infringement. Criminalization cannot be invoked as a social policy merely because an act or conduct has earned the prospective of multiplying by leaps and bounds owing to rise in technological sophistication and digital prowess.

[100] Sheldon W Halpern, *Copyright Law in the Digital Age: Malum in Se and Malum Prohibitum*, 4 MARQUETTE INTELLECTUAL PROPERTY LAW REVIEW 1 (2000).

References

Analysis Of R.G. Anand V. M/S Deluxe Films And Its Relevance In Recent Times - Copyright – India, https://www.mondaq.com/india/copyright/1149674/analysis-of-rg-anand-v-ms-deluxe-films-and-its-relevance-in-recent-times (last visited Oct 9, 2023).

Anushka Bharwani, *Eastern Book Company and Ors. vs D.B. Modak and Ors*., LAW TIMES JOURNAL (2020), https://lawtimesjournal.in/eastern-book-company-and-ors-vs-d-b-modak-and-ors/ (last visited Oct 9, 2023).

Aparajita Lath, Bill to Decriminalise IP Offences Misses the Mark and Dilutes Significant Provisions, SPICYIP (2023), https://spicyip.com/2023/01/bill-to-decriminalise-ip-offences-misses-the-mark-and-dilutes-significant-provisions.html (last visited Sep 18, 2023).

Aparajita Lath, Jan Vishwas *Bill 2023: Small Businesses, Competition and Public Health Set up to Lose*?, SPICYIP (2023), https://spicyip.com/2023/08/jan-vishwas-bill-2023-small-businesses-competition-and-public-health-set-up-to-lose.html (last visited Sep 18, 2023).

Ashwin Ramakrishnan, *Towards an Effective Regime against Online Copyright Infringement in India*, 2016.

Augustine Birrell, SEVEN LECTURES ON THE LAW AND HISTORY OF COPYRIGHT IN BOOKS (1899).

Berne Convention et al., *History of Copyright Law in India* (2019), https://www.bananaip.com/ip-news-center/history-of-copyright-law/..

Christopher Buccafusco & David Fagundes, *The Moral Psychology of Copyright Infringement*, 100 MINNESOTA LAW REVIEW 2433 (2016).

Christopher Buccafusco & Jonathan S. Masur, *Innovation and Incarceration: An Economic Analysis of Criminal Intellectual Property Law*, 87 SOUTHERN CALIFORNIA LAW REVIEW 275 (2014).

Copyright infringement and remedies in India - Lexology, https://www.lexology.com/library/detail.aspx?g=96a0fc1e-d8de-4efe-9f7b-d9ed17752bc4 (last visited Jul 25, 2022).

Criminal liabilities and remedies for copyright infringement in India - iPleaders, https://blog.ipleaders.in/criminal-liabilities-remedies-copyright-infringement-india/ (last visited Jul 25, 2022).

David Vaver, INTELLECTUAL PROPERTY LAW: COPYRIGHT, PATENTS, TRADE-MARKS (2000).

Dowling v. United States :: 473 U.S. 207 (1985) : Justia US Supreme Court Center, https://supreme.justia.com/cases/federal/us/473/207/ (last visited Dec 5, 2022).

Eldar Haber, THE CRIMINAL COPYRIGHT GAP, INTELLECTUAL PROPERTY SCHOLARS CONFERENCE (IPSC) PAPER 5 (2014).

Eldar Haber, CRIMINAL COPYRIGHT (2018).

Eldar Haber, *Internal Reasoning for Criminal Copyright*, CRIMINAL COPYRIGHT 104 (2018), https://www.cambridge.org/core/books/criminal-copyright/internal-reasoning-for-criminal-copyright/66BF2FBFD4C36DDD505F3350E1668A9D (last visited Dec 23, 2021).

FICCI, *Proposed Decriminalization of Offenses Under Copyright Act 1957* (2019).

Geraldine Szott Moohr, *Defining Overcriminalization Through Cost-Benefit Analysis: The Example of Criminal Copyright Law*s, 54 AMERICAN UNIVERSITY LAW REVIEW, http://digitalcommons.wcl.american.edu/aulr (last visited Jul 21, 2021).

Geraldine Szott Moohr, *The Crime of Copyright Infringement: An Inquiry Based on Morality, Harm, and Criminal Theory*, 83 BOSTON UNIVERSITY LAW REVIEW 731 (2003).

I. Trotter Hardy, *Criminal Copyright Infringement*, 11 WILLIAM AND MARY BILL OF RIGHTS JOURNAL 312 (2002).

Irina D. Manta, *The Puzzle of Criminal Sanctions for Intellectual Property Infringement*, 24 (2) HARVARD JOURNAL OF LAW & TECHNOLOGY 1 (2011).

John Gray, *John Stuart Mill on Liberty, Utility, And Rights*, AMERICAN SOCIETY FOR POLITICAL AND LEGAL PHILOSPHY (1981).

Ken Burleson, *Learning from Copyright's Failure to Build Its Future*, 89 INDIANA LAW JOURNAL 1299 (2014).

Lydia Pallas Loren, Digitization , Commodification , Criminalization : The Evolution of Criminal Copyright Infringement and the Importance of the Willfulness Requirement, 77 WASHINGTON UNIVERSITY LAW REVIEW 835 (1999).

Maria C. Dugas, THE THERORETICAL CASE AGAINST CRIMINALIZED COPYRIGHT INFRINGEMENT IN CANADA, 2017.

Michael M Dubose, *Criminal Enforcement of Intellectual Property Laws in the Twenty-First Century*, 29 COLUMBIA JOURNAL OF LAW & THE ARTS 481 (2006).

N.V. PARANJAPE, CRIMINOLOGY, PENOLOGY & VICTIMOLOGY (2018).

Robert M Siegfried, *Student Attitudes on Software Piracy and Related Issues of Computer Ethics*, ETHICS AND INFORMATION TECHNOLOGY 6(4)(2004).

Ronald Dworkin, *Lord Devlin And The Enforcement Of Moral*S, 986 YALE LAW JOURNAL (1966).

Sheldon W Halpern, *Copyright Law in the Digital Age: Malum in Se and Malum Prohibitum*, 4 MARQUETTE INTELLECTUAL PROPERTY LAW REVIEW 1 (2000).

Singh, Justice Pratibha, Historical Development Of Law Of Copyright - Intellectual Property - India, https://repository.nls.ac.in/cgi/viewcontent.cgi?article=1029&context=ijlt (last visited Oct 5, 2021).

Steven Penney, CRIME, COPYRIGHT, AND THE DIGITAL AGE, 2004.

The Difference Between A Civil Wrong And A Criminal Wrong - CLATalogue, https://lawctopus.com/clatalogue/the-difference-between-a-civil-wrong-and-a-criminal-wrong/ (last visited Aug 14, 2022).

The term "intellectual property" was used in 1845 in Davoll et al. v. Brown, Hacker News, https://news.ycombinator.com/item?id=17801506 (last visited Sep 21, 2023).

ISSN 2226-6771

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