

THE ROLE OF ARTIFICIAL INTELLIGENCE, INTELLECTUAL PROPERTY RIGHTS AND TECHNOLOGY IN ECONOMIC DEVELOPMENT

Muhammad Ridduwan

Faculty of Law, Palembang University
E-mail: ridwannoermuhammad@gmail.com

Fitriah

Faculty of Law, Palembang University
E-mail: fitriahsyahrial@gmail.com

Nia Nopianti

Faculty of Law, Palembang University
E-mail: Nianopianti96@gmail.com

Susi Yanuarsih

Faculty of Law, Palembang University
E-mail: susiyanuarsih@unpal.ac.id

Abstract

This article is entitled the role of artificial intelligence, intellectual property rights, and technology in economic development. The problems discussed in this article are how the legal regulations regarding artificial intelligence, intellectual property rights and technology in national legislation and how the role of artificial intelligence, intellectual property rights, and technology in economic development. The research method used in this study is the normative legal research method. The purpose of this study is to determine the role of artificial intelligence, intellectual property rights, and technology in economic development while the benefits obtained from this study are expected to enable readers to know and understand the role of artificial intelligence, intellectual property rights, and technology in economic development. From this study it can be concluded that first, legal regulations regarding artificial intelligence do not yet exist in Indonesia while legal regulations regarding intellectual property rights and technology are already regulated in separate laws. Second, in general, both Artificial Intelligence, Intellectual Property Rights, and technology simultaneously play a key role in the growth and development of the country's economy.

Keywords : *Artificial Intellegence, Intellectual Property Rights, Technology, Economic Development.*

1. INTRODUCTION

Indonesia as a developing country is a member of the Association of Southeast Asian Nations (hereinafter referred to as the Association of Southeast Asian Nations) in this article abbreviated as ASEAN) namely A an organization that accommodates member countries in the Southeast Asia Region . Which is Indonesia as wrong wrong one member becomes countries in the development stage the economy Not yet so established . Even the experts mention that Indonesia is an ASEAN country with a growth rate of Its economy is very behind compared to other ASEAN members . 1997 , Indonesia actually reap Lots praise from various parties both domestic and international as high performing Asian economic countries that have high performance a very proud economy . However , the blow crisis monetary crisis that hit this

country in mid - 1997 has wreck havoc economy national so that tired For Rise Again (Abdul Manan, 2016).

Crisis monetary events that occur type That Then develop become complex and massive crisis to cause pessimism among economists intertwined with time to gold economy national in the future . At first crisis monetary This is a contagion effect of from Thai baht currency against the US dollar. However , because foundation economy national Not yet so established so matter That also has an impact on Indonesia, where the economic recovery process is going on lasts a long time.

Development and advancement system law riches intellectual now is need real and important for Indonesia. Domestic conditions require Indonesia to proceed to direction That along with economic development as well as adaptation to impact globalization . With development law riches intellectuals in Indonesia, then must notice ability , power support , and tamping capacity , as well as interest national (Andi BasoIlmar , 2020).

Property rights intellectual That Alone is a reward given by the state for results work intellectual a valuable human being economical . The resulting on base strength Power thinking and abilities that include creativity , feeling, and will that each person has . However so , no everyone can produce a valuable masterpiece economical high (OK Saidin, 2013).

On progress agreed existence various types of property rights The previous intellectual not known as Property Rights Intellectual , however Because triggered by the existence of the General Agreement on Tariffs and Trade, abbreviated as GATT part from the formation of the world rrrade organization then also known as branches of Property Rights Intellectual ysang get protection namely :

1. Copyright;
2. Brand;
3. Indication Geographical ;
4. Patent;
5. Protection Plant Varieties ;
6. Trade Secrets ;
7. Industrial Design; and
8. Circuit Layout Design Integrated .

In the era of globalization and development economy as well as development technology that occurs mature This is the development of intellectual property rights Intellectual play a role strategic in the world of business and trade (Joni Sansri Ritonga et.al, 2024). One of the development quite recent confiscate public attention is emergence A phenomenon known in society with Intelligence The creation that is thought to be also included as branch new from right riches intellectual .

As for the method research used in this article is method normative research , namely something method research conducted with study various literature and libraries related laws with issue the law discussed (Marzuki, 2015).

The purpose of study This is For know role intelligence artificial , rights riches intellectual and technological in economic development whereas benefits obtained from study This is readers are expected can know as well as understand role intelligence artificial , rights riches intellectual and technological in Economic Development .

Based on exposure above , and looking at development phenomena that occur in society so problems that will discussed in this article is

1. How arrangement law about intelligence artificial , rights riches intellectual and technological in regulation legislation national
2. How role intelligence artificial , rights riches intellectual and technological in growth the country's economy .

2. RESULT AND DISCUSSION

2.1 Arrangement intelligence artificial in regulation legislation national

Intelligence artificial or known with artificial intelligence originating from a combination of two words , namely artificial, which means artificial and meaningful intelligence intelligence (Fatimah Nad et.al, 2023). Artificial Intelligence is A designed technology For make system purpose- built computer For make things easier work man .

With input and knowledge Artificial Intelligence humans possible Can accept knowledge via simulation of reasoning processes and power think humans to complete various existing problems in society . Although intelligence artificial This own limitations like not Can used For look for experience even do study as it should be man However intelligence artificial This Can used For get whatever you want .

Then you can concluded that intelligence artificial created such appearance to be able to do things as it should be man even Can functioning as tool servant for man even something very extreme that intelligence artificial This can replace man in routine life daily .

Indonesia recognizes two kinds subject law namely humans and legal entities . Both subject This own different characteristics . Categorization intelligence artificial as subject law Still reap debate among the community and practitioners law . Considering intelligence artificial is A system design man so existence intelligence artificial This classified as subject corporate law . This is caused by Because intelligence artificial not own naturalness as aspect main existence human . Remembering existence conflict between the community and practitioners law about matter This as well as remember existing needs and developments in society so Already as it should be intelligence artificial This arranged alone as subject law .

2.2 Arrangement law right riches intellectual in regulation legislation national

As we know that Indonesia know a set rule about right riches intellectual that is right copyright , patent, trademark , secret trade , industrial design , and layout design circuit integrated .

First right creation in a way new related rules with right creation is Law No. 28 of 2014 which replaces Law no. 19 of 2002 as for background behind main occurrence change Constitution right creation is Because such a development rapidly to right creation in society .

In Indonesia, the journey Copyright regulations have experience evolution length that reflects dynamics social , economic and legal national and international . Since colonial times with implementation Auteurswet 1912 as inheritance Dutch law , regulation regarding Copyright continue experience update until birth Constitution Number 28 of 2014 concerning Copyright. Law This present as response to various challenge new emerging consequence progress digital technology and as form harmonization to various convention international which has ratified by Indonesia, such as The Berne Convention and the TRIPs Agreement (*Trade-Related Aspects of Intellectual Property Rights*) (Ervan Susilowati, 2023).

Constitution Number 28 of 2014 adopted principles more Copyright protection progressive and contextual , with strengthen position law creator through confession on moral rights and rights economy in a way more firm . Law this also introduces various update

important , such as extension of protection period , regulation license , protection right related , and mechanism settlement disputes and systems registration right more creations systematically . In addition , this law give role important to institution collective management and state institutions in supervise and enforce right creation , and accommodate development digital technology as room new in existence and distribution work Copyright (Rizkia , 2022).

Copyright is right exclusive the creator who arises in a way automatic based on principle declarative after something creation realized in form real without reduce restrictions in accordance with Provision Legislation . The Copyright Holder is the Creator as Copyright owner , receiving party right the in a way legitimate from Creator , or other party receiving more carry on right from the receiving party right That in a way valid . Scope arrangement right creation covering right economic and moral rights .

Protected creations covering Creation in field knowledge knowledge , art , and literature, consisting of above : a. books , pamphlets , typography work write published , and all results work write others ; b. lectures , talks , speeches , and creations similar others ; c. tools the props made For interest education and science knowledge ; d. songs and/ or music with or without text ; e. drama, musical drama , dance, choreography , puppetry , and pantomime ; f. works art appearance in all form like painting , drawing , carving , calligraphy , art chisel , statue , or collage ; g. work art applied ; h. works architecture ; i . maps ; j. works batik art or other motif art ; k. works photography ; Portrait ; m. work cinematography ; n. translation , interpretation, adaptation , anthology , database, adaptation , arrangement , modification and other works of results transformation ; o. translation , adaptation , arrangement , transformation , or modification expression culture traditional ; p. compilation Creation or data, either in a format that can be read with Computer Program or other media ; q. compilation expression culture traditional during compilation the is original works ; r. video games ; and s. Computer Programs.

No Copyright on results work in the form of : a. results meeting open state institutions ; b. regulations legislation ; c. speech statehood or speech officials government ; d. decision court or judge's determination ; and e. Scripture or symbol religious protection law to right creation with existence Constitution new This has give framework clear and comprehensive laws Because Constitution This also regulates regarding Settlement Dispute namely If happen violation to right creation This can resolved via court Commerce and rights holders know experts his heirs will get compensation . However in its manifestation Still face complex challenges . In practice, one of the constraint main is low public understanding of importance protection right creation . Challenge other is weakness enforcement law to violation right creation although regulations right creation This has arrange sanctions criminal and civil However so implementation Still not optimal.

Handling process case often slow and convoluted consequence bureaucracy that is not efficient as well as limited coordination between authorized institutions . This is aggravated with limited source Power capable human and infrastructure handle violation right creation professionally , especially those related to with digital realm (Simatupang , 2011).

Development technology and its popularity Internet use has also become factor significant complicating protection right creation . Digital platforms such as YouTube, Instagram, and social media sites others , become a new medium distribution work creation , but also at the same time become gap occurrence violation right creation . In one side , society now can with easy access and distribute content entertainment . On the other hand , the works creation often used without permission creator with reason convenience digital access .

Although these platforms have provided mechanisms for reporting violations, responses and handling are often not fast or effective, so that they cause economic and moral loss for the owner of the right creation.

Another challenge that is quite significant is protection of traditional and local cultural works. The system of law oriented towards individual creators is not yet fully capable of accommodating works collectively owned by public customs. As a result, many inheritance cultures, such as traditional music regions and dances, are used by other parties without compensation or acknowledgment of their community origin. This shows the need for the development of instruments or laws more sensitive to the rights of public customs in the framework of intellectual property protection (Fadilah, 2024).

In facing the various problems mentioned, optimization of protection of right creation can be done through a number of approaches. First is improvement of education and literacy of the public, especially for creative industry perpetrators and internet users. Socialization about the importance of right creation and the consequences of law from violation must be intensified by the government and related institutions. Second, the system of registration of creation through the Directorate General of Intellectual Property (DJKI) must be strengthened and simplified.

Overall, protection of right creation in Indonesia indeed has its own strong foundation in law, but challenges in the field are still big. With this, it is hoped that a creation ecosystem where protection work is fair, balanced and productive intellectual property can be realized in the future.

Second, Patent. Protection of patent law in general is nationally arranged in Law No. 13 of 2016 replacing the Constitution previously. Changes to this patent law aim to align the national patent law with development technology and practice. Patents are exclusive rights granted by the state to the inventor or those who give an agreement to other parties to carry it out. An invention is the inventor's idea that is poured out into something that solves specific problems in the field of technology in the form of a product or process, or refinement and development of a product or process. An inventor is one or more people who together implement the ideas that are put forward in activities that produce an invention (Fadilah, 2024).

Patent rights are a form of protection given by law to the inventor or holder of patent rights for control over the use of his invention during a certain period of time, usually 20 years. Patents are only given for inventions that meet three main criteria: novelty, steps of inventiveness, and applicability in industry. An invention must be new, meaning there is no knowledge or the same technology previously; must contain steps of inventiveness, namely have a level of creativity that is not considered as commonplace; and must be able to be implemented in industry or have a practical application that can be used in production or industrial processes (Simanjuntak et al., 2025). The scope of patent protection includes ordinary patents and simple patents. A patent is classified as a regular patent if it fulfills the conditions: first is a finding in the field of technology, second contains an inventive step, and third can be implemented in industrial activities.

Protection of patent rights grants diverse benefits, both at the individual and industry levels. One of the main benefits from patent rights is the incentive given to the inventor to keep innovating. With the existence of a patent, the inventor has exclusive control over the use of his invention, which allows him to monetize the invention through licensing, technology cooperation, or commercialization of the invention. These benefits to the economy are very important, especially for individuals and companies that want to develop new technology-based products.

For industry , protection patents also function For increase Power competitive . With existence patents , companies Can prevent other parties use technology they without permission , which encourages company For invest in research and development . In addition , patents can also become source income through licensing and technology transfer , which allows company or individual For get royalty from use inventions by other parties . On a larger scale broad , patent rights become component important in economy based knowledge , which contributes to growth economy , creation field work , and improvement Power global competitiveness . Countries that have strong patent system tend more proceed in matter innovation and technology , so that patents do not only functioning For protect inventor , but also become instrument development economy .

Although the patent system in Indonesia is already experience development , implementation Still face diverse significant challenges . One of them challenge main is lack of awareness public to importance patent rights . Many actors businesses , researchers , and innovators who have not understand right How patent rights can protect results work them and give profit economy . In addition , the complex and lengthy patent registration process also becomes obstacles . Besides that , enforcement law to patent infringement national Still weak .

In order to handle obstacles the on government can take steps namely First simplification system patent registration ; second , granting incentive to local inventors; and third , increasing enforcement law to patent infringement . Third , the trademark. general protection brand arranged in Law No. 20 of 2016. Law This No only arrange problem protection brand solely but also regulate about protection indication geographical .

Brand (language English : *brand*) or brand is a mark applied by entrepreneurs (factories , producers , etc.) on the goods they produce as sign identifier . Brand is signs that can displayed in a way graphic in the form of image , logo, name, word, letter , number , arrangement color , in 2 -dimensional and/ or 3- dimensional forms , sound , holograms, or combination of 2 or more element the For differentiate goods and/ or services produced by individuals or legal entities in activity trading goods and/ or services . Brands are his heart sustainability A business , because through brand it something product Can known by the public wide . Even when public wide Already fanatic to something brand , society No Want to look at brand others . It means brand is tools that make something product produce multiple benefits . Reflecting from benefits gained from the importance of the "name" contained in a brand , of course No close possibility can happen dispute brand and/ or own designation similar brands .

Activity For introduce and popularize brand trade is something condition For success company market product said , because That do it through “ use brand ” for product business For differentiate it with product other competitors . brand is one of the factor important for success market dominance .

There are two brands , namely brand trade and brands services . Trademarks is a brand used on goods traded by a person or some people in particular together or legal entity For differentiate with goods similar others . Service marks that is a brand used for services traded by a person or some people in particular together or legal entity For differentiate services similar others . Special For brand collective Actually No can it is said as type the new brand because brand collective This its use used in a way collective , but understanding brand collective that is as brand used on goods and / or service with the same characteristics traded

by several people or legal entities in a way together For differentiate with goods and/ or service similar others (Widianoro , 2022).

Registration brand aim For get certainty law and protection law to right on trademark . Registration brand conducted at the Directorate General of Property Rights Intellectuals . Directorate General HKI is agency registration assigned brand For register the trademark applied for registration by the owner trademark . Registration brand in matter This is For gives the status that applicant considered as user First until there are other people who prove it on the contrary . The right to brand No There is without registration . Here's what's more bring certainty . Because if somebody can prove He has register something brand and he given something Trademark Certificate which is proof than right his on something brand , then other people don't can use it and others don't entitled For use same brand For similar items too (Semaun , 2016).

Legal Protection Provided to brand owner whose brand imitated by others, can submit lawsuit on Trademark infringement . Article 83 of the Republic of Indonesia Law Number 20 of 2016 states :

1. Registered Trademark Owner and/ or recipient Registered Trademark License can submit lawsuit to other parties who without right use the brand you have similarities in principle or the whole thing For goods and/ or similar services in the form of :

- a. lawsuit change loss ; and/ or
- b. termination all related actions with use

The brand .

2. Lawsuit as referred to in paragraph (1) may also be submitted by the owner of a well-known trademark based on decision court .

3. Lawsuit as referred to in paragraph (1) is submitted to Court Commerce .

To similarity brands that are still used at the time submitted lawsuit , Article 84 of the Republic of Indonesia Law Number 20 of 2016 provides protection the law which states " As long as Still in examination and for prevent greater losses large , brand owners and/ or recipient License as plaintiff can submit application to the judge to stop activity production , distribution , and/ or trading goods and/ or services that use the Trademark in a way without rights ."Article 87 of the Republic of Indonesia Law Number 20 of 2016, Regarding decision Court Commerce about brand only can submitted cassation .

Settlement dispute others that can done to dispute brand that is , the solution dispute through criminal offense . Article 103 of the Republic of Indonesia Law Number 20 of 2016 states " Criminal acts criminal as intended in Articles 100 to with Article 102 being offense complaint ." Crime complaint (*klacht delict*) means only with existence complaint from si owner counterfeit brand , then can prosecuted and charged criminal or held investigation . Without any complaint from the party who feels himself harmed from action forgery that , then No There is investigation from party Police (Runtung et.al, 2014).

Fourth , Trade Secrets , Trade Secrets is information that is not known to the public in the field technology and/ or business , have mark economy Because useful in activity business , and maintained confidentiality by the owner of the Trade Secret . Scope Trade Secret Protection covering method production , method processing , method sales , or other information in the field technology and/ or businesses that have mark economy and not known to the public general .

Apart from being a state of law , Indonesia is a welfare state or *the welfare state* also wants to realize goals principal , with existence involvement and intervention of the state (

government) in form regulations so that goals the can come true in various aspect life society . This is in accordance with provisions of Article 28C of the 1945 Constitution which states that everyone has the right For advance himself in fight for his rights in a way collective For build society , nation and country .

Every business or business will always own information of a nature secret and in as category confidential that is confidential trade . Business actors will realize importance confidential trade at the time its competitors or its competitors try For get information in the form of Who its customers , plans marketing , or another very important thing for his efforts . Indonesia knows term confidential trade with the term trade secret or undisclosed information , or information that is not known . Trade secrets is information that has mark economy alone Good current and potential Because generally No known to others, valuable for others who don't can get information in a way valid and protected as confidential through effort reasonable actions taken by the owner confidential trade . If something when one of or more from third the above criteria No Again fulfilled , then information the No Again including to in confidential trade . Various type information that provides superiority competitive can become confidential trade , including formula or recipe , design products , customer list , schedule price , technique manufacturing , and marketing strategies . (Katya Benalda et.al, 2024).

In the Trade Secrets Act , the owner confidential trade also has right Good For use Alone confidential the trade he owns and For give license and forbid other parties to use or disclose confidential trade the to party third For interests of a nature commercial as arranged in provisions of Article 4 of the Trade Secrets Law . Protection confidential trade ongoing during confidential trade the kept secret . After confidential trade known public in a way valid (not Because theft or abuse rights) then protection confidential trade end .

Protection of Property Rights Intellectual in framework Property Rights Law Intellectuals in Indonesia, after ratification of the WTO into Constitution Number 7 of 1994, as action carry on agreement implementation of TRPs then has promulgated Laws in the field of Property Rights Intellectual based on 7 (seven) fields in TRIPs distribution , namely :

1. Copyright, Law Number 28 of 2014;
2. Trademarks, Law Number 20 of 2016;
3. Patents, Law Number 13 of 2016;
4. Industrial Design, Law Number 31 of 2000;
- Circuit Layout Design Integrated , Law Number 32 of 2000;
- Trade Secrets , Law Number 30 of 2000;
7. Plant Varieties , Law Number 29 of 2000

Protection law design Industry In a way substantive , in The Industrial Design Law consists of of 57 articles the arrange a number of matter important related with definition about designer , requirements protection design industry , exceptions protection design industry , subject , scope rights , requests registration cancellation and settlement Industrial Design disputes and system registration design industry , settlement disputes and and determination dispute (Mokoginta , 2017).

Arrangement registration This in a way details there is in Law no. 32 of 2000, which makes it mandatory applicant For deliver document design in form picture or diagram, description function design , as well as statement authenticity . After through administrative processes and not there is object from party third during the announcement period , then

applicant will get certificate layout design that becomes proof right exclusive (Nazhif Ali, 2024).

Term time protection provided by law is for 10 (ten) years , starting from since date reception registration or since date first time design the used in a way commercial anywhere , with condition registration done in maximum period of two years after use commercial First .

2.3 Settings technology in regulation legislation national

Constitution Number 11 of 2008 concerning Information and Electronic Transactions (ITE Law) is Constitution the first one that is special arrange action criminal cyber in Indonesia. Based on letter President of the Republic of Indonesia. No. R . /70/Pres/9/2005 dated September 5 2005, the text of the ITE Law in full official delivered to the Indonesian House of Representatives then ratified on April 21 , 2008.

Although has the ITE Law was formed in Indonesia but in fact or the reality of the cyber world still difficult For tamed because cyberspace is a virtual world that is difficult found in a way real but can visited by millions users all over the world every when . Characteristics This is what influences the ITE Law have constraint in its implementation , because in reality action criminal cyber often nature across countries so that cause question about applicable jurisdiction on actions or consequence action criminal as well as on the perpetrator . This is Indonesia realized that limitations legislation conventional owned difficult For answer problem this , so that look at need For adapt the law For still guard sovereignty and integrity of the state (Setiawan, 2013).

2.4 Role Intelligence Artificial in Economic growth

In the digital era, Artificial Intelligence has become one of the technology trends yang change landscape economy globally . Technology This utilize ability in - depth data analysis processing information in scale big and learning machines to create problem solving that can increase efficiency operational as well as push innovation in all sector .

Developments that have occurred now use of Artificial Intelligence not only to improve internal business processes but also as a determining factor in building superiority competitive (Hendri Afriadi et.al, 2024). The impact from the development of Artificial Intelligence mature This is birth A draft digital economy namely something businesses that utilize intelligence artificial and internet to help growth economy massively and comprehensively . Changes paradigm business from manual processes to digital processes give birth to so many online platforms are used as facilitator for activity economy , services production and distribution (Budi Harto et.al, 2023).

As for the development the digital economy has bring Lots benefit among them is First Improvement efficiency operational . Second , Improvement global access . Third , innovation products and services. Fourth , Creation field Work new . Fifth , improvement collaboration and networking .

However thus , with existence development economy digital -based that brings so Lots benefits , there are also challenges that must be faced in this digital among others First lack of infrastructure technology . Second , the existence of digital inequality as well as lack of digital skills . Third , changes pattern consumers and changing business models . Fourth global competition . Fifth trust consumers . Lastly , dependence on technology (Tanjung, 2024).

2.5 The Role of Property Rights Intellectuals in Economic Growth

Business world in growth and development not Possible off from what is called Property Rights Intellectuals . Business world need protection on the product as well as What only intertwined with the product for example brand and design from A products and so on . What is needed protection so that it doesn't exploited by others for profit personal and can harm rightful owner .

Progress economy a country can also looked at from many protection of intellectual property rights The intellectual he has . However sadly implementation protection of intellectual property rights Intellectual in a way national Lots meet obstacles triggered by differences culture of society that is communal with character from Property Rights regime Individual intellectuals (Sopia Siregar et.al, 2019).

Intertwined with the role of property rights Intellectual in growth economy at least there are two sectors affected namely First sector business micro , small and medium as well as second sector tourism .

First , effort micro , small and medium play a role central in structure economy national . This sector become a primary pillar for economy and as entity spread out businesses wide . Micro , small and medium enterprises covers various sector business start from the creative industry until sector agribusiness .

However thus although own a huge contribution for economy , sector This Still face various challenge like limitations access to financing , low access technology , and the lack of understanding related with protection of intellectual property rights Intellectual (Simanjuntak et.al, 2025).

Creative economy That Alone is series activity the economy that started from utilization creativity , skills and talents individuals to create welfare as well as field Work with produce and explore Power creativity and power creation individual (Sulasi Rongiyati, 2018). In addition economy creative in essence is form from the Effort to seek sustainable development via creativity with which the economy sustainable is A climate an empowered economy economic competitiveness creative also opens opportunity for the community to develop his business with utilizing non - renewable resource reserves even not limited namely ideas and talents (Rosmadi , 2014).

Protection of Property Rights Intellectual play a role important for business micro , small and medium as well as based business economy creative . In terms of economy creative sector it really depends with creativity so that protection to right riches intellectual is very relevant . However , in practice protection to right riches intellectual This Lots face obstacle among them is lack of understanding of the business community in sector this is what concerns with right riches intellectual . Besides that , the administrative process is complicated become constraint the biggest for progress sector This .

So for overcome constraint the government take policy in the form of Simplify the management and registration process right riches intellectual as well as do socialization and education related the importance protection hsak riches intellectual for business micro , small and medium .

Second , the role right riches intellectual for related economic development with sector tourism . tourism industry is sector economy that produces products and services that involve various activity economy that provides contribution to this industry Good directly and not directly (Sanjiwani , 2016).

For support businesses This sadly some big society realize how importance registration right riches intellectual For the products they make . On the other hand outside in

a way careful understand problem this and try claim right use product local creative (Seharja et.al, 2023). Level of awareness local entrepreneurs in secure right riches intellectual they depending on the market share they have destination without confusing the values contained inside it .

One of uniqueness work Indonesian Community Creation is batik, right riches intellectual on batik works made by local craftsmen and have mark sell height is also important things For get protection (Anggraeni et.al, 2021).

In today's digital era This technology become an important factor in development economics and business development rapid technology has change method work and patterns think business , as well as give opportunities and challenges new for the perpetrators business .

At least there are two things main in discussion about role technology for development economy namely first , transformation economy , technology has give contribution big in transformation global economy . One of the an undeniable reality Can avoided is technology has adopting a new business model that has change method man access goods and services . Technology has also help in improvement productivity work . Besides that , technology has also give convenience in matter acquisition information and learning process teach .

Second , transformation business , role technology in the process of transformation very big business . Digital platforms have allows activity business For reach out greater market share wide and connecting customer with product the goods and services they provide need . This also allows the Company to develop a more effective marketing strategy effective and enables the Company to access global customers with the way that is not unimaginable previously . Besides that , technology has allows business For collect data and analyze it with more effective (Andriansyah , 2023).

However sadly behind convenience offered by technology for the business world , tucked away a number of obstacles and constraints namely First , the need skills new . Second problem data security . Third more competition tight . Fourth strict regulations . And Fifth challenge ethics and morals.

3. CONCLUSION

Problem intelligence the current booming creation This Not yet there is arrangement the law in something Constitution whereas concerning problem right riches intellectual and technological aspects of each field the Already there is the settings in something Constitution alone . Artificial intelligence which is currently This currently develop it really plays a role important and provide contribution positive for development economy . Because with the existence of Artificial Intelligence This can encourage the actors involved in this world business For build superiority competitive for companies and business industries they .

Property rights intellectual hold role key for growth and development the country's economy , especially in the sector business micro , small and medium enterprises (MSMEs) and sector tourism . This is caused by in operate activity business second sector This touch with riches culture and creativity humans . In the current digital era This utilization technology hold role central in development economy . This is due to with utilization technology so activity business Already can reach global class market share .

Finally can concluded that in a way general both Artificial Intelligence , Intellectual Property Rights Intellectual , as well as technology in a way simultaneously hold role key for growth and development the country's economy .

REFERENCES

- A Mokoginta, 2022, Perlindungan Hukum Terhadap Hak Pekerja Menurut Undang-Undang Nomor 11 Tahun 2020 tentang Cipta Kerja. *Lex Crimen*, Vol 11 No (5).
- Abdul haris nafis dkk, 2025, Perlindungan Hukum Terhadap Desain Tata Letak Sirkuit Terpadu Sebagai Objek Kekayaan Intelektual Di Indonesia, *jurnal Batavia*, vol 2, no 2
- Abdul Manan, 2016, Peranan Hukum Dalam Pembangunan Ekonomi, Jakarta, Prenadamedia Group.
- Adelia Dwi Anggraeni, Budi Santoso, Pramita Prabandari, 2021, Perlindungan Hak Kekayaan Intelektual Pada Usaha Mikro, Kecil, dan Menengah Dibidang Pengrajin Batik dan Kuliner, *Notarius*, Vol 14, No 2.
- Agus Sachari dalam Muhamad dan Djubaedillah, 2014, *Hak Milik Intelektual, Sejarah, Teori dan Praktiknya di Indonesia*, citra Aditya bakti, bandung
- Alimuddin sinurat runtung, suhaidi, mahmud mulyadi, 2014, penegakan hukum terhadap tindak pidana pemalsuan merek, *USU Law Journal*, Vol 2, No 2,
- Andi Baso Ilmar, 2020, Peran Hak Cipta Dalam Pembangunan dan Kesejahteraan Masyarakat, *Iqtishaduna : Jurnal Ilmiah Mahasiswa Jurusan Hukum Ekonomi Syariah*, Vol 1, No 4.
- Budi Harto Dkk, 2023, Transformasi Bisnis Diera Digital : Teknologi Informasi Dalam Mendukung Transformasi Bisnis Diera Digital, Jambi, PT Sonpedia Publishing Indonesia.
- Enni Sopia Siregar, Lilis Sinurat, 2019, Perlindungan HAKI dan Dampaknya Terhadap Perekonomian Indonesia Diera Pasar Bebas : Pendekatan Kepustakaan, *NIAGAWAN*, Vol 8, No 2.
- Ervan Susilowati, 2023, *Hak Kekayaan Intelektual (HKI) Di Indonesia: Teori Dan Praktik*. Takaza Innovatix Labs, Hlm 6.
- Fatimah nada dkk, 2023, Gagasan Pengaturan Artificial Intelligence Sebagai Subjek Hukum di Indonesia, *Prosiding Nasional Hukum Aktual Harmonisasi Hukum Pidana dalam Perspektif Demokrasi dan Hak Asasi Manusia*
- Hendri Afriadi Dkk, 2024, Peran Artificial Intellegence Dalam Pengembangan Strategi Ekonomi Diera Digital : Analisis Keunggulan Kompetitif dan Inovasi, *COSTING : Journal of Economic, Bussines, and Accounting*, Vol 7, No 6.
- Iona Febrina Simanjuntak, Japatar Simamora, 2025, Hak Paten Dalam Hak Kekayaan Intelektual : Perlindungan, Implementasi, dan Tantangan, *Jurnal Hukum Progresif*, Vol 8, No 1,
- Iona Febrina Simanjuntak, Japatar Simamora, 2025, Upaya Perlindungan Hak Kekayaan Intelektual Untuk Produk UMKM Dalam Ekonomi Kreatif, *BIMA : Journal of Bussines, Inflation, Management, and Accounting*, Vol 2, No 1.
- Joni Sandri Ritonga Dkk, 2024, Hak Kekayaan Intelektual Dalam Hukum Bisnis : Perlindungan dan Penegakan Hukum Atas Merek dan Paten di Indonesia, *EKOMAN : Jurnal Ekonomi, Bisnis, dan Management*, Vol 2, No 2.
- Katya Benalda dkk, 2024, Penguatan Regulasi Rahasia Dagang Melalui Ketentuan Mengenai Perlindungan Informasi Rahasia Dalam Perjanjian Lisensi Rahasia Dagang Berdasarkan Penerapan Asas Kepastian Hukum, *Teori Prospek Dan Teori Risiko, ACTA DIURNAL : Jurnal Ilmu Hukum Kenotariatan*, fakultas hukum universitas padjadjaran, vol 7, no 2,

Kecerdasan Buatan, diakses dari <http://www.wikiopedia.org/>, diakses tanggal 18 Oktober 2025 Pukul 19.15.

Maskarto Lucky Nara Rosmadi, 2014, *Industri Kreatif Dalam Menghadapi Pasar Bebas ASEAN 2015*, Jurnal Wawasan Hukum, Vol 30, No 1.

Murtadho, Nazhif Ali. 2024, "Perlindungan Hukum Terhadap Desain Tata Letak Sirkuit Terpadu Ditinjau Dari Perspektif Pidana Dalam Hukum Positif." *Jurnal Hukum Bisnis (J-KUMBIS)* 2, no. 1

Muhamad Amirulloh dan Helitha Novianty Muchtar, 2016, *Buku Ajar Hukum Kekayaan Intelektual*, unpad press, bandung,

OK Saidin, 2013, *Aspek Hukum Hak Kekayaan Intelektual*, Rajagrafindo Persada, Jakarta.

Pengertian Hak Kekayaan Intelektual, diakses dari <http://www.patendo.com/>, diakses tanggal 19 Oktober 2025 Pukul 19.30.

Pengertian Teknologi, diakses dari <http://www.grameduia.com/>, diakses tanggal 19 Oktober 2025 Pukul 20.00.

Peter Mahmud Marzuki, 2015, *Penelitian Hukum Edisi Revisi*, Prenadamedia Group, Jakarta.

Putri Kusuma Sanjiwani, 2016, *Hak Kekayaan Intelektual Dalam Industry Pariwisata : Studi Kasus Perlindungan Hukum Pemanfaatan Lokal Genus Dalam Produk Pengusaha Lokal*, Jurnal Destinasi Pariwisata, Fakultas Pariwisata Universitas Udayana, Vol 7, No 1.

R. Fadilah, 2024, *Hak Kekayaan Intelektual Sebagai Objek Harta Bersama Perspektif Hukum Positif Di Indonesia Dan Hukum Islam*. *Yustisi*, Vol 11, No 1,

Radita Setiawan, 2013, *Efektivitas Undang-Undang Informasi Dan Transaksi Elektronik Di Indonesia Dalam Aspek Hukum Pidana*, jurnal residie, vol 2, no 2,

Rizkia, Fardiansyah, 2022, *Hak Kekayaan Intelektual Suatu Pengantar*. Penerbit Widina

Rouf Fajrin Widianoro, 2022, *pendaftaran merek sebagai sarana perlindungan hukum*, renaissance, Vol 7, No 2, Hlm 419.

Syahrian Semaun, 2016, *Perlindungan Hukum terhadap merek perdagangan barang dn jasa*, jurnal hukum dictum, vol 14, no 1

Sesde Seharja, Andin Rusmini, 2023, *Perlindungan Hak Kekayaan Intelektual Bagi Usaha Kreatif Lokal Dalam Mendukung Sektor Pariwisata*, MUTIARA : Jurnal Ilmiah Multidisiplin Indonesia, Vol 1, No 2.

Siti Rukmana Tanjung, 2024, *Dampak Tranformasi Ekonomi Digital Dalam Upaya Perkembangan Ekonomi Berkelanjutan*, Proceeding International Seminar On Islamic Studies Thailand, Vol 5, No 1.

Soerjono Soekanto, 2013, *Sosiologi Suatu Pengantar Edisi Revisi*, Rajagrafindo Persada, Jakarta.

Sulasi Rongiyati, 2018, *Perlindungan Hak Kekayaan Intelektual Pada Produk Ekonomi Kreatif*, NEGARA HUKUM, Vol 9, No 1.

Suryahartati dan herlina, 2022, *Buku Ajar Hukum Kekayaan Intelektual*

Syahnhan Habibi Nasution dkk,

T.H. Simatupang, 2017, *Hukum Perlindungan Kekayaan Intelektual Dalam Rangka Meningkatkan Kesejahteraan Masyarakat*. *Jurnal Penelitian Hukum De Jure*, Vol 17, No 2,

Tim Lindsey, Eddy Damian, dkk, 2011, *hak kekayaan intelektual suatu pengantar*, PT Alumni, bandung,

Tomi Suryo Utomo, 2010, *Hak Kekayaan Intelektual Diera Global : Sebuah Kajian Kontemporer*, Graha Ilmu, Yogyakarta.

Ekonomi dan Bisnis Diera Digital, Jurnal Manajemen, Ekonomi, dan Bisnis, Vol 1, No 1.

Zico Armanto Mokoginta, 2017, Perlindungan Hukum Atas Desain Industri Berdasarkan Undang-Undang Nomor 31 Tahun 2000 Tentang Desain Industri, Lex Privatum, vol 5, no 5