

Legal Protection for E-Commerce Websites Examined from an Intellectual Property Rights Perspective

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ABSTRACT

Digital transformation in business operations has been driven by the rapid growth of the e-commerce industry in Indonesia. Protecting intellectual property rights (IPR), including copyright, trademarks, and digital information, on e-commerce sites has become increasingly legally challenging due to this trend. This study aims to analyze the legal framework for IPR protection on e-commerce platforms and identify barriers to its implementation. The study uses legislative and conceptual approaches, as well as normative legal research methodology. The findings indicate that although the legal framework for IPR protection has been comprehensively regulated, a lack of awareness among business actors, particularly MSMEs, and an inadequate monitoring and enforcement system have hampered its implementation. To build a fair, safe, and sustainable digital business ecosystem, this study highlights the importance of strengthening law enforcement, improving digital monitoring systems, and enhancing legal knowledge among business actors.

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1. INTRODUCTION

A major transformation in global trade patterns has been driven by advances in information and communication technology, marked by the rapid growth of the e-commerce industry in Indonesia. Research by [1] found that business digitalization, particularly e-commerce, is a key driver of economic growth in Indonesia; by 2022, e-commerce will contribute 64.5% of the national digital economy's value. E-commerce is a crucial pillar of Indonesia's digital economy ecosystem because it simplifies transactions and provides market access. [2].

However, the growth of e-commerce has created legal challenges, particularly regarding the protection of

Intellectual Property Rights (IPR). [3] E-commerce sites contain various intellectual property rights (IPR), such as trademarks, digital content copyrights, and software, but violations such as content piracy and unauthorized use of logos are still common. IPR owners are vulnerable in the digital world due to low awareness and inadequate legal protection mechanisms. [4].

Various laws in Indonesia, including Law No. 28 of 2014 concerning Copyright, Law No. 20 of 2016 concerning Trademarks and Geographical Indications, and Law No. 11 of 2008 concerning Electronic Information and Transactions, regulate the protection of intellectual property rights (IPR). Furthermore, Government Regulation No. 80 of 2019 concerning Electronic Commerce regulates the

responsibilities of e-commerce platforms in handling IPR violations. Although these laws are normatively adequate, research by[5]found that high costs and lack of awareness among MSMEs resulted in suboptimal IPR protection.

A normative legal study is crucial for conducting a comprehensive analysis of the regulations and legal principles governing the protection of Intellectual Property Rights (IPR) in e-commerce, particularly in the rapidly evolving digital era.[6]states that effective IPR protection not only protects rights holders but also improves the quality and trustworthiness of the e-commerce ecosystem. This method can help determine whether current regulations are sufficient to meet needs or need to be amended.[6].

This study examines the types of legal protection for IPR elements on e-commerce websites, the effectiveness of existing regulations in protecting IPR owners, and the legal consequences of IPR infringements occurring on e-commerce platforms. The study aims to analyze positive legal provisions regarding IPR in e-commerce, identify problems in their implementation, and make suggestions for improving legislation and law enforcement.[5].

This research is expected to provide a significant contribution to the development of a flexible and efficient legal protection system that can keep pace with the growth of the digital economy and e-commerce in Indonesia and improve the protection of intellectual property rights.

2. LITERATURE REVIEW

A theoretical study based on journals and scientific articles on Intellectual Property Rights (IPR) protection in e-commerce in Indonesia shows that safeguarding IPR is a crucial component for the security and sustainability of digital businesses. As a result of research conducted by[5]Law enforcement faces significant challenges, such as high costs and low awareness among businesses, particularly MSMEs, which results in

suboptimal protection. This study emphasizes the importance of ensuring product authenticity and providing efficient reporting mechanisms for Intellectual Property Rights (IPR) violations by the government and e-commerce platform operators.[5].

On the other hand, research conducted by[6], found that effective IPR protection can improve the quality of e-commerce. They found, through a normative juridical approach, that the application of Lex Informatika is crucial for resolving IPR disputes in the e-commerce cyber environment. This strengthens Indonesia's position in adopting international and domestic regulations that are in line with advances in information technology.[6].

Besides that,[7]This study examines trademark protection on e-commerce platforms from a human rights perspective and suggests collaboration between governments, e-commerce platforms, and trademark owners to strengthen human rights protection. The study also emphasizes the need for internal policies and reporting mechanisms for e-commerce platforms to prevent trademark infringement that could harm consumers and businesses.[7].

Overall, the theoretical study of various scientific articles confirms that intellectual property rights (IPR) protection in e-commerce is part of legal compliance and a strategy for building a competitive, healthy, and sustainable digital business ecosystem in Indonesia.

3. RESEARCH METHODS

This study uses a normative legal research method. According to[8]Normative legal research focuses on studying legal norms, rules, and literature using a statutory approach. The method for collecting legal materials is through library research from various sources, including laws, government regulations, books, scientific journals, and legal doctrine. Furthermore, a conceptual approach is used to connect legal theories and principles related to the protection of intellectual property rights (IPR) in e-commerce.[5]Besides that,[9]states that the method of legal material analysis is carried out through systematic interpretation, namely studying the relationships between relevant articles in a comprehensive manner.

This method provides a complete and systematic overview of the regulations and practices applicable to protecting human rights (IPR) in e-commerce. This method also enables researchers to make useful legal policy recommendations.[10],[6].

4. DISCUSSION AND ANALYSIS

Intellectual Property Rights (IPR) protection is crucial in e-commerce because it safeguards the rights of copyright, trademark, and patent owners and builds a competitive and secure digital business ecosystem. Various Indonesian laws, such as Law No. 28 of 2014 concerning Copyright, Law No. 20 of 2016 concerning Trademarks and Geographical Indications, and Law No. 11 of 2008 concerning Electronic Information and Transactions (ITE), provide intellectual property rights protection in the digital context.[5] [6] However, the main problem currently facing the law is implementation and enforcement. This still faces challenges such as high litigation costs and a lack of awareness among business actors, especially MSMEs, about the importance of IPR registration and protection.[5].

Research by[5] Using a literature study, it was shown that IPR protection in e-commerce remains ineffective in Indonesia, despite the law being quite comprehensive. Many businesses fail to register their intellectual property rights. As a result, they are at risk of content piracy, product duplication, and trademark misuse.[5] This is exacerbated by weak oversight and law enforcement mechanisms from the government and e-commerce platforms that manage the market.[6] Tokopedia, Bukalapak, and Shopee, which have become popular e-commerce platforms in Indonesia, are still listed under illegal market surveillance due to the distribution of pirated products and other IPR violations.[6].

A literature review shows that the Lex Informatika approach has great potential to become a contemporary legal solution for resolving IP disputes on the

internet. To regulate and enforce IP rules in the complex cyberspace, Lex Informatika adapts national and international legal principles. Given the cross-border nature of e-commerce and the rapid growth of information technology, this is considered crucial.[6] This method also helps address classic legal issues that are often not directly applicable in the digital environment, such as jurisdictional barriers and effective law enforcement.

In the literature, raising awareness and training for business actors, especially MSMEs, as well as normative legal elements are often cited as crucial components. Many MSMEs, which are the core of Indonesia's digital economy, are not yet aware of the strategic benefits of IPR protection as a corporate asset. They can be motivated to register copyrights, trademarks, or patents and utilize legal protection to prevent piracy and counterfeiting.[5] To expedite the handling of Intellectual Property Rights violations and impose strict sanctions on those who commit them, the government and related institutions such as the Directorate General of Intellectual Property and the Ministry of Communication and Informatics must also work together.

In the literature, increasing awareness and training for business actors, particularly MSMEs, as well as normative legal elements are often cited as crucial components. Many small and medium enterprises (MSMEs), which are the core of Indonesia's digital economy, are unaware of the strategic benefits of protecting Intellectual Property Rights (IPR) as a corporate asset. They may be interested in registering copyrights, trademarks, or patents and utilizing legal protection to prevent piracy and counterfeiting.[5] The government and relevant institutions, such as the Directorate General of Intellectual Property and the Ministry of Communication and Informatics, must work together to expedite the handling of intellectual property rights violations and impose strict sanctions on those who commit them.

Overall, this study concludes that policy development, legal enforcement on the ground, strengthening the role of digital platforms, and empowering business actors are still needed to protect IPR in e-commerce. Developing a fair, innovative, and sustainable

Indonesian digital market ecosystem requires improved legal and technological mechanisms, as well as multi-stakeholder collaboration [5], [6],[7].

5. CONCLUSION

In conclusion, IPR protection in Indonesia's digital business ecosystem already has a relatively comprehensive regulatory foundation, but the biggest gap remains at the level of implementation and enforcement in cyberspace—ranging from high enforcement costs, seemingly complicated procedures, to low IPR literacy among business actors (especially MSMEs). This condition means that IPR has not been positioned as a strategic asset that is actively explained, registered, and managed, leaving business actors vulnerable to content piracy, trademark misuse, and repeated product counterfeiting on e-commerce channels.

In the context of sustainability, IPR issues in e-commerce cannot be viewed as merely a legal issue, but rather an ecosystem governance issue. A healthy digital ecosystem requires three pillars to operate simultaneously: (1) regulatory certainty and state enforcement capacity, (2) compliance and readiness of IPR owners (including MSMEs) to register and prove ownership, and (3) platform responsibility as gatekeepers managing the flow of goods and content. When one of these pillars is weak—for example, lax platform oversight or passive IPR owners—violations become cheap, fast, and difficult to remediate, and undermine consumer trust and the reputation of the digital market as a whole.

Therefore, the direction of future enforcement needs to shift from a reactive approach (handling cases one by one) to a systemic approach based on prevention and early detection. This includes easily accessible reporting mechanisms, rapid and accountable take-down procedures, stricter seller and product verification, and the implementation of monitoring technologies (e.g., AI-assisted or digital watermarking) to automatically identify patterns of counterfeiting and plagiarism. At the same time, the government needs to strengthen

cross-institutional orchestration, for example, by accelerating the response to violations, clarifying digital evidence channels, and ensuring consistent sanctions. Literacy programs, mentoring, and simplification of IPR registration services must be targeted specifically at MSMEs to reduce cost, information, and procedural barriers.

With this framework, IPR protection serves not only as a "shield" for rights holders, but also as an instrument for maintaining market integrity, encouraging fair innovation, and strengthening the competitiveness of the digital economy. Ultimately, the success of IPR protection in e-commerce is measured not by the number of articles, but by the creation of an ecosystem that makes violations more difficult, quicker to detect, and more costly in their consequences, while innovation, creativity, and original products become the most profitable options for all parties.

5.1 Suggestion

The government and relevant institutions, such as the Directorate General of Intellectual Property, need to shift their approach from mere outreach to results-based and measurable assistance. This can be achieved by segmenting the needs of MSMEs (micro, small, and medium) to provide more appropriate services. For example, micro MSMEs are prioritized for trademark registration and assistance with basic promotional materials, while small and medium MSMEs are directed to strengthen their broader IPR portfolios, such as industrial designs and content copyright protection. Regular IPR clinic programs at the city/district level are crucial for providing more practical, one-day services, from brand verification and class selection to document completion, to filing. Furthermore, cost barriers can be reduced through incentive schemes such as registration vouchers for MSMEs that meet certain criteria, as well as the establishment of an integrated digital IPR complaint channel with tracking numbers and clear response time standards, providing business actors with certainty about the process. At the same time, simple and formal digital evidence guidelines are needed to ensure MSMEs understand the types of evidence they

can use when reporting violations on platforms.

E-commerce platform operators also need to implement stricter internal policies, not simply waiting for reports, but based on risk mapping. This can be done through tiered seller verification, where new sellers undergo a more robust KYC process and certain restrictions on counterfeit-prone categories, then gain broader access after establishing a strong track record of compliance. Take-down mechanisms need to be designed with two tracks: a fast track for brand owners or authorized parties with a short resolution target, and a regular track for general reports with a transparent verification process. To prevent repeat violations, platforms need to clarify repeat infringer policies with progressive sanctions, ranging from listing removals and temporary account freezes and store audits to permanent blocking and preventing re-account creation. To ensure enforcement doesn't stop at content removal, platforms also need to establish relevant data support mechanisms for law enforcement processes within privacy corridors, and strengthen consumer protections, such as guarantees of genuine products at verified stores with a fast refund scheme if violations are proven.

From a business perspective, IPR protection needs to be understood as part of a business strategy, not merely a legal administration. Businesses should conduct a simple IPR audit to identify assets most vulnerable to imitation—brands, packaging designs, photo and video content, copywriting, catalogs, and visual identity elements—and then proceed with registration in stages based on priority of use and market potential. In addition to registration, businesses need to establish a system for proving product authenticity in the marketplace, for example through production codes, QR code verification, authenticity cards, or official verification channels that are easily accessible to consumers. Internal governance should also be strengthened through clear contracts with designers, photographers, and third parties regarding work ownership and content use,

as well as a rapid response SOP for infringement, so that reporting and escalation processes can be carried out consistently and efficiently. Defensive measures such as registering potentially imitated brand spelling variations can also be considered to reduce the risk of brand squatting in the digital space.

Strengthening IPR protection will be much more effective if supported by proactive technology systems. Platforms, in collaboration with IPR owners, can develop the use of artificial intelligence to detect suspicious similarities in logos, packaging, and listing patterns based on images, keywords, unusual prices, or seller behavior. Digital watermarking and content fingerprinting can be applied to catalog photos, promotional videos, and product descriptions to make content theft easier to identify, eliminating the need for manual monitoring. Strengthening can also be achieved through official reference databases uploaded by brand owners, such as logos, original product photos, packaging characteristics, and lists of authorized resellers, which the platform then uses for automatic comparison. An early warning system that notifies brand owners when new similar listings appear will expedite response and suppress the spread of counterfeit goods early on.

For consistent implementation, a regular and measurable collaborative structure is needed between the DJIP, platform organizers, and IPR owners, as well as MSME associations. This collaboration needs to be outlined in an operational agreement containing KPIs, SLAs, reporting formats, and escalation flows, so that it doesn't stop at normative commitments. Success targets also need to be clearly measurable, for example, the average take-down time per category, the percentage of cases resolved according to the SLA, a reduction in high-risk listings based on technology detection results, the rate of repeat infringements, the number of MSMEs registering IPRs after mentoring, and a reduction in consumer complaints regarding counterfeit goods. With this systemic approach, IPR protection not only protects rights owners but also maintains the integrity of the digital market, increases consumer trust, and creates a safer, fairer, more creative, and more sustainable e-commerce ecosystem.

BIBLIOGRAPHY

- [1] N. M. Y. D. A. Ni and M. Y. D. Ayu, "Pengaruh E-Commerce Terhadap Pertumbuhan Ekonomi Indonesia," *J. Ekon. Trisakti*, vol. 3, no. 2, pp. 2891–2900, 2023.
- [2] S. R. I. E. V. A. NINGSIH, "Perlindungan Hukum Terhadap Konsumen Dalam Transaksi E-Commerce Melalui Marketplace Facebook Dengan Sistem Split Payment." Universitas Islam Sultan Agung Semarang, 2025.
- [3] J. Jessica and L. Sumanto, "Perlindungan Hukum Kekayaan Intelektual Terhadap Konsumen Dalam Transaksi E-Commerce Di Indonesia," *Ensiklopedia Educ. Rev.*, vol. 6, no. 3, pp. 26–35, 2024.
- [4] J. R. Rumbiak and S. Bustani, "Kompleksitas Pelanggaran Pemanfaatan Ruang Ditinjau Dari Teori Kesadaran Hukum: Kasus Tambang Di Pulau Obi," *Ensiklopedia Educ. Rev.*, vol. 6, no. 3, pp. 54–57, 2024.
- [5] A. Asriati and S. Salmawati, "Perlindungan Hak Kekayaan Intelektual Terhadap Usaha Mikro Kecil Dan Menengah Pada Sektor Ekonomi Kreatif," *Indones. J. Leg. Law*, vol. 8, no. 1, pp. 14–20, 2025.
- [6] H. Haipon, D. Pujiningsih, G. E. Hayatulah, D. A. Harimurti, and Y. Fitriani, "Perlindungan Hukum Terhadap Konsumen dalam Transaksi E-Commerce di Indonesia," *J. Kolaboratif Sains*, vol. 7, no. 12, pp. 4785–4789, 2024.
- [7] R. M. S. Saragi, "Perlindungan Hukum Terhadap Konsumen Dalam Transaksi Jual Beli Online (E-Commerce) Berdasarkan Undang-Undang Nomor 8 Tahun 1999." Universitas Lancang Kuning, 2024.
- [8] J. Ibrahim, "Teori dan metodologi penelitian hukum normatif," *Malang Bayumedia Publ.*, vol. 57, no. 11, 2006.
- [9] S. H. Djulaeka and S. H. Devi Rahayu, *Buku Ajar: Metode Penelitian Hukum*. Scopindo Media Pustaka, 2020.
- [10] G. N. R. K. Sanjaya, I. N. P. Budiarta, and N. M. P. Ujianti, "Perlindungan Hukum terhadap Konsumen atas Barang Tiruan Pada Transaksi E-Commerce (Studi Kasus pada Toko Stridewear. Id Bali)," *J. Interpret. Huk.*, vol. 3, no. 2, pp. 332–338, 2022.