



---

## **Legal Protection Against Music Piracy in the Digital Age (A Study of Reproduction, File Sharing, and Unlicensed Use)**

**Nazwa Daffa Rizkia<sup>1\*</sup>, Puan Syahidaturrahman<sup>2</sup>, Maya Listiya<sup>3</sup>, Ikhwan Aulia Fatahillah<sup>4</sup>**

<sup>1-4</sup> Universitas Islam Negeri Sunan Gunung Djati, Indonesia

email: [tiam49727@gmail.com](mailto:tiam49727@gmail.com)<sup>1</sup>

---

### **Article Info :**

Received:  
23-05-2026  
Revised:  
05-06-2026  
Accepted:  
21-06-2026

### **Abstract**

*The rapid development of information technology has fundamentally transformed the music industry by enabling instantaneous and borderless access to musical works. However, this transformation is accompanied by increasing cases of illegal exploitation that violate intellectual property rights. This study aims to analyze the anatomy of music infringement and piracy, identify its underlying causal factors, and examine its impacts on copyright protection within the dynamics of digitalization in Indonesia. Using a normative juridical approach, the study examines Law Number 28 of 2014 on Copyright (Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta) and relevant scholarly literature. The findings reveal that digital music piracy manifests in various forms, including illegal downloading, unauthorized streaming, unlawful redistribution, and moral rights violations through unlicensed remixing and adaptation. These practices are driven by multidimensional factors such as low purchasing power, weak legal awareness, technological advancement outpacing regulation, and limited enforcement effectiveness. The implications extend beyond economic losses for rights holders, also weakening creative incentives and disrupting the sustainability of the national creative industry. The study concludes that although the legal framework is normatively adequate, its implementation in the digital ecosystem remains problematic and requires stronger institutional coordination, improved collective management systems, and enhanced public legal literacy.*

**Keywords:** Digital Era, Digital Piracy, Legal Protection, Music Copyright, Music Industry.



©2022 Authors.. This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License.  
(<https://creativecommons.org/licenses/by-nc/4.0/>)

---

## **INTRODUCTION**

The rapid expansion of digital technologies has fundamentally transformed the global music ecosystem by reshaping the processes of music creation, reproduction, distribution, and consumption through highly interconnected online platforms that transcend geographical boundaries and conventional market structures. The convergence of streaming services, cloud storage, social media, and peer-to-peer networks has simultaneously democratized access to musical works and intensified the vulnerability of copyrighted content to unauthorized reproduction, file sharing, and unlicensed commercial exploitation, thereby creating unprecedented legal challenges for copyright protection in the digital era (Ashibly & Syarifudin, 2023). Contemporary copyright governance no longer concerns merely the regulation of physical duplication but increasingly requires legal adaptation to technologically sophisticated forms of infringement that operate across jurisdictions and digital infrastructures (Ritawati et al., 2023). Indonesia has experienced similar developments as digital music consumption continues to expand while copyright violations remain widespread despite the existence of comprehensive copyright legislation. The legal protection of musical works consequently represents not only a matter of safeguarding private economic interests but also an essential component of sustaining innovation, cultural production, and the long-term competitiveness of the creative economy.

The legal framework governing copyright protection in Indonesia is principally established under Law Number 28 of 2014 concerning Copyright, which recognizes copyright as an exclusive right arising automatically upon the fixation of an original work and guarantees both moral and economic rights of creators (Undang-Undang Nomor 28 Tahun 2014 Tentang Hak Cipta). The philosophical foundation of this protection reflects the integration of utilitarian theory and moral rights doctrine, emphasizing that effective legal protection encourages creativity while preserving the personal relationship between

creators and their works (Djumhana, 2014). Previous studies have consistently demonstrated that digital copyright protection has become increasingly dependent upon licensing mechanisms, royalty management systems, and technological enforcement strategies rather than solely relying on conventional legal sanctions (Sahrul et al., 2023). Research also indicates that digital distribution platforms have complicated copyright licensing arrangements because the ease of reproducing and disseminating musical content frequently exceeds the capacity of existing legal enforcement institutions to respond effectively (Kusumaningsih, 2024). Despite continuous institutional efforts to strengthen royalty administration through collective management organizations, practical implementation continues to encounter significant structural obstacles in monitoring digital exploitation of copyrighted works (DJKI, 2023).

Existing scholarship has substantially enriched understanding of copyright protection within digital environments; nevertheless, the literature remains fragmented because many studies investigate isolated dimensions of digital copyright disputes without integrating the interrelationship among unauthorized reproduction, digital file sharing, and unlicensed utilization as interconnected forms of infringement. Normative legal analyses generally emphasize statutory interpretation and licensing regulations while providing relatively limited empirical discussion regarding the operational patterns of piracy occurring across digital platforms (Dharma & Mahadewi, 2023). Other studies have concentrated primarily on the protection of song creators against unauthorized commercial use or royalty disputes while devoting less attention to emerging infringement models involving modified streaming applications, unauthorized redistribution, and user-generated digital circulation (Marbun et al., 2023). Investigations concerning Spotify application modification reveal increasingly sophisticated piracy mechanisms that challenge conventional copyright enforcement because technological circumvention enables widespread unauthorized access beyond traditional piracy models (Rahmad & Hadi, 2023). Comparative legal analyses likewise suggest that enforcement effectiveness differs considerably across jurisdictions, indicating that legislative adequacy alone cannot ensure meaningful copyright protection without corresponding institutional capacity and adaptive regulatory implementation (Siregar, 2023).

These unresolved issues have generated significant conceptual and practical gaps because current legal discourse frequently assumes that statutory protection automatically translates into effective enforcement despite mounting evidence demonstrating persistent digital piracy and limited deterrence. Studies examining Society 5.0 have argued that technological transformation continuously produces novel infringement patterns requiring more adaptive legal approaches than those currently embedded within conventional copyright governance (Mulyani et al., 2024). Similar observations emphasize that legal protection for intellectual property within Indonesia's creative industries remains constrained by weak enforcement coordination, limited technological surveillance, and evolving methods of digital content dissemination (Nasution & Judijanto, 2024). Research addressing digital music piracy further demonstrates that unauthorized copying and redistribution continue to impose substantial economic losses upon creators while simultaneously weakening incentives for artistic innovation and sustainable investment within the music industry (Sepadawati et al., 2024). Recent investigations also indicate that the persistence of copyright violations reflects structural weaknesses extending beyond regulatory design toward institutional enforcement and digital governance capacities (Wulandari, 2024). The continuing growth of digital piracy ultimately threatens not only individual copyright holders but also the broader sustainability of Indonesia's creative economy and cultural industries (Widijowati, 2023).

Within this evolving scholarly landscape, recent research has increasingly acknowledged that strengthening legal protection requires a multidimensional perspective capable of connecting legal doctrines with the operational realities of digital technologies and platform-based content circulation. Contemporary analyses of intellectual property protection within Indonesia's music industry argue that copyright governance must simultaneously address creators' economic rights, technological innovation, enforcement mechanisms, and institutional collaboration to remain effective under conditions of rapid digital transformation (Purwaningsih et al., 2025). Recent juridical assessments likewise suggest that although Indonesia possesses relatively comprehensive copyright legislation, substantial implementation gaps remain visible in addressing unauthorized reproduction and online dissemination of musical works across decentralized digital environments (Putra, 2026). Discussions concerning royalty protection have similarly emphasized that legal certainty must extend beyond licensing arrangements toward practical mechanisms capable of preventing unauthorized exploitation before economic losses occur (Ramadani et al., 2025). Judicial protection against digital music piracy therefore

requires analytical frameworks that explain how multiple forms of infringement interact rather than examining each violation independently (Saifudin & Rosmaya, 2022). Such a perspective offers stronger explanatory power for understanding why copyright violations continue to proliferate despite increasingly sophisticated legal regulation.

This study positions itself within this research gap by examining legal protection against music piracy in the digital age through an integrated analysis of unauthorized reproduction, digital file sharing, and unlicensed use as mutually reinforcing forms of copyright infringement. Rather than treating these violations as separate legal phenomena, this research develops a comprehensive analytical framework that explains their interrelationship, identifies the underlying causal factors that facilitate their persistence, and evaluates their implications for copyright protection within Indonesia's evolving digital ecosystem. The study aims to analyze the forms of music copyright infringement, identify the principal drivers of digital piracy, and assess their legal and socio-economic consequences. The expected contribution lies in advancing a more integrated conceptual understanding of digital music piracy while providing a methodological framework that bridges normative legal analysis with the contemporary dynamics of digital copyright enforcement.

## **RESEARCH METHODS**

This study employed a normative juridical (doctrinal legal) research design with a descriptive–analytical approach to examine the adequacy of legal protection against music piracy in the digital era, particularly concerning unauthorized reproduction, digital file sharing, and unlicensed use. Rather than relying on empirical observations, the study analyzed legal norms governing copyright protection within Indonesia's legal system by examining their conceptual coherence and practical applicability in responding to contemporary digital copyright infringement. The primary sources consisted of statutory regulations, particularly Law Number 28 of 2014 on Copyright and its implementing regulations, while secondary sources included peer-reviewed journal articles, legal textbooks, conference proceedings, government publications, and scholarly commentaries addressing copyright law, digital intellectual property, and music piracy. The literature was selected through purposive criteria emphasizing academic credibility, legal relevance, publication recency, and substantive discussion of copyright protection in digital environments. The analytical framework integrated statutory analysis, conceptual analysis, and comparative legal interpretation to evaluate the relationship between existing legal provisions and emerging forms of digital copyright infringement.

The analysis was conducted through several sequential stages, including identifying relevant legal sources, classifying legal issues according to the forms of copyright infringement, interpreting statutory provisions using systematic and teleological approaches, synthesizing doctrinal arguments across the selected literature, and critically evaluating the consistency between legal norms and contemporary digital practices. To ensure analytical rigor, the study employed source triangulation by comparing statutory provisions with scholarly interpretations and recent academic discussions, while maintaining transparency in the selection and interpretation of legal materials through systematic documentation of all references. The credibility of the findings was further strengthened by cross-examining legal doctrines with current developments in digital copyright governance to minimize interpretative bias and enhance analytical consistency. Since this research relied exclusively on publicly accessible legal documents and published academic literature without involving human participants or personal data, formal ethical approval was not required; nevertheless, academic integrity was maintained through accurate citation practices, faithful representation of original arguments, and adherence to established principles of responsible legal scholarship.

## **RESULTS AND DISCUSSION**

### **Forms of Music Copyright Infringement in the Digital Age**

The normative analysis demonstrates that copyright infringement in the digital music ecosystem has evolved from isolated acts of unauthorized copying into interconnected forms of exploitation facilitated by digital technologies, online platforms, and decentralized methods of content dissemination. Indonesian copyright law recognizes copyright as an exclusive right that automatically arises once a work has been embodied in a tangible form, granting creators both economic and moral rights that remain legally protected regardless of subsequent commercialization. This legal construction reflects the balance between encouraging creative production and safeguarding the personal relationship

between authors and their intellectual creations, making copyright protection an essential component of sustainable cultural and economic development (Undang-Undang Nomor 28 Tahun 2014 Tentang Hak Cipta; Djumhana, 2014). Contemporary digital environments have expanded the accessibility of copyrighted works while simultaneously reducing the practical barriers to unauthorized reproduction, creating legal circumstances in which infringement increasingly occurs through technologically mediated interactions rather than conventional physical duplication. The legal challenge consequently extends beyond identifying unlawful conduct toward determining whether existing copyright norms remain sufficiently adaptive to the technological architecture within which modern music circulation occurs.

The doctrinal interpretation of Indonesian copyright law indicates that music piracy encompasses multiple legally distinguishable forms of infringement, although these violations frequently operate simultaneously within the same digital ecosystem. Unauthorized reproduction constitutes the most fundamental infringement because it directly interferes with the exclusive economic right of copyright holders to reproduce their musical works, while unauthorized file sharing broadens the scale of infringement by enabling unrestricted dissemination through peer-to-peer networks, cloud storage, messaging applications, and social media platforms (Dharma & Mahadewi, 2023). Unlicensed public use represents another significant category because musical works are increasingly incorporated into commercial videos, livestreams, podcasts, digital advertisements, and online entertainment without obtaining prior authorization from copyright owners, thereby undermining lawful licensing arrangements (Ashibly & Syarifudin, 2023). Recent legal scholarship further suggests that modified streaming applications and unauthorized uploading have introduced more sophisticated patterns of infringement by circumventing technological protection measures designed to preserve creators' economic interests (Rahmad & Hadi, 2023). These overlapping practices demonstrate that digital copyright infringement should be understood as an integrated process rather than a collection of independent legal violations.

The systematic classification of copyright violations derived from statutory interpretation and doctrinal literature reveals that different forms of infringement interfere with distinct dimensions of copyright protection while generating cumulative legal consequences for creators and the music industry. Rather than differing only in their technical execution, these forms of infringement challenge separate components of copyright governance, including reproduction rights, distribution rights, communication rights, and licensing mechanisms.

**Table 1. Classification of Music Copyright Infringement under Indonesia's Digital Copyright Framework**

| <b>Form of infringement</b>        | <b>Primary legal right affected</b>         | <b>Typical digital practice</b>                                   | <b>Legal implication</b>                       |
|------------------------------------|---|---|--|
| Unauthorized reproduction          | Reproduction right                          | Copying digital music files                                       | Violation of exclusive economic rights         |
| Unauthorized file sharing          | Distribution right                          | Peer-to-peer sharing, cloud transfer, social media dissemination  | Unlawful distribution of copyrighted works     |
| Unlicensed public use              | Public communication and performance rights | Commercial videos, livestreams, business establishments           | Royalty deprivation and licensing infringement |
| Illegal uploading                  | Publication and distribution rights         | Uploading copyrighted music to unauthorized websites or platforms | Unauthorized public availability               |
| Streaming through illegal services | Economic exploitation rights                | Access through pirate streaming applications or websites          | Circumvention of lawful licensing systems      |

The categorization presented in Table 1 illustrates that digital piracy cannot be confined to a single legal concept because each form of infringement interferes with different exclusive rights recognized under copyright law. The legal distinction becomes particularly important since appropriate enforcement measures depend upon the nature of the violated right, the technological mechanism employed, and the commercial objective underlying the infringement. Similar observations have been advanced in recent analyses of digital copyright governance, which emphasize that online piracy increasingly combines reproduction, communication, and distribution into a continuous sequence of unauthorized exploitation rather than isolated unlawful acts (Sepadawati et al., 2024). This multidimensional character explains why conventional enforcement strategies frequently encounter practical limitations when attempting to classify technologically evolving patterns of infringement within static statutory provisions.

The conceptual relationship between reproduction, file sharing, and unlicensed use also demonstrates the continuing relevance of utilitarian and moral rights theories as complementary foundations for copyright protection. Utilitarian theory justifies exclusive rights by recognizing that legal certainty creates economic incentives for continued artistic production, whereas moral rights theory emphasizes the inseparable personal connection between creators and their works regardless of subsequent commercial transactions (Djumhana, 2014). Unauthorized digital dissemination weakens both theoretical foundations because creators experience not only measurable financial losses but also diminished control over attribution, integrity, and authorized exploitation of their musical works. Legal analyses of digital content industries similarly argue that technological transformation has expanded the importance of protecting moral interests alongside economic rights, particularly where digital modification, remixing, and unauthorized redistribution alter the identity of original creative works (Mulyani et al., 2024). The doctrinal coherence of Indonesian copyright law consequently depends not only upon the existence of statutory protection but also upon its capacity to preserve both dimensions of copyright under technologically dynamic conditions.

The legal literature further indicates that digital piracy has gradually shifted from individual acts of infringement toward organized patterns of unauthorized exploitation supported by online infrastructures that facilitate rapid circulation across multiple platforms and jurisdictions. Comparative legal scholarship identifies that technological convergence has blurred traditional distinctions between private copying, commercial distribution, and public communication, creating interpretative challenges for enforcement agencies responsible for applying copyright legislation within borderless digital environments (Siregar, 2023). Similar concerns have been expressed regarding the effectiveness of contemporary copyright governance, which increasingly depends upon institutional cooperation, platform accountability, and adaptive legal interpretation rather than exclusively relying on punitive sanctions (Ritawati et al., 2023). The doctrinal findings generated in this study indicate that reproduction, file sharing, and unlicensed use should be interpreted as interconnected legal phenomena whose cumulative effects substantially undermine the realization of economic rights, moral rights, and sustainable development within Indonesia's digital music industry.

### **Legal Protection Against Music Piracy in the Digital Era**

The doctrinal analysis indicates that Indonesia has established a comprehensive legal framework for protecting music copyright through a combination of preventive and repressive legal mechanisms that safeguard both the economic and moral rights of creators. The principal legal foundation is Law Number 28 of 2014 on Copyright (Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta), which regulates copyright ownership, licensing, royalty administration, dispute resolution, and legal sanctions against copyright infringement. Rather than functioning solely as a punitive instrument, the statute reflects a regulatory philosophy that seeks to balance the protection of creators with the promotion of lawful access to creative works in an increasingly digital environment. Legal scholars have argued that the effectiveness of copyright protection depends not only on legislative completeness but also on the consistency of its implementation across digital platforms and commercial practices (Kusumaningsih, 2024). The legal framework consequently operates as a preventive governance mechanism while simultaneously providing judicial remedies for infringements that cannot be avoided through regulatory compliance.

Preventive legal protection is primarily designed to reduce the likelihood of infringement before disputes arise by strengthening legal certainty regarding copyright ownership and lawful exploitation.

Although copyright protection is automatically granted under the declarative principle established by Law Number 28 of 2014 on Copyright (Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta), voluntary registration remains legally significant because it provides documentary evidence that facilitates the verification of ownership during judicial proceedings. Licensing agreements further operationalize exclusive economic rights by defining the scope of authorized reproduction, communication, adaptation, and commercial use of musical works. The administration of collective licensing through Collective Management Organizations enables creators to receive royalties from commercial users while reducing transaction costs associated with individual licensing arrangements (DJKI, 2023). Theoretical studies similarly recognize that an effective licensing system strengthens copyright compliance by creating transparent legal relationships between creators, digital platforms, and commercial users of music (Sahrul et al., 2023).

The evolution of digital technology has expanded preventive protection beyond conventional legal instruments by incorporating technological measures intended to restrict unauthorized access to copyrighted works. Technological Protection Measures, including Digital Rights Management (DRM), encryption systems, automated content recognition, and digital watermarking, provide additional safeguards against unauthorized copying and online distribution while complementing statutory protection. Law Number 28 of 2014 on Copyright (Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta) also recognizes legal protection for technological security measures by prohibiting actions intended to disable or circumvent technologies that protect copyrighted works. This interaction between legal regulation and technological innovation reflects the changing nature of copyright governance in digital environments where preventive intervention frequently offers greater effectiveness than post-infringement litigation.

**Table 2. Preventive and Repressive Legal Protection Against Digital Music Piracy**

| Legal Protection Mechanism              | Legal Basis  | Primary Function                   | Expected Legal Outcome               |
|---|--|------------------------------------|--------------------------------------|
| Copyright registration                  | Law Number 28 of 2014 on Copyright                   | Evidence of ownership              | Greater legal certainty              |
| Licensing agreements                    | Copyright licensing provisions                       | Lawful authorization of music use  | Royalty protection                   |
| Collective Management Organizations     | Copyright Law and DJKI regulations                   | Collective royalty administration  | Efficient royalty distribution       |
| Technological Protection Measures (DRM) | Copyright Law provisions on technological protection | Prevention of unauthorized copying | Reduced digital infringement         |
| Civil litigation                        | Commercial Court procedures                          | Compensation and injunction        | Restoration of economic rights       |
| Criminal prosecution                    | Criminal sanctions under Copyright Law               | Punishment of commercial piracy    | Deterrence against future violations |

The comparison presented in Table 2 demonstrates that preventive protection emphasizes legal certainty before infringement occurs, whereas repressive protection is intended to restore rights that have already been violated. These mechanisms should not be interpreted as separate legal responses because their effectiveness depends upon their complementary operation within an integrated copyright governance system. Contemporary scholarship similarly emphasizes that preventive legal certainty substantially improves the effectiveness of judicial enforcement by reducing evidentiary uncertainty regarding ownership and licensing arrangements (Ramadani et al., 2025). The practical value of preventive protection therefore extends beyond administrative documentation toward strengthening the legal position of copyright holders during dispute resolution.

Repressive legal protection becomes applicable when exclusive copyright rights have been violated through unauthorized reproduction, file sharing, commercial exploitation, or other unlawful

uses recognized under Law Number 28 of 2014 on Copyright (Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta). Copyright holders may pursue civil remedies before the Commercial Court to recover damages, request injunctions, and prevent continuing infringement, while criminal sanctions are available for commercial-scale piracy involving intentional economic exploitation of copyrighted works (Saifudin & Rosmaya, 2022). The legal framework also recognizes alternative dispute resolution, including mediation and arbitration, as mechanisms capable of resolving licensing and royalty disputes more efficiently than conventional litigation. Studies examining intellectual property governance have suggested that combining litigation and non-litigation approaches improves legal efficiency while preserving long-term relationships among stakeholders within the creative industry (Nasution & Judijanto, 2024).

The normative assessment further indicates that legislative protection alone cannot adequately respond to increasingly sophisticated forms of digital piracy without adaptive institutional implementation and technological support. Unauthorized streaming applications, platform manipulation, automated content redistribution, and transnational digital networks continue to expose limitations in conventional enforcement despite the relatively comprehensive regulatory framework established by Law Number 28 of 2014 on Copyright (Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta) (Purwaningsih et al., 2025). Similar analyses have emphasized that sustainable copyright protection requires coordinated interaction among legislators, enforcement agencies, digital platforms, collective management organizations, and copyright holders rather than exclusive reliance on criminal punishment (Widijowati, 2023). The doctrinal findings consequently suggest that effective legal protection in the digital era depends upon the integration of preventive regulation, responsive enforcement, technological safeguards, and institutional collaboration within a continuously evolving copyright governance framework.

### **Institutional Roles and Contemporary Challenges in Digital Music Copyright Protection**

The doctrinal analysis indicates that the effectiveness of copyright protection in the digital era depends not exclusively on the substantive provisions contained in Law Number 28 of 2014 on Copyright (Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta) but also on the institutional capacity to translate statutory norms into effective enforcement. Digital music piracy has developed into a multidimensional legal issue involving creators, collective management organizations, digital platforms, government agencies, law enforcement institutions, internet service providers, and consumers. This institutional complexity reflects the transformation of copyright governance from a conventional legal relationship between rights holders and infringers into a broader regulatory ecosystem requiring coordinated action among multiple stakeholders. The legal framework therefore functions more effectively when regulatory institutions possess sufficient administrative authority, technological capability, and inter-agency cooperation to respond to evolving patterns of digital infringement. Institutional coordination consequently becomes a determining factor in whether copyright law can achieve its intended objectives of protecting creativity and maintaining legal certainty within the digital economy.

Among governmental institutions, the Directorate General of Intellectual Property (DJKI) occupies a central position in administering copyright registration, supervising intellectual property policies, disseminating legal awareness, and facilitating dispute resolution concerning copyright ownership. Although copyright protection arises automatically under the declarative principle, DJKI strengthens legal certainty by providing an official administrative system through which creators may document ownership and access various legal services associated with copyright protection. The institution also supports public education concerning lawful copyright utilization and provides online complaint mechanisms for intellectual property violations occurring in digital environments (DJKI, 2023). This administrative function extends beyond registration because it contributes to the development of a legal culture that encourages voluntary compliance with copyright law. Institutional legitimacy therefore derives not only from statutory authority but also from the ability to improve accessibility, transparency, and public confidence in copyright administration.

Collective Management Organizations (CMOs) represent another essential institutional component because they bridge the legal relationship between copyright owners and commercial users of musical works through collective licensing and royalty administration. The rapid expansion of digital streaming services has significantly increased the complexity of royalty management, making

individual licensing arrangements increasingly impractical for many creators and users. Collective administration enables copyright holders to receive remuneration while simplifying licensing procedures for broadcasters, streaming platforms, public venues, and other commercial entities that utilize copyrighted music. Legal analyses have consistently emphasized that efficient royalty governance contributes directly to the realization of creators' economic rights because licensing systems become more transparent and administratively manageable (Ramadani et al., 2025). Similar studies also indicate that stronger institutional governance within collective management organizations enhances accountability in royalty distribution while reducing disputes arising from fragmented licensing practices (Sahrul et al., 2023).

Digital platforms have simultaneously emerged as influential regulatory actors because they increasingly exercise private governance over copyrighted content through automated monitoring technologies, licensing agreements, and internal content moderation policies. Streaming services, social media platforms, and video-sharing websites possess technological infrastructures capable of detecting unauthorized uses through digital fingerprinting, algorithmic matching systems, and automated copyright identification mechanisms. These technological capabilities significantly improve the speed of identifying potential infringements compared with conventional legal enforcement conducted solely through judicial institutions. Research concerning copyright protection in digital content industries demonstrates that technological enforcement mechanisms have become indispensable complements to statutory regulation because they provide immediate responses before widespread dissemination of infringing material occurs (Marbun et al., 2023). Platform accountability consequently represents an increasingly important dimension of contemporary copyright governance because technological intermediaries now influence the practical effectiveness of copyright protection on a daily basis.

Despite these institutional developments, significant enforcement challenges remain evident due to the transnational character of digital copyright infringement. Online piracy frequently operates across national jurisdictions through websites, cloud services, decentralized networks, and anonymous digital infrastructures that are physically located outside Indonesia while remaining accessible to domestic users. This jurisdictional fragmentation complicates the application of national copyright legislation because enforcement authorities possess limited territorial competence over foreign digital service providers or anonymous operators located in different legal systems. Comparative legal scholarship has observed that copyright enforcement increasingly requires international cooperation, regulatory harmonization, and cross-border information exchange to address the mobility of digital infringement effectively (Siregar, 2023). Similar observations have been presented in broader discussions concerning intellectual property governance, which argue that globalization has fundamentally altered the territorial assumptions upon which conventional copyright enforcement was historically constructed (Ritawati et al., 2023).

Rapid technological innovation further intensifies these enforcement difficulties because new methods of unauthorized distribution frequently emerge before corresponding regulatory adaptations can be implemented. Peer-to-peer architectures, encrypted communication services, virtual private networks (VPNs), decentralized blockchain-based storage, and artificial intelligence-assisted content generation have substantially reduced the effectiveness of traditional enforcement mechanisms based on centralized monitoring. These technologies often obscure the identity of infringers while simultaneously enabling copyrighted content to circulate rapidly across multiple digital environments beyond the immediate control of copyright holders. Contemporary legal scholarship emphasizes that copyright regulation should be sufficiently adaptive to accommodate technological innovation without undermining legal certainty or restricting legitimate technological development (Purwaningsih et al., 2025). The pace of technological transformation therefore requires regulatory responses that prioritize flexibility and institutional learning alongside legislative reform.

The persistence of digital music piracy also reflects broader socio-legal challenges associated with public awareness and legal compliance. Unauthorized downloading, illegal streaming, and unlicensed sharing continue to occur partly because many users perceive digital content as freely reproducible rather than legally protected intellectual property. Such perceptions weaken the preventive function of copyright law by reducing voluntary compliance and normalizing practices that directly interfere with creators' economic interests. Studies examining copyright protection within Indonesia's creative industries have noted that sustainable enforcement depends upon cultivating legal awareness among consumers in addition to strengthening institutional enforcement capacities (Ashibly &

Syarifudin, 2023). Similar findings suggest that educational initiatives concerning copyright ethics are capable of complementing statutory sanctions by encouraging greater societal respect for intellectual property rights (Widijowati, 2023).

Another institutional challenge concerns the disparity between legislative development and enforcement capacity. Although Law Number 28 of 2014 on Copyright (Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta) provides comprehensive legal provisions addressing copyright ownership, licensing, civil remedies, criminal sanctions, and technological protection measures, implementation frequently encounters practical limitations arising from limited digital forensic resources, administrative coordination, and technological expertise among enforcement agencies. Normative analyses indicate that the legal framework itself has evolved more rapidly than the institutional mechanisms responsible for applying it within increasingly sophisticated digital environments (Putra, 2026). Research examining legal strategies for intellectual property protection similarly concludes that institutional modernization should accompany legislative reform to ensure that copyright governance remains responsive to technological change (Nasution & Judijanto, 2024). Institutional effectiveness therefore depends upon continuous investment in technical capacity, inter-agency coordination, and specialized legal expertise capable of addressing emerging forms of digital infringement.

The doctrinal findings generated in this study indicate that the future development of copyright protection should prioritize collaborative governance rather than relying upon isolated institutional interventions. Effective legal protection requires sustained interaction among legislators, administrative agencies, collective management organizations, judicial institutions, digital platforms, technology developers, and copyright holders within an integrated regulatory framework. Such collaboration enables preventive measures, technological safeguards, licensing mechanisms, and judicial remedies to function as mutually reinforcing components of a comprehensive copyright governance system rather than independent regulatory instruments. This integrated institutional perspective is consistent with contemporary legal theories recognizing that digital copyright protection increasingly depends upon regulatory cooperation across both public and private sectors. The long-term sustainability of Indonesia's digital music industry will therefore depend not only on the strength of statutory protection but also on the capacity of institutions to adapt collectively to technological transformation while preserving the fundamental principles of copyright law.

## **CONCLUSION**

The findings of this study conclude that the escalation of music copyright piracy in the digital era remains a critical legal and socio-economic issue that demands sustained scholarly and regulatory attention. The increasing prevalence of unauthorized reproduction, digital file sharing, and unlicensed use of musical works reflects the convergence of technological accessibility and the limitations of legal enforcement within borderless digital environments. Such conditions demonstrate that copyright infringement in the music industry is no longer incidental but has evolved into a systemic phenomenon embedded in contemporary digital consumption practices. The resulting impacts extend beyond economic losses suffered by creators and record labels, as they also weaken creative incentives, undermine fair compensation mechanisms, and erode the normative respect for intellectual property rights within society.

Based on the normative legal analysis, the effectiveness of copyright protection is strongly dependent on the integration between preventive and repressive mechanisms established under Law Number 28 of 2014 on Copyright (Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta). Preventive instruments such as copyright registration, licensing arrangements, Collective Management Organizations, and technological protection measures play a crucial role in reducing the likelihood of infringement before it occurs, while repressive mechanisms including civil litigation, criminal sanctions, and alternative dispute resolution serve to restore legal rights after violations have taken place. Nevertheless, the implementation of these mechanisms is still constrained by institutional limitations, uneven legal awareness among users, and the increasing complexity of transnational digital piracy networks. These challenges indicate that legal protection cannot operate effectively in isolation but requires coordinated governance involving state institutions, digital platforms, and industry stakeholders.

This study recommends several strategic measures to strengthen copyright protection in the digital music ecosystem, including the enhancement of cyber enforcement capacity by the Directorate General of Intellectual Property, reinforcement of Collective Management Organizations to ensure transparent royalty distribution, expansion of public legal literacy regarding intellectual property rights, and optimization of automated enforcement technologies such as Content ID systems by digital platforms. However, the study is limited by its normative juridical approach, which relies exclusively on legal texts and academic literature without direct empirical observation of industry practices. Future research is encouraged to adopt empirical or socio-legal methodologies involving stakeholders within the music industry, digital platform operators, and enforcement institutions to provide a more comprehensive evaluation of how copyright law functions in real-world digital environments.

## REFERENCES

- Ashibly, & Syarifudin. (2023). *Perlindungan Hukum Hak Cipta Musik di Era Digital Dengan Prinsip Keadilan*. 4(1), 39–44. <https://doi.org/10.32767/lajour.v4i1.175>
- Dharma, G. A. S., & Mahadewi, K. J. (2023). Perlindungan hak cipta dalam industri musik digital di Indonesia: Studi normatif terhadap perlindungan hak cipta penggunaan musik digital. *Jurnal Kewarganegaraan*, 7(1), 451-457. <https://doi.org/10.31316/jk.v7i1.4815>
- DJKI. (2023). *Lembaga Manajemen Kolektif*. Diakses dari <https://dgip.go.id/tentang-djki/kekayaan-intelektual>
- Djumhana, M. (2014). *Hak Milik Intelektual Sejarah: Teori, dan Praktiknya di Indonesia* (ed. 4). PT. Citra Aditya Bakti.
- Kusumaningsih, R. (2024). Perizinan Pendistribusian Musik Melalui Platform Digital di Indonesia Ditinjau dari Undan-Undang Hak Cipta. *PLEDOI (Jurnal Hukum dan Keadilan)* 3(1), 11–21. <https://doi.org/10.56721/pledoid.v3i1.295>
- Marbun, K. B., Purba, J. E., & Agustina, Y. (2023). Perlindungan Hukum Bagi Pencipta Lagu Atas Lagu Ciptaannya Yang Dipakai Orang Lain Tanpa Izin. *Collegium Studiosum Journal*, 6(2), 492-496. <https://doi.org/10.56301/csj.v6i2.1083>
- Mulyani, S., Lestari, A. T. W., & Tedjosaputro, L. (2024). Perlindungan hukum hak cipta pada industri konten digital dalam perspektif Society 5.0. *Spektrum Hukum*, 21(1), 1-9. <https://dx.doi.org/10.56444/sh.v21i1.5090>
- Nasution, E. R., & Judijanto, L. (2024). Legal Strategies for Protecting Intellectual Property Rights in Business A Case Study Creative Industry in Indonesia. *The Easta Journal Law and Human Rights*, 2(02), 80-88. <https://doi.org/10.58812/eslhr.v2i02.209>
- Purwaningsih, G. N., Vitrianingsih, Y., Mardikaningsih, R., & Issalillah, F. (2025). Legal protection of intellectual property rights in the creative industry: A case study on the music industry in Indonesia. *Bulletin of Science, Technology and Society*, 4(1), 63-68. <https://inti.ejournalmeta.com/index.php/inti/article/view/106>
- Putra, RM (2026). Perlindungan Hak Cipta Musik di Indonesia: Kajian Yuridis terhadap Undang-Undang dan Implementasinya. *Jurnal Riset Multidisiplin Edukasi*, 3 (1), 157-163. <https://doi.org/10.71282/jurmie.v3i1.1512>
- Rahmad, D. A., & Hadi, H. (2023). Perlindungan Hak Cipta Pencipta Lagu Terhadap Pembajakan Dalam Bentuk Modifikasi Aplikasi Spotify. *Jurnal Privat Law*, 10(2), 311-321. <https://doi.org/10.20961/privat.v10i2.65074>
- Ramadani, M. A., Hartana, H., & Setiawan, P. A. H. (2025). Perlindungan Hukum Hak Cipta Lagu/Musik atas Royalti dalam Perspektif Teori Keadilan Menurut Undang-Undang No. 28 Tahun 2014 Tentang Hak Cipt. *Media Hukum Indonesia (MHI)*, 3(3). <https://doi.org/10.5281/zenodo.16760870>
- Ritawati, R., Raihan, R., Mustomi, O., & Syah, M. I. (2023, December). Copyright in the Digital Age in the Protection of Intellectual Property Rights in Indonesia. In *International Conference on "Changing of Law: Business Law, Local Wisdom and Tourism Industry" (ICCLB 2023)* (pp. 1358-1367). Atlantis Press. [https://doi.org/10.2991/978-2-38476-180-7\\_138](https://doi.org/10.2991/978-2-38476-180-7_138)
- Sahrul, S., Setiawan, Y. A., & Wahyu, W. (2023). Theoretical Study Of Legal Protection Of Song Royalty On Digital Platforms. *Jurnal Ilmiah Dunia Hukum*, 7(2), 68-80. <https://dx.doi.org/10.56444/jidh.v7i2.3333>
- Saifudin, M., & Rosmaya, I. (2022). The Judicial Protection Against Copyright Holders from Music

- Piracy in Digital Era. *Srawung: Journal of Social Sciences and Humanities*, 63-69. <https://doi.org/10.56943/jssh.v1i3.156>
- Sepadawati, D., Suhartono, S., & Munir, M. (2024). Pembajakan Karya Cipta Lagu Di Era Transformasi Digital. *Syntax Idea*, 6(8), 3542-3549. <https://doi.org/10.46799/syntax-idea.v6i8.4287>
- Siregar, R. H. F. (2023). Notes of protection: A comparative analysis of music copyright laws and enforcement. *Indonesian Comparative Law Review*, 5(2), 115-126. <https://doi.org/10.18196/iclr.v5i2.17927>
- Undang-Undang Nomor 28 Tahun 2014 Tentang Hak Cipta.
- Widijowati, D. (2023). Preserving Artistic Legacies: Legal Safeguards for Intellectual Property Rights in the Music Industry. *Research Horizon*, 3(3), 164-171. <https://doi.org/10.54518/rh.3.3.2023.111>
- Wulandari, F. (2024). Problematika Pelanggaran Hak Cipta di Era Digital. *Journal of Contemporary Law Studies*, 2(2), 99–114. <https://doi.org/10.47134/lawstudies.v2i2.2261>