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Prasanna S,

Chairman of Institute of Legal Education

No. 08, Arul Nagar, Seera Thoppu,

Maudhanda Kurichi, Srirangam,

Tiruchirappalli – 620102

Phone : +91 73059 14348 – info@iledu.in / Chairman@iledu.in



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COPYRIGHT ISSUES IN THE DIGITAL ERA: OTT PLATFORMS AND ONLINE PIRACY**AUTHOR** – PRAGTI KUMARI, STUDENT AT AMITY LAW SCHOOL**BEST CITATION** – PRAGTI KUMARI, COPYRIGHT ISSUES IN THE DIGITAL ERA: OTT PLATFORMS AND ONLINE PIRACY, *INDIAN JOURNAL OF LEGAL REVIEW (IJLR)*, 5 (13) OF 2025, PG. 400-413, APIS – 3920 – 0001 & ISSN – 2583-2344**ABSTRACT**

The swift progress of digital technology and the extensive adoption of the internet have fundamentally changed how creative content is created, shared, and consumed worldwide. The rise of Over-the-Top (OTT) services like Netflix, Amazon Prime Video, Disney+ Hotstar, and others has reshaped the entertainment sector by granting viewers immediate access to films, web series, music, and various forms of digital media. Nevertheless, this digital evolution has introduced new challenges to the conventional system of copyright protection. The problem of online piracy has emerged as a major issue in the digital age, as the unauthorized sharing, downloading, and streaming of copyrighted materials have become increasingly simple and prevalent. This research paper examines the escalating conflict between technological advancement and the safeguarding of intellectual property rights, with a particular emphasis on the copyright issues encountered by OTT platforms in India and globally.

In the digital landscape, copyright violations have manifested in intricate ways – ranging from illegal streaming sites and torrenting to the unauthorized recording and redistribution of OTT content. Despite the presence of robust copyright legislation and international agreements such as the Berne Convention, TRIPS Agreement, and WIPO Internet Treaties, enforcing copyright protection in the digital realm remains a formidable challenge due to jurisdictional constraints, the anonymity of offenders, and the cross-border nature of the internet. In India, the Copyright Act of 1957, in conjunction with the Information Technology Act of 2000, establishes the legal framework for safeguarding creative works; however, these laws frequently fail to adequately address the rapidity and magnitude of contemporary digital piracy. OTT platforms encounter distinct legal and ethical challenges as they endeavor to reconcile accessibility, affordability, and the rights of creators and producers. This research seeks to examine the legal, technological, and policy aspects of copyright challenges in the digital age, focusing on how OTT platforms manage copyright ownership, licensing, and enforcement.

It also investigates significant judicial rulings that have influenced the strategy towards digital copyright protection and underscores the initiatives undertaken by governments and industry participants to combat piracy through Digital Rights Management (DRM) systems, encryption, watermarking, and educational campaigns.

Moreover, the paper explores the growing significance of artificial intelligence and blockchain technology as potential instruments for enhancing copyright enforcement in the future.

In conclusion, the study posits that although OTT platforms have democratized entertainment and improved accessibility, there is a pressing need for more robust legal and technological frameworks to protect intellectual property rights in the digital marketplace. The paper concludes that addressing online piracy necessitates a comprehensive approach that integrates effective law enforcement, international collaboration, technological advancements, and consumer education. Only through

such an all-encompassing strategy can the equilibrium between creativity, commerce, and consumer rights be preserved in the continuously evolving digital entertainment landscape.

KEYWORDS–COPYRIGHT PROTECTION, DIGITAL ERA, ONLINE PIRACY, OTT PLATFORMS, INTELLECTUAL PROPERTY RIGHTS

RESEARCH METHODOLOGY

The research methodology employed in this study is fundamentally qualitative and doctrinal, concentrating on an in-depth examination of current laws, judicial rulings, policy documents, and secondary literature pertaining to copyright matters in the digital age. Given that the subject addresses the legal and technological issues stemming from the rise of OTT platforms and online piracy, the investigation is based on a systematic and analytical review of statutory provisions, case law, and scholarly analyses to comprehend the extent and constraints of copyright protection in today's digital landscape.

This study utilizes the doctrinal method, which entails the exploration of legal principles, legislative structures, and judicial interpretations to assess the sufficiency of existing copyright laws in confronting digital violations. The Indian legal framework, specifically the Copyright Act of 1957 and the Information Technology Act of 2000, is scrutinized thoroughly, alongside pertinent international agreements such as the Berne Convention, the TRIPS Agreement, and the WIPO Internet Treaties. These agreements constitute the foundation of the international copyright system and offer a comparative framework for understanding India's standing within the global legal arena. Furthermore, the research examines judicial precedents like *UTV Software Communication Ltd. v. 1337x.to* and *Viacom18 Media Pvt. Ltd. v. John Doe*, which have significantly influenced judicial perspectives on digital copyright protection and online piracy in India.

Beyond doctrinal analysis, the research integrates a comparative legal methodology by investigating how other jurisdictions, including

the United States, the United Kingdom, and the European Union, have addressed analogous challenges. This comparative viewpoint aids in identifying best practices and policy strategies that could potentially enhance India's enforcement capabilities against digital piracy. Academic journals, reports from international entities (such as the World Intellectual Property Organization) Government publications have been referenced to gain a thorough insight into global trends regarding copyright enforcement.

Additionally, the research employs both analytical and descriptive methodologies to evaluate the technological and economic aspects of the issue. The operation of OTT platforms, their licensing frameworks, and the effects of piracy on their revenue and content creation are examined through data and reports released by industry and media research organizations. The investigation also delves into the application of technological instruments such as Digital Rights Management (DRM), watermarking, encryption, and innovative solutions like blockchain and artificial intelligence in combating and identifying online copyright violations.

This study is based on secondary data, drawing from reliable and credible sources including books, scholarly articles, law commission documents, official government announcements, and online legal repositories such as SCC Online, Manupatra, and WIPO Lex. Internet-based resources, comprising research papers and media articles, have been meticulously assessed to guarantee precision and dependability. No primary data gathering or field surveys have been performed, as the aim of the study is theoretical and analytical rather than empirical.

In summary, this research methodology aspires to furnish a thorough legal and technological comprehension of copyright challenges in the digital age. By integrating doctrinal legal analysis with comparative and analytical scrutiny, the study intends to pinpoint existing deficiencies in the law, evaluate enforcement obstacles, and suggest practical recommendations for enhancing copyright protection in the swiftly changing landscape of OTT platforms and digital media.

INTRODUCTION

Copyright represents a vital segment of intellectual property rights (IPR), aimed at protecting the creative outputs of authors, artists, musicians, filmmakers, and various other creators.

It provides exclusive rights to the creator concerning their original works in literature, art, music, film, and computer programs, thereby ensuring that their intellectual and creative efforts are both rewarded and safeguarded.

The primary aim of copyright law is to achieve a balance between fostering creativity and facilitating the spread of knowledge and culture for the benefit of the public.

This legal framework is founded on the notion that creativity and innovation thrive when creators receive legal acknowledgment and financial incentives for their contributions.

Consequently, copyright serves as an essential foundation for the cultural and economic advancement of any country.

The notion of copyright has undergone considerable transformation throughout the centuries. Initially, the first organized copyright legislation, referred to as the Statute of Anne (1710) in England, acknowledged the rights of authors concerning their literary creations. Over time, this idea disseminated globally, resulting in the formation of various international treaties such as the Berne Convention for the Protection of Literary and Artistic Works (1886) and subsequently the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement

(1995) under the World Trade Organization (WTO). These treaties established consistent standards for copyright protection and highlighted the necessity for international collaboration in preserving intellectual works. In India, the Copyright Act of 1957 functions as the principal law regulating the protection of creative works. Throughout the years, it has been revised several times, most significantly in 2012, to adapt to technological progress and international standards.

With the emergence of the digital age, the extent and character of copyright protection have experienced a significant change. The advancement of the internet, digital media, and online platforms has transformed the creation, distribution, and consumption of creative works. In contrast to the conventional print and broadcast sectors, where physical or limited copies of works were disseminated, digital technology enables content to be duplicated and shared endlessly at minimal cost. This situation presents both opportunities and challenges. On one side, it has allowed creators to connect with a global audience through platforms such as YouTube, Spotify, and various OTT services. Conversely, it has facilitated unauthorized copying, downloading, and distribution of creative works, resulting in a troubling increase in online piracy.

The emergence of Over-the-Top (OTT) platforms like Netflix, Amazon Prime Video, Disney+ Hotstar, SonyLIV, and others has ushered in a new era for the entertainment sector. These platforms provide content directly to consumers via the internet, circumventing traditional broadcasting and cable networks. They have transformed how audiences access and enjoy entertainment by offering an extensive library of movies, television shows, and web series on demand. However, with the growing popularity of OTT platforms, the issue of copyright infringement has also escalated. Content uploaded to these platforms frequently appears illegally on unauthorized streaming websites or torrent networks within hours of its

release. Such violations not only result in substantial economic losses for producers and distributors but also jeopardize the creative endeavors of artists and content creators.

In the digital era, copyright protection encounters unprecedented challenges due to the borderless characteristics of the internet. Traditional legal frameworks frequently fall short when addressing cross-border piracy, as infringers can operate from jurisdictions with lax enforcement laws. Furthermore, the anonymity of users and the rapidly changing landscape of digital technologies complicate the identification and prosecution of offenders. Despite the existence of robust legal structures, including international treaties and national legislation, the application and enforcement of copyright in the digital sphere remain intricate and inconsistent. In India, the Copyright Act of 1957 and the Information Technology Act of 2000 collectively establish the legal foundation for safeguarding creative works online. Nevertheless, challenges such as jurisdictional uncertainty, digital evidence, and the swift proliferation of infringing content continue to present significant hurdles.

The significance of copyright protection in the digital age cannot be emphasized enough. It guarantees fair remuneration for creators and investors, fosters innovation, and upholds the integrity of cultural industries. In the absence of effective copyright enforcement, creative sectors such as film, music, and digital media would find it difficult to thrive, resulting in a decline in the quality of content production. Concurrently, it is crucial to strike a balance between the rights of creators and the public's access to information and entertainment. Overly stringent restrictions on access can hinder creativity and innovation, while inadequate enforcement may dissuade creators from developing new works.

Consequently, within the framework of the contemporary digital economy, it is essential for copyright protection to continuously adapt in order to tackle new challenges. The emphasis

should be placed on creating technological solutions, implementing legal reforms, and fostering international collaboration that can effectively combat piracy and safeguard the rights of content creators. This research paper intends to delve into these intricate issues comprehensively, examining how OTT platforms handle copyright ownership, the characteristics of online piracy, and the sufficiency of current legal structures in India and globally. Additionally, it aims to underscore possible solutions and policy suggestions for enhancing copyright protection in the rapidly evolving digital environment.

The Digital Revolution and Its Impact on Copyright

The 21st century has experienced an extraordinary digital revolution that has transformed nearly every facet of human existence, encompassing communication, commerce, education, and entertainment. This revolution—propelled by the swift progress of the internet, mobile technology, and artificial intelligence—has fundamentally changed the manner in which creative content is generated, shared, and consumed. For the domain of intellectual property, especially copyright law, this evolution has introduced both prospects and obstacles. While digital technology has broadened access to creative works and facilitated new avenues of expression, it has also rendered the unauthorized use, replication, and distribution of such works alarmingly simple, thereby raising concerns about the efficacy of traditional copyright frameworks. The term digital revolution signifies the transition from analog and mechanical technologies to digital and electronic systems that commenced in the late 20th century. This transition was hastened by the emergence of the World Wide Web (WWW) in the 1990s, which offered a global platform for the creation and distribution of information. In the pre-digital age, the reproduction of creative works was constrained by physical and economic limitations—printing books necessitated presses, distributing films required physical reels, and selling music relied

on tangible records or CDs. However, in the digital age, a mere click can replicate and disseminate an entire film, song, or book to millions of users worldwide. This effortless replicability of digital content has undermined the very principles upon which copyright law was established—the regulation of copies. One of the most notable effects of the digital revolution on copyright is the alteration in methods of distribution and consumption. The rise of digital platforms like YouTube, Spotify, and OTT services such as Netflix, Amazon Prime Video, and Disney+ Hotstar has entirely reshaped the entertainment sector. These platforms offer legal access to content on demand, dismantling the monopoly held by traditional broadcasters and cinemas. However, the same technology that supports legal distribution also facilitates illegal access and piracy. Through peer-to-peer sharing networks, torrent sites, and unauthorized streaming services, copyrighted material can now be duplicated and disseminated instantly, often at no cost to the consumer. Consequently, creators and distributors encounter substantial financial losses and diminished motivation to produce high-quality content. The global and borderless nature of the internet further complicates the enforcement of copyright. While copyright laws are territorial, meaning they are applicable within the confines of a specific nation, digital content easily crosses borders. A film or song that is uploaded illegally in one country can be downloaded or streamed in another within moments. This situation raises concerns regarding jurisdiction, enforcement, and liability. Traditional enforcement methods such as injunctions and penalties frequently prove ineffective when the infringer operates from a nation with weaker copyright laws or remains anonymous. Thus, the digital landscape necessitates a reevaluation of how copyright rights are enforced in a connected world.

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commercial ramifications complicate the determination of where creativity concludes and infringement commences. Therefore, copyright law must adapt to embrace these emerging forms of digital creativity without stifling innovation. The digital revolution has also fostered the emergence of new business models centered around licensing and subscription. Over-the-top (OTT) platforms, for example, depend significantly on licensing agreements to stream films, series, and other copyrighted materials. These platforms invest substantial resources in securing rights and producing original content. Nevertheless, despite their endeavors, digital piracy continues to be a pervasive issue. Unauthorized versions of films or series frequently surface on illegal websites shortly after their release, undermining both the commercial value and the exclusive rights of the platform. This ongoing challenge underscores the inadequacy of current legal and technological frameworks to prevent or mitigate piracy in the digital realm. In response to these challenges, various technological protection measures have been adopted by governments and industry stakeholders to protect copyrighted works. Techniques such as Digital Rights Management (DRM), encryption, and watermarking are now commonly employed to limit unauthorized access and copying. For instance, DRM systems regulate how users can access, share, or duplicate digital content. Although these technologies provide a certain degree of protection, they have also been criticized for being excessively restrictive and occasionally infringing upon legitimate consumer rights. Achieving a balance between safeguarding creators and ensuring user freedom has emerged as one of the most contentious issues in contemporary copyright discussions. Moreover, the digital revolution has highlighted the necessity for international collaboration in copyright protection. Given that online piracy frequently transcends national boundaries, no single nation can effectively tackle it independently. International agreements such as the WIPO

Copyright Treaty (1996) and the WIPO Performances and Phonograms Treaty (1996)—collectively referred to as the Internet Treaties—were created to confront the challenges posed by the digital landscape. These treaties urge member nations to implement legal frameworks that safeguard digital works and technological protection measures. As a signatory, India revised its Copyright Act in 2012 to conform to these international standards, incorporating provisions for technological protection and liability for intermediaries like internet service providers. In summary, the digital revolution has significantly altered the framework of copyright law, transitioning it from a system originally intended for tangible works to one that is currently grappling with the challenges posed by virtual realities. Although digital technologies have enhanced the accessibility of creative works and broadened the reach of artists and producers, they have also facilitated infringement and complicated enforcement efforts. The equilibrium between accessibility and protection is central to contemporary copyright law. The forthcoming challenge is to establish legal and technological structures that safeguard creators' rights while promoting innovation and public access. As the pace of digital transformation continues to quicken, copyright law must adapt dynamically to address the evolving requirements of creators, consumers, and the global entertainment sector.

OVERVIEW OF OTT PLATFORMS

In the contemporary digital age, Over-the-Top (OTT) platforms have transformed the entertainment and media sector by granting audiences immediate, on-demand access to a diverse range of digital content via the internet. The phrase "Over-the-Top" signifies the distribution of media content through the internet, circumventing conventional distribution methods such as cable, satellite, or broadcast television. OTT platforms have become a significant element of the digital content landscape, altering the manner in which individuals engage with entertainment

and information worldwide. With the rise in internet accessibility, cost-effective data plans, and the prevalent use of smartphones, OTT services have emerged as one of the most rapidly expanding sectors within the global entertainment market.

An OTT platform operates by delivering video, audio, and other digital content directly to consumers through online streaming technology. Users can access this content on devices such as smartphones, smart TVs, tablets, or computers without relying on traditional intermediaries. Notable global OTT platforms include Netflix, Amazon Prime Video, Disney+ Hotstar, Hulu, and Apple TV+, while in India, regional platforms like ZEE5, SonyLIV, Voot, ALTBalaji, and MX Player have also achieved considerable popularity. These platforms generally function under various business models – subscription-based (SVOD) like Netflix and Amazon Prime, advertisement-based (AVOD) like MX Player and YouTube, and transactional or pay-per-view (TVOD) models where users pay for individual content such as newly released films. The success of OTT platforms is mainly attributed to their capacity to provide personalized, flexible, and accessible content. Unlike conventional television channels that function on fixed schedules, OTT platforms empower viewers to select what, when, and where to watch, thereby creating a user-focused entertainment experience. Sophisticated algorithms evaluate viewer behavior and preferences to suggest customized content, enhancing user engagement and satisfaction. Moreover, OTT platforms have played a crucial role in the emergence of original digital content, such as web series, documentaries, and films created specifically for online audiences. This development has broadened opportunities for filmmakers, actors, and content creators, enabling them to circumvent traditional gatekeepers like studios and television networks to connect with a global audience. Nevertheless, the expansion of OTT platforms has encountered legal and ethical hurdles,

particularly regarding copyright and intellectual property rights. Every piece of content streamed on these platforms—be it a film, show, or song—is safeguarded by copyright law. OTT platforms either generate their own original content or obtain the requisite licenses and distribution rights from copyright holders to provide third-party content to viewers. These licenses frequently entail intricate agreements that address elements such as territory, duration, exclusivity, and digital reproduction rights. Consequently, the copyright ownership framework of OTT content can be intricate, involving producers, writers, musicians, and production companies, each possessing different rights in the same work. One of the most significant challenges confronting OTT platforms in the digital era is online piracy. Piracy is defined as the unauthorized reproduction, downloading, and dissemination of copyrighted materials, typically via illegal websites or file-sharing networks. The inherent characteristics of OTT distribution – which provides high-quality content online – render it susceptible to piracy. Once a new film or web series is launched on an OTT platform, it is often recorded, ripped, and uploaded to illegal sites or disseminated through torrents. This leads to substantial revenue losses and jeopardizes the exclusive rights afforded to OTT platforms under copyright legislation. Furthermore, the global and anonymous nature of the internet complicates the tracking and legal action against infringers, who may operate from regions with inadequate copyright enforcement frameworks.

Consequently, OTT platforms have implemented various technological and legal strategies to protect their content. Technological solutions such as Digital Rights Management (DRM) systems, encryption, watermarking, and geofencing are frequently employed to prevent unauthorized copying and distribution. For instance, DRM ensures that content is accessible solely to authorized users and devices, while digital watermarking aids in identifying the source of illegal distribution.

Legally, OTT platforms establish contracts that explicitly outline ownership and usage rights and often collaborate with governments and cybercrime agencies to combat piracy. Despite these initiatives, the challenge remains, as pirates continually discover new ways to circumvent security measures and illegally share protected content. In India, the regulatory framework overseeing OTT platforms has gradually developed. At first, these platforms functioned in a relatively unregulated environment when compared to traditional broadcasting. However, due to the growing impact of OTT content and the increase in complaints related to piracy, censorship, and copyright issues, the Government of India placed OTT platforms under the jurisdiction of the Ministry of Information and Broadcasting (MIB) in 2020. The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 established specific responsibilities for digital content providers, which include self-regulation, content classification, and mechanisms for grievance redressal. While these regulations mainly focus on content oversight and ethical standards, they also contribute indirectly to fostering accountability and upholding intellectual property rights.

Another aspect of the copyright dilemma for OTT platforms pertains to cross-border distribution and jurisdictional disputes. Given that OTT platforms operate on a global scale, a single piece of content may be available in various countries, each with its own copyright laws and enforcement practices. For example, a film licensed solely for streaming in India could be accessed illegally by users in other nations via Virtual Private Networks (VPNs), resulting in the circumvention of geo-blocking and violation of licensing agreements. These challenges underscore the necessity for the harmonization of international copyright laws and collaborative enforcement among countries. Despite these obstacles, OTT platforms have certainly made access to creative content more democratic. They have empowered both

creators and consumers by dismantling traditional barriers related to geography, distribution, and censorship. Concurrently, they have highlighted the significance of strong copyright protection in sustaining a fair and viable digital ecosystem. For OTT platforms to prosper in the long run, it is crucial to strike a balance between innovation, accessibility, and the protection of intellectual property. Enhancing legal frameworks, investing in sophisticated anti-piracy technologies, and raising public awareness about the detrimental effects of piracy are vital measures to achieve this equilibrium. In summary, OTT platforms symbolize the future of entertainment, merging technology, creativity, and convenience. Nevertheless, their success is largely contingent upon their ability to safeguard copyrighted content from unauthorized usage and to ensure that creators receive appropriate compensation for their contributions. As the digital revolution progresses, the necessity for comprehensive copyright governance becomes increasingly critical to maintain the integrity of creative industries and to support the expansion of the global digital entertainment sector.

ONLINE PIRACY: NATURE AND FORMS

Online piracy denotes the unauthorized reproduction, distribution, or utilization of copyrighted digital materials such as films, music, literature, and software via the internet. It represents one of the most significant challenges encountered by OTT platforms and content creators in the digital age. The primary factor contributing to the prevalence of piracy online is the ease of access, anonymity, and worldwide reach of the internet, which enables users to share and consume content unlawfully with minimal consequences.

The character of online piracy is predominantly transnational and fluid. In contrast to traditional copyright violations that occur within physical borders, digital piracy can transpire across various jurisdictions in mere seconds. Once a copyrighted film or series is made available on

an OTT platform, it is frequently recorded, ripped, or downloaded and subsequently redistributed on illegal websites or peer-to-peer networks. These pirated versions disseminate swiftly, resulting in substantial financial losses for creators, producers, and legitimate streaming services. Piracy not only impacts revenue but also undermines the creative industry by deterring investment in new content.

- The primary types of online piracy consist of:

1. Illegal streaming – Platforms or applications that broadcast copyrighted material without permission, frequently at no cost or funded by advertisements.

2. Torrenting and peer-to-peer (P2P) sharing – Individuals exchange files directly with each other through torrent software, complicating enforcement due to the absence of a singular distribution source.

3. Unauthorized downloads – Individuals obtain copyrighted movies, music, or literature from file-hosting services or unlicensed websites.

4. Cam-ripping and screen recording – Capturing content from screens or theaters and posting it online, which typically occurs shortly after a release.

5. Use of VPNs and mirror sites – Viewers circumvent geographical restrictions to access content that is not licensed in their region, breaching distribution agreements.

- The main categories of online piracy include:

1. Illegal streaming – This involves platforms or applications that transmit copyrighted content without authorization, often at no charge or supported by advertisements.

2. Torrenting and peer-to-peer (P2P) sharing – This method allows individuals to share files directly with one another using torrent software, making enforcement challenging due to the lack of a central distribution point.

3. Unauthorized downloads – This refers to individuals acquiring copyrighted films, music,

or literature from file-hosting services or unlicensed websites.

4. Cam-ripping and screen recording – This practice involves capturing content from screens or theaters and uploading it online, usually occurring shortly after the content's release.

5. Use of VPNs and mirror sites – This enables viewers to bypass geographical restrictions to access content that is not licensed in their area, violating distribution agreements.

The ongoing existence of these practices indicates that online piracy transcends being solely a legal concern; it is also a technological and behavioral challenge. Numerous consumers opt for pirated content because of its free availability or their unawareness of copyright regulations. In response, OTT platforms and governments are implementing Digital Rights Management (DRM) tools, watermarking, and more stringent cyber laws, in addition to launching public awareness initiatives.

Ultimately, online piracy jeopardizes the sustainability of the digital entertainment sector. Safeguarding creative works necessitates enhanced legal enforcement, international collaboration, and the encouragement of affordable, accessible, and lawful digital options.

LEGAL FRAMEWORK GOVERNING COPYRIGHT PROTECTION

Copyright law establishes the legal basis for safeguarding the rights of creators, ensuring that their original works are not utilized without consent. In the realm of the digital age and OTT platforms, this legal framework is crucial in tackling issues such as online piracy, illegal streaming, and the unauthorized distribution of content.

1. International Framework

A number of international treaties constitute the foundation of global copyright protection.

The Berne Convention for the Protection of Literary and Artistic Works (1886) stands as the oldest and most significant treaty. It guarantees that creative works receive automatic protection in all member nations without requiring formal registration.

The TRIPS Agreement (1995), established under the World Trade Organization (WTO), sets forth minimum standards for the protection and enforcement of intellectual property rights.

The WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), commonly referred to as the Internet Treaties (1996), confront digital challenges by acknowledging the rights of creators in online settings and stressing the importance of protection against unauthorized digital reproduction and distribution.

These treaties collectively guarantee that copyright protection transcends national boundaries and is adapted to the digital landscape.

2. Indian Legal Framework

In India, the principal legislation regulating copyright is the Copyright Act of 1957.

This Act safeguards a variety of works, including literary, artistic, musical, and cinematographic creations.

It confers upon authors and producers exclusive rights to reproduce, distribute, communicate, and modify their works.

The Copyright (Amendment) Act of 2012 was enacted to harmonize Indian law with international treaties, focusing on digital rights, technological protection measures, and the responsibilities of internet intermediaries.

According to this law, OTT content such as web series, films, and music is classified as cinematographic works and sound recordings. Unauthorized uploading or streaming of such content constitutes copyright infringement, which is subject to penalties including imprisonment and fines.

Moreover, the Information Technology (IT) Act of 2000 complements the Copyright Act by establishing provisions against digital offenses, hacking, and unlawful online activities. Intermediaries, such as websites or Internet Service Providers (ISPs), are obligated to remove infringing content upon receiving notification.

3. Enforcement and Challenges

Despite the existence of robust laws, enforcing them in the digital realm poses significant challenges due to issues such as cross-border jurisdiction, the anonymity of offenders, and the rapid pace of technological advancements. Indian courts, exemplified by the UTV Software Communication Ltd. v. 1337x.to case, have issued "John Doe orders" aimed at blocking access to piracy websites, demonstrating judicial efforts to safeguard digital copyright.

In summary, the legal framework governing copyright protection integrates both international treaties and domestic laws to uphold the rights of creators and manage digital content. Nevertheless, to effectively address online piracy and safeguard OTT content, ongoing legal reforms, enhanced enforcement strategies, and international collaboration are imperative.

COOTT (Over-the-Top) platforms have transformed the methods by which creative content is produced, distributed, and consumed. Nevertheless, their increasing popularity has also introduced distinct copyright challenges, particularly due to the fact that all their content is delivered digitally, making it susceptible to easy copying, sharing, or piracy.

1. Ownership and Licensing Issues

A significant copyright issue for OTT platforms is identifying who holds the rights to the content. OTT platforms feature both original content (created by them) and licensed content (obtained from production companies or studios). The licensing agreements typically outline the extent of rights—such as streaming

rights, duration, and geographical availability. Conflicts often emerge when the ownership of a film or series is ambiguous, or when the content is distributed beyond the agreed-upon territory, infringing copyright regulations. For example, if a series is licensed solely for Indian viewers but is made available internationally, it constitutes a violation of the contract and copyright law.

2. Unauthorized Recording and Redistribution

A significant challenge encountered by OTT platforms is the illegal recording and redistribution of their content. Numerous websites and individuals capture films or web series using screen recording or ripping software and subsequently upload them to piracy websites or social media platforms. This results in substantial financial losses and diminishes the exclusivity of OTT content. Despite the implementation of Digital Rights Management (DRM) tools and encryption, such leaks persistently occur.

3. Cross-Border Infringement and Geo-Blocking

OTT platforms function on a global scale; however, copyright regulations vary significantly from one nation to another. To navigate this complexity, these platforms implement geo-blocking, which limits access to content based on the user's geographical location. Nevertheless, users frequently circumvent these limitations by utilizing VPNs (Virtual Private Networks), thereby gaining access to content that is not authorized for distribution in their respective countries. This behavior infringes upon distribution agreements and leads to intricate jurisdictional dilemmas.

4. Intermediary and Platform Liability

Occasionally, OTT platforms encounter inquiries regarding their liability for content that infringes copyright, which has been uploaded by third parties. According to Indian legislation, intermediaries are obligated to eliminate infringing content upon receiving notification; however, ascertaining their degree of accountability can prove challenging,

particularly for platforms that host user-generated content.

5. Enforcement Challenges

Despite the legal safeguards provided by the Copyright Act of 1957, OTT platforms face significant hurdles in enforcement due to the internet's borderless and anonymous characteristics. Pursuing legal action against foreign or concealed infringers is often a lengthy and ineffective process.

In conclusion, OTT platforms contend with a variety of copyright-related challenges, including confusion over ownership, piracy, territorial infringements, and obstacles to enforcement. Tackling these issues necessitates the establishment of more robust digital legislation, advancements in technology such as watermarking and DRM, and enhanced collaboration among governments, OTT providers, and internet intermediaries.

CASE STUDY

1. UTV Software Communication Ltd. v. 1337x.to & Others (2019, Delhi High Court)

This case stands out as one of the most pivotal Indian rulings regarding online piracy and the protection of OTT content. UTV Software, a prominent media organization, sought intervention from the Delhi High Court against various illicit websites that were unlawfully streaming and distributing its copyrighted films. The court acknowledged the substantial economic damage inflicted by such piracy and granted a "dynamic injunction," which permitted UTV to block not only the specified websites but also any future mirror or redirect sites that disseminated the same infringing content. This groundbreaking ruling fortified the position of content creators and OTT platforms by enhancing India's judicial approach to combating online piracy.

2. Viacom18 Media Pvt. Ltd. v. John Doe (2012, Delhi High Court)

Viacom18, the producer of the film *Singham*, pursued preventive measures against

unidentified individuals (John Does) who were anticipated to upload or distribute pirated copies of the movie online.

The court issued a “John Doe order,” allowing the company to restrict access to websites and individuals engaged in piracy even prior to the occurrence of the infringement. Such orders have become prevalent in India to safeguard new releases on OTT and cinema platforms from pre-release leaks.

3. Red Chillies Entertainment Pvt. Ltd. v. Hathway Cable & Datacom Ltd. (2017)

In this instance, the producer of Happy New Year claimed unauthorized broadcasting of the film by a cable operator. The court determined that such unauthorized distribution infringed upon the exclusive broadcasting rights of the copyright holder and awarded damages. This case underscored that only licensed entities, including OTT platforms, are permitted to legally stream or broadcast copyrighted films.

4. Disney Enterprises Inc. v. Kimcartoon.to & Others (2021)

In this international case, Disney initiated legal proceedings against websites that were illegally streaming its copyrighted shows and films. The court granted an injunction against the infringing sites, demonstrating that even major OTT content owners encounter ongoing challenges from piracy networks.

In summary, these instances demonstrate that courts are progressively acknowledging the gravity of digital copyright infringements, particularly within the OTT sector. By utilizing dynamic injunctions, John Doe orders, and enhanced enforcement measures, the judiciary is contributing to the safeguarding of creators' rights and digital platforms. However, obstacles persist due to the global and ever-changing landscape of online piracy.

TECHNOLOGICAL MEASURES TO COMBAT PIRACY

In the digital age, safeguarding copyrighted material on OTT platforms necessitates robust technological protections alongside legal

frameworks. Given that piracy frequently occurs via online duplication, screen recording, or file sharing, technology is essential for identifying, preventing, and monitoring unauthorized content usage.

1. Digital Rights Management (DRM)

DRM stands as one of the most prevalent instruments employed by OTT platforms. It regulates how users can access, replicate, or distribute digital content. For instance, services such as Netflix, Amazon Prime, and Disney+ implement DRM to encrypt their videos, ensuring that playback is restricted to authorized applications. This mechanism effectively thwarts illegal downloads or the conversion of videos into shareable formats.

2. Watermarking and Fingerprinting

Digital watermarking entails embedding a distinctive, invisible code within a video or audio file that signifies its origin. In the event of a content leak, the watermark aids in tracing the source and timing of the breach. Conversely, fingerprinting is utilized to identify pirated copies online by matching them against a repository of original content. This technology enables platforms to automatically eliminate or report pirated versions that are detected.

3. Encryption and Secure Streaming Protocols

OTT platforms implement end-to-end encryption and secure streaming protocols (such as HTTPS and HLS encryption) to guarantee that content remains secure during transmission. This measure prevents hackers or unauthorized individuals from intercepting and downloading content while it is being streamed.

4. Geo-Blocking and Access Control

In order to adhere to licensing limitations, OTT services frequently implement geo-blocking technology, which limits access to content based on the viewer's geographical location. This mechanism ensures that users are unable to stream shows or films outside the designated regions where rights have been allocated.

Additionally, it helps to avert cross-border copyright infringements.

5. Automated Content Monitoring and AI Tools

Contemporary OTT platforms utilize AI-driven monitoring systems to scour the internet and social media for leaked or pirated content. These systems are capable of issuing automated takedown notices and swiftly blocking infringing URLs. Furthermore, artificial intelligence plays a crucial role in identifying unusual login activities, thereby preventing account sharing and password theft.

In summary, technological measures such as DRM, watermarking, encryption, and AI-based monitoring are vital for safeguarding digital content on OTT platforms. Although these tools cannot entirely eradicate piracy, they significantly diminish unauthorized access, protect the rights of creators, and foster the advancement of the digital entertainment sector.

CHALLENGES AND GAPS IN CURRENT LEGAL FRAMEWORK

Despite the existence of laws designed to safeguard copyright in the digital age, including those applicable to OTT platforms, numerous loopholes and challenges in implementation persist, complicating enforcement efforts. These deficiencies undermine the battle against online piracy and have repercussions for both creators and digital service providers.

1. Outdated Legal Provisions

The majority of copyright legislation, such as India's Copyright Act of 1957, was established during a time prior to the digital revolution. Although some amendments have been introduced, they frequently do not adequately address the swift technological advancements associated with OTT streaming, digital downloads, and cloud storage. For instance, the Act lacks clear definitions regarding matters such as streaming rights and the responsibilities of digital intermediaries.

2. Cross-Border Jurisdiction Issues

Piracy frequently transpires across various nations, while copyright laws are inherently territorial. Consequently, even if an OTT platform successfully identifies a pirate website located overseas, pursuing legal action becomes challenging due to the differing national laws and the absence of international cooperation. This global aspect of piracy renders enforcement efforts slow and complicated.

3. Ineffective Enforcement Mechanisms

While courts may issue injunctions and takedown orders, the execution of these orders is often inadequate. Illicit websites rapidly resurface under new domain names (mirror sites), complicating the efforts of authorities to monitor and permanently eliminate them. Additionally, law enforcement agencies encounter technical constraints and a shortage of resources for conducting digital investigations.

4. Ambiguity in Platform Liability

OTT platforms often encounter uncertainty regarding their accountability for infringing content, particularly when they host third-party materials or user-generated content. The lack of a clear differentiation between intermediary liability and content ownership leads to confusion and potential legal risks.

5. Lack of Awareness and Digital Literacy

Numerous users inadvertently access or share pirated content without understanding its illegality. This lack of public awareness contributes significantly to the pervasive issue of online piracy. There are few campaigns or governmental initiatives aimed at educating consumers about digital copyright ethics.

6. Limited International Cooperation

Although treaties such as the Berne Convention and the WIPO Copyright Treaty are in place, countries vary in their enforcement practices. In the absence of stronger global collaboration, piracy networks continue to take advantage of legal and geographical loopholes.

In conclusion, the existing legal framework encounters significant challenges, including outdated laws, ineffective enforcement, cross-border obstacles, and limited public awareness. To adequately safeguard OTT content, governments must modernize copyright legislation, improve international collaboration, and invest in digital enforcement and awareness initiatives.

CONCLUSION

The emergence of the digital age and the increasing popularity of OTT platforms have fundamentally altered the methods by which creative content is produced, distributed, and consumed. Nevertheless, this digital transformation has also introduced significant copyright challenges, particularly in the forms of online piracy, unauthorized distribution, and disputes over ownership. While OTT platforms have made entertainment more accessible to audiences, they simultaneously encounter ongoing threats to the security and exclusivity of their content.

The current legal framework, although thorough in certain areas, frequently falls short in addressing contemporary digital challenges. Legislation such as the Copyright Act of 1957, along with international agreements like the Berne Convention and the WIPO Copyright Treaty, establish a foundational legal structure; however, their enforcement in the digital realm is often lacking. Websites dedicated to piracy continue to proliferate, frequently changing servers or operating anonymously across international borders, which complicates legal action and prolongs the process.

Technological solutions including Digital Rights Management (DRM), watermarking, encryption, and AI-driven monitoring systems have contributed to reducing unauthorized access and identifying infringements. However, these technologies by themselves cannot eradicate piracy without robust legal, administrative, and collaborative initiatives from both governmental and private entities.

The answer resides in a balanced strategy – revising copyright legislation to align with digital realities, enhancing international collaboration, and fostering public awareness regarding the respect for intellectual property rights.

Governments and OTT platforms must collaborate to cultivate a culture in which the rights of creators are esteemed, and consumers comprehend the significance of legally accessing content.

In conclusion, safeguarding copyright in the digital age necessitates a combination of contemporary laws, cutting-edge technology, and active public involvement. Only through a unified global initiative can the issues of online piracy be effectively addressed, ensuring that the creative sector continues to flourish in a just and secure digital landscape.

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