

# INTERNATIONAL JOURNAL FOR LEGAL RESEARCH AND ANALYSIS



Open Access, Refereed Journal Multi-Disciplinary  
Peer Reviewed

[www.ijlra.com](http://www.ijlra.com)

## **DISCLAIMER**

No part of this publication may be reproduced or copied in any form by any means without prior written permission of Managing Editor of IJLRA. The views expressed in this publication are purely personal opinions of the authors and do not reflect the views of the Editorial Team of IJLRA.

Though every effort has been made to ensure that the information in Volume II Issue 7 is accurate and appropriately cited/referenced, neither the Editorial Board nor IJLRA shall be held liable or responsible in any manner whatsoever for any consequences for any action taken by anyone on the basis of information in the Journal.

Copyright © International Journal for Legal Research & Analysis

## **EDITORIALTEAM**

### **EDITORS**

#### **Dr. Samrat Datta**

*Dr. Samrat Datta Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Samrat Datta is currently associated with Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Datta has completed his graduation i.e., B.A.LL.B. from Law College Dehradun, Hemvati Nandan Bahuguna Garhwal University, Srinagar, Uttarakhand. He is an alumnus of KIIT University, Bhubaneswar where he pursued his post-graduation (LL.M.) in Criminal Law and subsequently completed his Ph.D. in Police Law and Information Technology from the Pacific Academy of Higher Education and Research University, Udaipur in 2020. His area of interest and research is Criminal and Police Law. Dr. Datta has a teaching experience of 7 years in various law schools across North India and has held administrative positions like Academic Coordinator, Centre Superintendent for Examinations, Deputy Controller of Examinations, Member of the Proctorial Board*



#### **Dr. Namita Jain**

*Head & Associate Professor*

*School of Law, JECRC University, Jaipur Ph.D. (Commercial Law) LL.M., UGC -NET Post Graduation Diploma in Taxation law and Practice, Bachelor of Commerce.*

*Teaching Experience: 12 years, AWARDS AND RECOGNITION of Dr. Namita Jain are - ICF Global Excellence Award 2020 in the category of educationalist by I Can Foundation, India. India Women Empowerment Award in the category of "Emerging Excellence in Academics by Prime Time & Utkrisht Bharat Foundation, New Delhi.(2020). Conferred in FL Book of Top 21 Record Holders in the category of education by Fashion Lifestyle Magazine, New Delhi. (2020). Certificate of Appreciation for organizing and managing the Professional Development Training Program on IPR in Collaboration with Trade Innovations Services, Jaipur on March 14th, 2019*



## Mrs.S.Kalpana

Assistant professor of Law

*Mrs.S.Kalpana, presently Assistant professor of Law, VelTech Rangarajan Dr.Sagunthala R & D Institute of Science and Technology, Avadi. Formerly Assistant professor of Law, Vels University in the year 2019 to 2020, Worked as Guest Faculty, Chennai Dr.Ambedkar Law College, Pudupakkam. Published one book. Published 8Articles in various reputed Law Journals. Conducted 1Moot court competition and participated in nearly 80 National and International seminars and webinars conducted on various subjects of Law. Did ML in Criminal Law and Criminal Justice Administration. 10 paper presentations in various National and International seminars. Attended more than 10 FDP programs. Ph.D. in Law pursuing.*



## Avinash Kumar



*Avinash Kumar has completed his Ph.D. in International Investment Law from the Dept. of Law & Governance, Central University of South Bihar. His research work is on "International Investment Agreement and State's right to regulate Foreign Investment." He qualified UGC-NET and has been selected for the prestigious ICSSR Doctoral Fellowship. He is an alumnus of the Faculty of Law, University of Delhi. Formerly he has been elected as Students Union President of Law Centre-1, University of Delhi. Moreover, he completed his LL.M. from the University of Delhi (2014-16), dissertation on "Cross-border Merger & Acquisition"; LL.B. from the University of Delhi (2011-14), and B.A. (Hons.) from Maharaja Agrasen College, University of Delhi. He has also obtained P.G. Diploma in IPR from the Indian Society of International Law, New Delhi. He has qualified UGC – NET examination and has been awarded ICSSR – Doctoral Fellowship. He has published six-plus articles and presented 9 plus papers in national and international seminars/conferences. He participated in several workshops on research methodology and teaching and learning.*

## **ABOUT US**

INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS  
ISSN

2582-6433 is an Online Journal is Monthly, Peer Review, Academic Journal, Published online, that seeks to provide an interactive platform for the publication of Short Articles, Long Articles, Book Review, Case Comments, Research Papers, Essay in the field of Law & Multidisciplinary issue. Our aim is to upgrade the level of interaction and discourse about contemporary issues of law. We are eager to become a highly cited academic publication, through quality contributions from students, academics, professionals from the industry, the bar and the bench. INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS ISSN 2582-6433 welcomes contributions from all legal branches, as long as the work is original, unpublished and is in consonance with the submission guidelines.

# **INTERDISCIPLINARY RESEARCH: CHALLENGES AND OPPORTUNITIES IN COPYRIGHT AND DIGITAL MEDIA LAWS IN INDIA**

AUTHORED BY - KULDEEP<sup>1</sup>

Multidisciplinary studies at the intersection of digital media and copyright laws in India offer a comprehensive view of the opportunities and challenges of navigating the intricacies of the digital age. The study investigates the terrain of interdisciplinary research, with a particular emphasis on the distinct obstacles encountered and the auspicious prospects showcased within the framework of India's copyright and digital media legislation. Discipline-specific silos, disparities in methodology, obstacles to cooperation and communication, and financial limitations are some of the main difficulties. Notwithstanding the issues at hand, there exist noteworthy prospects such as the possibility of comprehensive comprehension, inventiveness and originality, the significance and influence of policies, and the involvement and cooperation of stakeholders. Through surmounting these obstacles and utilising interdisciplinary methodologies, scholars might unveil novel perspectives, formulate inventive remedies, and mould the future course of digital media and copyright regulations in India.

An interesting convergence of legal, technological, and societal difficulties is presented by India's copyright and digital media legislation. This multidisciplinary study explores the challenges brought about by the quick development of digital technology, with an emphasis on data privacy and intellectual property rights (IPR) protection. We examine the development of copyright law in India over time, from conventional ideas to the difficulties presented by the digital era. The paper examines the dynamic interactions between data privacy rights and copyright protection, focusing on the implications of online platforms' data collection, processing, and use on copyright enforcement. We evaluate the adequacy of current legal frameworks and draw attention to new judicial rulings and legislative initiatives. In the end, this study adds to the current discourse regarding the mutually reinforcing relationship between intellectual property rights and data privacy in India's digital environment.

---

<sup>1</sup> Research Scholar, School of Law, University of Technology, Jaipur

**Keywords:** *Copyright Law, Intellectual Property Rights, Data Privacy, India, Online Ecosystem, Digital Technologies, Creative Works, Historical Background, Legal Framework, Digital Sphere, Data Privacy Rights.*

## 1. Introduction

The rise of the digital era has initiated a fundamental transformation in the creation, distribution, and consumption of information, art, and entertainment worldwide. This transition is especially evident in India, a nation experiencing a significant increase in internet usage and digital content production, set to emerge as one of the largest digital markets globally. This digital revolution presents a multifaceted set of legal difficulties, particularly with copyright and digital media legislation. Historically, these legal frameworks were carefully crafted for an analogue environment, defined by tangible copies, distinct distribution methods, and geographically limited markets. Their application to the pervasive, borderless, and swiftly changing aspects of digital environments frequently reveals substantial ambiguities, enforcement challenges, and a fundamental discord between legal provisions and technological reality. The intrinsic attributes of digital content—its immediate and seamless reproduction, worldwide accessibility, limitless scalability, and adaptable distribution across various platforms—require a fundamental reevaluation of traditional legal frameworks. The task involves not just modifying existing laws but also developing new legal and regulatory frameworks suitable for an increasingly linked and algorithm-driven environment.

In this setting, multidisciplinary research is not only advantageous but essential. The complex issues inherent in copyright and digital media are seldom solely legal; instead, they are profoundly interconnected with technological progress, sociological patterns, economic frameworks, and cultural standards. A thorough comprehension and successful mitigation of online piracy—a continual threat in the digital realm—necessitate insights that extend beyond conventional legal analysis. It necessitates meticulous contributions from computer science to scrutinise the foundational digital distribution networks and content identification technologies; from economics to assess the exact revenue loss for creators and industries, discern market distortions, and evaluate the effectiveness of diverse anti-piracy incentives; and from sociology or media studies to understand user behaviour, motivations for infringement, and the dominant societal perspectives on digital content ownership and sharing. Likewise, devising effective legal solutions to emerging phenomena like as user-generated content (UGC), characterised by collaborative content creation and sharing, or the intricacies posed by

works generated by Artificial Intelligence (AI), necessitates a comprehensive approach. This entails exploring philosophical enquiries on authorship, technical aspects of AI algorithms, and economic ramifications for creative sectors, all of which surpass the limitations of individual academic disciplines.

The critical importance of multidisciplinary study about copyright and digital media laws in India resides in its ability to offer comprehensive, nuanced, and progressive answers. Interdisciplinary approaches, by integrating insights from various academic fields such as law, computer science, information technology, economics, sociology, media studies, communication, ethics, and psychology, can elucidate the complex and frequently subtle connections among technological innovation, user practices, market dynamics, and fundamental legal principles. A comprehensive understanding is essential for formulating legal frameworks that are both resilient and enforceable in the digital domain, while also being adaptable to swift technological advancements, representative of India's distinct socio-cultural values, and equitable in reconciling the rights of creators with the public's interest in access to knowledge and cultural enrichment. In the absence of integrated insights, policy actions may become technologically obsolete, economically unviable, or socially ineffectual.

This research study aims to rigorously analyse the key difficulties and opportunities inherent in copyright and digital media legislation in India using an interdisciplinary approach. The objective is to analyse the intricate complexities stemming from widespread digital transformation, pinpoint deficiencies in current legal frameworks and academic discussions, and suggest novel approaches for more effective legal and policy interventions suited to India's specific context. The paper will specifically address:

- a) a comprehensive analysis of the distinct legal, technological, and cultural challenges encountered in the Indian context, supplemented by relevant case studies;
- b) an investigation into the substantial potential for interdisciplinary collaboration to stimulate innovation, produce novel solutions, and adeptly address these complex challenges;
- c) a critical assessment of appropriate methodological frameworks that can effectively support such rigorous interdisciplinary research; and
- d) a thorough examination of the policy ramifications arising from the findings of this interdisciplinary inquiry, culminating in concrete recommendations for legislative

action and future academic pursuits aimed at cultivating a balanced and robust legal ecosystem that promotes creativity, innovation, and equitable access in the digital age.

## 2. Literature Review

The academic discourse about copyright and digital media legislation has experienced considerable growth and transformation due to the widespread advancement of digital technology. Early literature concentrated on the challenging implementation of established copyright principles to emerging digital media and distribution techniques. This time experienced significant academic focus on issues including the effects of peer-to-peer file-sharing on music copyright, the legal consequences of software piracy, and the difficulties of online content distribution.<sup>2</sup> These preliminary investigations, however fundamental, frequently stayed predominantly within the boundaries of conventional legal interpretation.

In India, the entire body of academic literature on copyright law has traditionally focused on the interpretation and practical implementation of the Copyright Act of 1957. A substantial segment of this research has concentrated on the amendments to the Act, notably the Copyright (Amendment) Act, 2012 which was a pivotal initiative aimed at explicitly tackling emerging digital challenges, including statutory licensing for broadcasters, performers' rights, and provisions for individuals with disabilities.<sup>3</sup> Research has examined essential elements such the extent and constraints of fair dealing regulations, the changing rights of writers and copyright holders in the digital realm, and the effectiveness of collecting societies in administering digital royalties.<sup>4</sup>

Asthana and Devi offer a current analysis of the evolving aspects of copyright law in the digital age, carefully emphasising the diverse challenges and new opportunities arising from swift technological progress, particularly the intricate issues posed by Artificial Intelligence and user-generated content. Their research utilises a stringent doctrinal and comparative legal methodology, extensively referencing domestic statutes such as the Copyright Act of 1957 (as amended), significant international treaties including the Berne Convention and TRIPS

---

<sup>2</sup> Lessig, L. (2004), *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, Penguin Press.

<sup>3</sup> Nair, R. (2013), *The Copyright (Amendment) Act, 2012: A Step Forward for Indian Copyright Law*, Journal of Intellectual Property Rights, 18(3), 221-229.

<sup>4</sup> Singh, V. (2015), "Copyright Law in India: A Critical Analysis", Asia Pacific Law Review, 23(1), 72-88

Agreement, along with pivotal case law from both Indian and foreign jurisdictions.<sup>5</sup> Pandey and Paul (2025) provide a critical examination of the evolving media laws in contemporary India, focussing specifically on the widespread problem of copyright infringements in the expanding social media environment. Their research clearly demonstrates how the intrinsic "sharing culture" on popular platforms such as Facebook and YouTube immediately contradict and frequently destroys the fundamental tenets of copyright law.<sup>6</sup>

Economists often examine the intricate incentive frameworks inherent in copyright and patent regimes, evaluating their effectiveness in fostering innovation and creative production against their capacity to establish monopolies and impede access.<sup>7</sup> Technologists, especially computer scientists and engineers, are actively engaged in investigating and creating practical solutions, including Digital Rights Management (DRM) systems, content identification algorithms, and blockchain applications for transparent content authentication, immutable rights documentation, and automated royalty distribution.<sup>8</sup> Sociologists and media studies scholars concurrently investigate the significant cultural influence of digital media, the fluid group dynamics within online communities, and the changing practices of content creation and consumption that increasingly contest conventional ideas of singular authorship and fixed ownership<sup>9</sup>.

In the Indian context, the implicit acknowledgement of the necessity for multidisciplinary research is evident in numerous policy conversations and nascent academic initiatives aimed at modernising legal systems. The Centre for Research on Innovation and Standardisation (CRISP) at BITS Law School clearly articulates its objective to do interdisciplinary research that informs the law and policy around technology innovation. This breadth thoroughly encompasses Intellectual Property Rights (IPR) legislation, the complexities of data protection and governance, and technological standardisation in Information and Communication Technologies (ICT)<sup>10</sup>. This proactive initiative by an academic institution highlights an

---

<sup>5</sup> Asthana, A., & Devi, S. (2025), "*Copyright in The Digital Age: Challenges, Reforms, And the Way Forward*", Indian Journal of Law and Legal Research, 7(2). Available at: <https://www.ijllr.com/post/copyright-in-the-digital-age-challenges-reforms-and-the-way-forward>

<sup>6</sup> Pandey, A., & Paul, A. (2025), "*Media Laws in Changing India: A Critical Analysis with Special Emphasis on Article*", International Journal of Science & Engineering Development Research, 10(5), c202-c208. Available at: <http://www.ijrti.org/papers/IJRTI2505220.pdf>

<sup>7</sup> Boldrin, M., & Levine, D. K. (2008). "*Against Intellectual Monopoly*", Cambridge University Press

<sup>8</sup> Werbach, K. (2018), "*The Blockchain and the New Architecture of Trust*", MIT Press

<sup>9</sup> Jenkins, H. (2006), "*Convergence Culture: Where Old and New Media Collide*", New York University Press

<sup>10</sup> CRISP - BITS Law School, (n.d.), CRISP, Available at: <https://www.bitslawschool.edu.in/CRISP>

increasing awareness within Indian legal academia regarding the essential need to bridge traditional disciplinary divides to effectively tackle the complex and rapidly evolving legal issues arising from relentless technological advancements. Moreover, specialised courses and honours programs in IPR and Cyber Law frequently integrate foundational components from computer science, business management, and ethical philosophy, highlighting an intrinsic, albeit occasionally implicit, interdisciplinary aspect of the subject<sup>11</sup>. Discussions regarding "Intellectual Property Management" and the prospects for "Intellectual Property Markets" in India underscore the essential integration of legal, economic, and technological viewpoints necessary to enhance and monetise intangible assets.<sup>12</sup>

Notwithstanding these preliminary and promising initiatives, some significant deficiencies in the existing research remain, which this paper intends to methodically rectify:

- **Absence of Comprehensive Integrated Frameworks:** Although individual studies in India may address legal, technological, or economic aspects of digital copyright, there is a notable deficiency of holistic frameworks that effectively unify these varied viewpoints.
- **Limited Empirical Interdisciplinary Studies:** A significant amount of the current interdisciplinary debate in India is predominantly theoretical or conceptual. An essential necessity exists for more stringent empirical research that systematically gathers and analyses data across several fields.
- **Under-explored Socio-Cultural Dimensions:** The intricate and often understated cultural subtleties of content generation, consumption, and sharing activities across India's extensive and varied linguistic and regional communities are typically neglected or simply examined in traditional legal assessments.
- **Policy Implementation Gaps and Efficacy:** Although progressive legislative reforms and new regulations are periodically introduced (e.g., the IT Rules, 2021), their effective implementation frequently encounters substantial practical obstacles, including technological infrastructure deficiencies, insufficient enforcement capabilities, limited public awareness, and stakeholder resistance.
- **Anticipatory Safeguarding of Legal Structures:** The unyielding and swift progression of technical innovation (e.g., rapid breakthroughs in AI, the rise of the Metaverse, the

---

<sup>11</sup> Symbiosis College, (n.d.), "Interdisciplinary Honours Course", Available at: <https://symbiosiscollege.edu.in/assets/pdf/slb/Honours%20Syllabus%20Files/Interdisciplinary%20-%20Gist%20Of%20the%20Courses.pdf>

<sup>12</sup> Heim, I. (2023), *"Intellectual Property Management: Interdisciplinary Knowledge for Business Decision-Making"*, Palgrave Macmillan.

evolution of Web3 technologies) renders legal frameworks obsolete, frequently by the moment of their implementation.

This study is carefully crafted to address the stated gaps by systematically examining the complex issues and numerous opportunities present in India's copyright and digital media laws through a clear and cohesive interdisciplinary perspective.

### 3. Challenges in Copyright and Digital Media Laws in India

The digital shift has provided unparalleled opportunities for innovation and distribution, although it has also complicated India's copyright and digital media regulatory systems significantly. These intricacies fundamentally challenge conventional concepts of ownership, distribution, and enforcement, requiring a thorough, interdisciplinary comprehension. These significant obstacles mostly arise from a combination of intrinsic legal ambiguities, the relentless speed of technological progress, and India's distinct socio-cultural complexities.

#### 3.1 Legal Challenges

The Copyright Act of 1957, India's principal copyright legislation, has undergone numerous amendments, particularly in 2012 to address early digital issues, yet it fundamentally predates the proliferation of the internet, advanced digital media platforms, and the surge in digital content creation. This fundamental disparity between analog-era legislation and contemporary digital realities results in numerous substantial legal challenges:

- **Definition and Scope of "Work" in a Digital Context:** The Copyright Act conventionally delineates "literary, dramatic, musical, and artistic works" according to their physical, fixed manifestations. Nevertheless, the digital domain often obscures these clear distinctions. Examine the intricacies associated with user-generated content (UGC), wherein countless amateur and professional creators contribute to sites such as YouTube, Instagram, and TikTok. A brief video segment on TikTok may amalgamate a copyrighted musical composition, an individual's original dance choreography (dramatic work), and visual filters (artistic work). The determination of rights holders, particularly regarding sampling, mashups, or transformative use of existing copyrighted work, becomes highly murky. A viral dance challenge video with a trending copyrighted song presents complex issues about potential copyright infringement of the original music, the copyrightability of the new choreography, and the applicability of the "fair dealing" exception.
- **Widespread Digital Violation and Copyright Infringement:** The intrinsic simplicity of digital replication, combined with the immediate and worldwide distribution potential of

the internet, has resulted in widespread online piracy in numerous creative industries in India, particularly in film, music, software, and publishing. Pirated content is easily accessible via illegal websites, torrent networks, social media groups, and encrypted messaging applications. The Copyright Act of 1957 has protections to safeguard against online piracy; nonetheless, "these laws are occasionally outdated and insufficient" in effectively addressing the scale and sophistication of contemporary digital infringement.<sup>13</sup>.

- **Complex Intermediary Liability:** Digital platforms, such as social media networks, video-sharing services, streaming platforms, cloud storage providers, and search engines, serve as essential intermediaries enabling the dissemination of extensive material, predominantly user-uploaded. Assessing their legal responsibility for copyright infringement perpetrated by its users is a globally contested and intricate matter. The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules, 2021), signify India's endeavour to control intermediaries by requiring grievance redressal channels, content identification, and expedited takedown procedures. These regulations have encountered substantial criticism from digital rights groups, content creators, and platform operators due to worries regarding potential governmental overreach, suppression of free speech, and the practical implementation challenges for platforms. They are presently facing continuous legal challenges in multiple high courts.<sup>14</sup> The central discourse is achieving a practical equilibrium among the rigorous enforcement of copyright legislation, safeguarding essential freedom of expression, and maintaining the operational sustainability and creativity of digital platforms. An excessively rigid liability framework may hinder platform innovation, whilst a permissive one could transform platforms into refuges for infringement.
- **Ongoing Jurisdictional Challenges:** The intrinsically global and decentralised characteristics of the internet significantly hinder the implementation of copyright legislation. An infringement occurring in one place might immediately impact rights holders in many jurisdictions, resulting in intricate, prolonged, and frequently costly international legal disputes. A film pirated in India may be stored on a server located in a different nation and accessed by users worldwide. India's legal system, despite being shaped by international treaties such as the TRIPS Agreement and the Berne Convention, continues to struggle with the challenges of efficiently pursuing cross-border digital

<sup>13</sup> Kumari Sonalika, Legal Research and Analysis. (n.d.), "Copyright Infringement in Digital Age: Challenge & Solution", Available at: <https://legalresearchandanalysis.com/copyright-infringement-in-digital-age/>

<sup>14</sup> Vajiram & Ravi. (2025), "Regulating Digital Content - Need for a New Legal Framework", Available at: <https://vajiramandravi.com/current-affairs/regulating-digital-content-in-india/>

copyright infringements. Acquiring evidence, delivering notices, and enforcing judgements across international borders present considerable challenges, frequently necessitating complex international legal collaboration that can be protracted and unwieldy.

### 3. 2. Technological Challenges

Technology, while functioning as the catalyst for the expansion of digital media and facilitating unparalleled creative expression, concurrently presents new and continually increasing issues for established legal frameworks:

- **Emerging Technologies and Conceptual Ambiguity:** The rapid ascent of AI-generated content, encompassing intricate prose, creative music, varied artworks, and usable computer code, raises essential and unsolved enquiries regarding originality, authorship, and copyright. Who possesses the copyright when an AI algorithm generates an original musical composition? Is the responsibility attributed to the AI creator, the user who supplied the first prompt, the entity that possesses the data utilised for training the AI, or maybe the AI itself as a legal entity? The Copyright Act of 1957 does not specifically include AI-generated works, resulting in considerable legal ambiguity and a void that deters investment and litigation.<sup>15</sup> This issue significantly pertains to the training data for AI models: if AI are trained on extensive datasets that include copyrighted materials, does this amount to copyright infringement? What licensing should govern AI's "learning"?
- **Blockchain and NFTs:** These technologies provide significant potential for establishing transparent and permanent records of copyright ownership, licensing, and royalty distribution; nevertheless, its decentralised and immutable characteristics simultaneously introduce new obstacles. How can content be removed if it is recorded on a distributed ledger? How may inaccuracies in ownership data be amended if the ledger is immutable? Non-Fungible Tokens (NFTs), which authenticate digital ownership through blockchain technology, exacerbate complexities by generating distinctive digital assets. The sale of an NFT generally conveys ownership of the token, but not necessarily the underlying copyright of the linked digital artwork. This differentiation is frequently misconstrued, resulting in legal conflicts about ownership, reproduction rights, and the moral rights of the original artist.
- **Metaverse and Virtual Worlds:** The swift advancement of immersive virtual worlds, known as the Metaverse, and their corresponding economies presents novel challenges

---

<sup>15</sup> Law4u. (n.d.), "What is the Impact of Technology on Copyright Laws?", Available at: <https://law4u.in/top-answer/8437/what-is-the-impact-of-technology-on-copyright-laws>

concerning virtual property rights, digital scarcity, and the enforcement of copyright on digital assets that may exist exclusively within a simulated context. What mechanisms are in place for the enforcement of intellectual property rights concerning virtual fashion designs or distinctive digital avatars generated on a metaverse platform? Can virtual "land" or digital wearables be protected under copyright, trademark, or design law? The current legal frameworks are inadequate to address the dynamic and innovative forms of ownership in these emerging virtual environments.

- **Bypassing Digital Rights Management (DRM):** DRM technologies are methods employed by copyright holders to limit access and inhibit unauthorised reproduction or dissemination of digital information. This constitutes an ongoing "cat-and-mouse" dynamic between DRM makers and adept individuals or collectives proficient in devising circumvention solutions.
- **Deepfakes and Synthetic Media:** Sophisticated AI and machine learning technologies can generate incredibly realistic synthetic media, referred to as "deepfakes," which can successfully replicate human voices, faces, and actions. These may be employed to produce counterfeit content that can violate personality rights, result in significant defamation, or inaccurately ascribe creative works to individuals who are not their creators.

### 3.3 Cultural Challenges

The distinctive socio-cultural milieu of India substantially complicates the efficient implementation and enforcement of copyright and digital media legislation.

- **Prevalent "Sharing" Culture and Public Perception:** In India, especially among younger demographics, students, and informal social networks, there is frequently a robust and entrenched "sharing culture." This cultural norm perceives the unrestricted dissemination of digital content—whether educational resources, films, music, or memes—as a standard, and even benevolent, practice. This common perspective frequently conflicts with the restrictive and proprietary aspects of copyright law, resulting in a widespread belief that copyright serves as an unjust barrier to access, rather than an essential tool for safeguarding creators' livelihoods and promoting creative production. Additionally, public awareness and comprehension of the complexities of copyright legislation, the entitlements of intellectual property proprietors, and the economic significance of creative works are frequently alarmingly deficient.<sup>16</sup>

---

<sup>16</sup> Datar Madhurima, "Comparative Analysis of Indian Copyright Laws with International Digital Copyright Standards", Available at: <https://www.researchgate.net/publication/>

- **Cost-Effectiveness, Availability, and the Technological Disparity:** A significant portion of the Indian populace, especially within lower-income brackets, finds the expense of lawfully obtained, copyrighted digital content (such as streaming subscriptions, premium e-books, and software licenses) to be prohibitive. This economic obstacle frequently leads consumers to seek accessible and complimentary (though illegal) pirated options. Reconciling the rightful claims of artists to derive income from their work with the societal necessity of providing inexpensive public access to knowledge, information, and entertainment continues to be a substantial and persistent challenge.<sup>17</sup> (IJFMR, 2024).
- **Regional Diversity, Linguistic Fragmentation, and Traditional Knowledge:** India's vast linguistic and cultural diversity results in the creation, consumption, and dissemination of digital material in numerous regional languages. This fragmentation presents distinct issues for content control, copyright enforcement, and the formulation of culturally relevant legal interpretations. Digital platforms and legal systems frequently fail to effectively address this language and cultural diversity, resulting in inconsistencies in content management and enforcement. Furthermore, the matter of traditional knowledge (TK) and traditional cultural expressions (TCEs)—which frequently arise from collective endeavours and are transmitted orally or through generations—poses a complicated relationship with contemporary copyright legislation
- **The informal economy and Creator Rights:** This encompasses a substantial segment of creative endeavours in India, especially in traditional arts, crafts, folk music, and regional entertainment. In this situation, authors frequently lack formal agreements, knowledge of their intellectual property rights, or the capacity to legally enforce them. The informal structure hinders the efficient application and enforcement of formal copyright rules, rendering many susceptible to exploitation and infringement, hence widening the disparity between legal theory and practical reality.

### **Case Study: The Judgement in *Shreya Singhal v. Union of India* (2015)<sup>18</sup> and Intermediary Liability in India**

This pivotal Supreme Court decision, while primarily addressing the fundamental right to freedom of speech and expression (as articulated in Article 19(1)(a) of the Indian Constitution),

---

384977577\_COMPARATIVE\_ANALYSIS\_OF\_INDIAN\_COPYRIGHT\_LAWS\_WITH\_INTERNATIONAL\_DIGITAL\_COPYRIGHT\_STANDARDS

<sup>17</sup> Roy Samridhya, “*The Impact of International Copyright Agreements on Indian Copyright Law*”, International Journal for Multidisciplinary Research (IJFMR), E-ISSN: 2582-2160, Volume 6, Issue 2, March-April 2024

<sup>18</sup> AIR 2015 SC 1523

significantly impacts digital media and the contentious matter of intermediary liability in India. The vacuum created by the striking down of Section 66A, coupled with the increasing difficulties of content regulation, ultimately resulted in the enactment of the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (IT Rules, 2021). These regulations signify the Indian government's subsequent endeavour to enhance the regulation of digital news media and Over-the-Top (OTT) platforms, which include a directive for a "three-tier grievance redressal mechanism" for these entities. This stratified system mandates platforms to designate grievance officers, comply with a code of ethics, and provide systems for self-regulation and governmental supervision. Nonetheless, as observed, these regulations are contentious and encounter persistent legal disputes, with detractors contending that they may result in excessive censorship, inhibit free expression, and impose unreasonable obligations on intermediaries.<sup>19</sup>

#### 4. Opportunities Through Interdisciplinary Research

The problems posed by the digital age to copyright and digital media laws in India are indeed substantial, however they also bring considerable opportunity for progress. Interdisciplinary research promotes collaboration among various academic disciplines and professional sectors, resulting in innovative solutions, enhanced policy interventions, and a more resilient legal ecosystem that both protects and cultivates creativity and innovation.

##### 4.1 Potential Benefits and Advancements

- **Holistic Problem-Solving:** Interdisciplinary techniques facilitate a thorough and cohesive comprehension of intricate challenges that beyond conventional disciplinary limits. Effectively addressing the enduring issue of online piracy requires not only the implementation of legal remedies (e.g., injunctions, damages) but also the concurrent application of advanced technological solutions (e.g., sophisticated content identification systems, enhanced Digital Rights Management (DRM), forensic watermarking), the meticulous design of economic incentives (e.g., establishing affordable, user-friendly, and legally compliant streaming or distribution services), and focused social interventions. (e.g., public awareness campaigns that elucidate the economic and cultural significance of creative work and the ethical ramifications of piracy) This comprehensive strategy transcends symptomatic treatment to tackle the underlying causes of violation.

---

<sup>19</sup> Ghosh Kabir S., "Traversing Latest Developments in Media Law in India", LexTalk World (2024), available at: <https://www.lextalk.world/post/traversing-latest-developments-in-media-law-in-india>

- **Advancements in Enforcement and Rights Management:** The collaboration of legal professionals, computer scientists, and data analysts can propel the creation and enhancement of innovative technology for copyright enforcement.
- **Enhanced Content Identification:** This entails the refinement and implementation of automated content identification technologies, similar to YouTube's Content ID system, but potentially customised for India's varied content landscape, capable of swiftly scanning extensive digital content to identify and flag infringing material.
- **Digital Watermarking and Fingerprinting:** Research may concentrate on advancing more robust and inconspicuous digital watermarking and audio fingerprinting methodologies that incorporate identifying information within digital media.
- **Blockchain for Improved Transparency and Efficiency:** Joint study integrating legal, economic, and blockchain knowledge can thoroughly investigate the whole capabilities of distributed ledger technology. Blockchain can be utilised to establish transparent, immutable, and verifiable records of copyright ownership, monitor licensing agreements, and automate the instantaneous transfer of royalties to creators and rights holders.
- **Artificial Intelligence for Legal Analytics and Predictive Enforcement:** AI and machine learning technologies can be engineered to scrutinise extensive volumes of legal data, encompassing historical infringement cases, judicial rulings, and internet content patterns.
- **Enhanced and Flexible Policy Formulation:** Interdisciplinary research equips policymakers with a more comprehensive, resilient, and evidence-driven basis for legislative and regulatory choices. For instance, comprehensive economic analyses can accurately measure the financial detriments experienced by industries as a result of piracy, so offering compelling rationale for enhanced enforcement. Sociological study can elucidate fundamental user behaviours, public acceptability of new rules, and the efficacy of various policy communication strategies.
- **Promoting a Culture of Compliance and Respect for Intellectual Property:** By incorporating ideas from behavioural economics, cognitive psychology, and communication studies, interdisciplinary research can facilitate the creation of more effective and culturally relevant public awareness campaigns.
- **Fostering and Maintaining Novel Business Models:** A comprehensive, interdisciplinary comprehension of the interaction among advancing technology, legal structures, and consumer behaviour can serve as a significant impetus for the development of novel and sustainable legal business models for digital material. Research may uncover prospects for

creating adaptable micro-licensing platforms, subscription services customised for India's varied income levels and regional content tastes, or hybrid freemium models.

- **Addressing the Complexities of AI-Generated Content In a proactive manner:** Collaboration among legal experts, AI developers, ethicists, philosophers of art, and artists is essential for creating resilient, adaptive, and ethically sound legal frameworks for AI-generated works. This encompasses fundamental enquiries on authorship, originality, culpability for AI-induced infringement, and the intricate matter of fair use for AI training data.

#### 4.2 Novel Solutions and Strategies

A variety of novel ideas and tactics have been offered or are presently under exploration worldwide, frequently arising from both implicit and explicit interdisciplinary collaboration. Their adaption and execution in India present substantial opportunities:

- **Graduated Response Systems (Three-Strikes Policy):** These systems, effectively executed or tested in various developed economies, entail a sequence of escalating warnings directed at internet subscribers identified as committing copyright infringement, prior to the imposition of more stringent penalties (e.g., internet speed throttling, temporary disconnection). Establishing such a system in India would require complex collaboration among various stakeholders: internet service providers (necessitating technical implementation and data management proficiency), copyright holders (demanding legal clarity on infringement identification), and pertinent government agencies (for policy oversight and enforcement).
- **Enhancement and Modernisation of Collective Licensing Mechanisms:** Simplifying and broadening collective licensing arrangements for digital content can substantially facilitate the procedure for users to legally access and utilise copyrighted information across diverse platforms. This can significantly diminish the motivation for participating in piracy by enhancing the accessibility and convenience of lawful alternatives.
- **Establishing "Notice and Stay Down" Protocols:** Transitioning from the reactive "notice and takedown" strategy, which removes infringing content solely upon notification, to a more proactive "notice and stay down" framework, wherein platforms are required to actively prevent the re-upload of identified infringing material, would signify a substantial progression. This transition, although significantly advantageous for rights holders, would need considerable technology investment from platforms (e.g., sophisticated content filtering systems) and explicit legal directives for intermediary roles and liabilities.

- **Copyright Education Initiatives with Cultural Sensitivity:** Formulating and implementing specialised educational programs and public awareness campaigns that utilise insights from media studies, educational psychology, and communication theory can more effectively articulate the complexities of copyright law and its advantages to a diverse Indian population. These activities must be culturally attuned and distributed across several languages and media platforms. This is essential for tackling the entrenched difficulty of "sharing culture" in India, promoting voluntary compliance and nurturing respect for intellectual property rights.
- **Creation of Specialised Intellectual Property Courts/Tribunals:** The establishment of specialised intellectual property courts or tribunals, manned by judges and legal experts with profound knowledge in law and intricate digital technologies, could markedly expedite dispute resolution processes and improve the efficacy and uniformity of enforcement. This systemic reform would guarantee that intricate technological issues concerning digital infringement are accurately comprehended and adjudicated. This project necessitates extensive administrative and legal reform guided by judicial insights, technological proficiency, and a thorough comprehension of the obstacles in existing litigation.
- **Advancing Strong Open Access Initiatives:** Advocating for and facilitating open access policies, especially in scholarly and research publications, can achieve a more equitable equilibrium between copyright protection and the essential requirement for broader information distribution.
- **Smart Contracts for Automated Licensing:** Additional research and pilot initiatives utilising smart contracts on blockchain for automated licensing agreements have the potential to transform the licensing of content and the distribution of royalties.

By deliberately seizing these opportunities and cultivating organised, enduring interdisciplinary collaborations, India may proactively establish a contemporary, adaptable, and efficient legislative framework for copyright and digital media.

## 5. Methodological Approaches in Interdisciplinary Research

Interdisciplinary study in the evolving field of copyright and digital media legislation in India necessitates a refined integration of many techniques. This requires a conscious shift from solely traditional doctrinal legal analysis to include empirical (including qualitative and quantitative), computational, and prospective methodologies. The genuine efficacy and revolutionary potential of these techniques reside in their synergistic capacity to thoroughly

encapsulate the complex and interrelated aspects of the challenges and opportunities inherent in the digital domain.

### 5.1 Evaluation of Existing Methodologies

Conventional legal research primarily depends on doctrinal analysis, entailing a methodical review of statutes (such as the Copyright Act of 1957), legislative history, case law (court precedents), and recognised legal concepts. The main goal is to analyse the law, ascertain its present condition, comprehend its implementation, and uncover discrepancies or deficiencies within the legal system. This methodology underpins the comprehension of the current legal framework.

Traditional legal research relies on doctrinal analysis, examining statutes, case law, and principles (e.g., Asthana & Devi, 2025; Pandey & Paul, 2025).

- **Effectiveness:** Establishes legal certainty and identifies reform areas.
- **Limitations:** Often fails to account for real-world impact, technological change, or socio-cultural behaviors.

**Comparative legal research** systematically compares Indian law with international standards or other jurisdictions (ResearchGate, n.d., Source 6.1; IJFMR, 2024).

- **Effectiveness:** Valuable for identifying global best practices and informing legislative amendments.
- **Limitations:** Direct transplantation may not suit India's unique context.

Emerging interdisciplinary studies incorporate wider methodologies:

- **Qualitative Research (Interviews, Focus Groups):** Collects rich, non-numerical data from stakeholders to understand perceptions and behaviors.
  - **Effectiveness:** Provides nuanced insights into practical challenges and motivations.
  - **Limitations:** Findings may not be statistically generalizable; data interpretation requires care.
- **Quantitative Research (Surveys, Statistical Analysis):** Collects numerical data to quantify public awareness, attitudes, or economic impact.
  - **Effectiveness:** Provides measurable data for generalization and trend identification; crucial for evidence-based policymaking.
  - **Limitations:** May oversimplify complex human behaviours; survey design must avoid biases.

- **Economic Analysis:** Analyses financial implications of copyright regimes, piracy impact, or market failures.
  - **Effectiveness:** Crucial for understanding financial impacts and assessing new business model viability.
  - **Limitations:** Models rely on simplifying assumptions and may not capture non-economic values.
- **Technological Analysis and Digital Forensics:** Examines technical mechanisms of content creation, distribution, infringement, and protection.
  - **Effectiveness:** Essential for understanding digital challenges, informing technical solutions, and providing expert evidence.
  - Requires specialized expertise; can quickly become outdated.

## 5.2 Proposed Enhancements or Alternatives

To substantially increase the rigour, depth, and practical effects of multidisciplinary research in copyright and digital media law in India, the following enhancements and alternative strategies are recommended:

- **Robust Mixed-Methods Research Designs:** The most effective strategy is to systematically integrate qualitative and quantitative approaches within a unified research framework. Exploratory qualitative interviews with authors and users can elucidate significant themes and intricate difficulties of copyright perception and infringement. These findings can subsequently inform the design of extensive quantitative surveys to assess the frequency of these concerns within a larger population.
- **Computational Legal Studies and Data Science:** This swiftly developing discipline utilises computational instruments, data science methodologies (such as natural language processing, machine learning, and network analysis), and extensive data analytics to examine large datasets of legal texts, court rulings, legislative discussions, and online materials.
- **Action Research and Participatory Approaches:** This methodology entails the active engagement of affected communities and stakeholders (e.g., independent artists, small digital media startups, rural internet users, local cultural practitioners) in a collaborative process to identify issues, co-develop solutions, and execute pilot interventions. This entails a cyclical procedure of strategising, executing the plan, monitoring the results, and contemplating the process, facilitating immediate adjustment and enhancement.

- **Futures Studies and Foresight approaches:** Due to the rapid advancement of technology and its potential for disruption, it is essential to integrate structured approaches from futures studies, such as scenario planning, horizon scanning, the Delphi method, and weak signals analysis.
- **Network Analysis and Mapping:** Utilising social network analysis (SNA) methodologies can elucidate the complex relationships and interactions among diverse participants in the digital content ecosystem, including content creators, digital platforms, internet service providers, copyright holders, identified infringers, and enforcement agencies.

The fundamental idea guiding effective interdisciplinary research in this vital area is to transcend merely contrasting findings from other disciplines. The objective should be authentic integration and synthesis, wherein the unique methodology, theoretical frameworks, and empirical discoveries from one discipline significantly inform, question, and enhance those of others. This collaborative integration results in new insights, really innovative solutions, and ultimately, more resilient and implementable policy recommendations for India's developing digital future.

## 6. Policy Implications

Interdisciplinary research findings profoundly impact policy-making and legal reforms in India concerning copyright and digital media laws. A holistic, evidence-based approach is crucial for developing robust, equitable, culturally relevant, and forward-looking legal frameworks.

### 6.1 Analysis of Implications

**Adaptive, Technology-Neutral Legislation:** Rapid technological advancement mandates a shift from prescriptive, reactive laws to adaptive, principle-based ones. Policy should formulate broad legal principles flexible for unforeseen scenarios.

- **Balancing Rights Protection with Equitable Access:** Interdisciplinary findings highlight the tension between protecting creators' IP rights and ensuring public access, particularly in India (IJFMR, 2024). Policy must balance incentivizing creativity with promoting widespread, affordable access, possibly via refined compulsory licensing or expanded fair dealing/fair use, backed by empirical data.
- **Refining Intermediary Liability:** The IT Rules, 2021, underscore this complexity. Interdisciplinary research (legal, tech, econ) can inform nuanced approaches. Policy implications include clearer "safe harbor" provisions, feasible "notice and stay down"

mechanisms, and reasonable due diligence for platforms that don't stifle innovation or free speech.

- **Enhancing Enforcement Mechanisms:** Pervasive online piracy demands effective, rapid, technologically informed enforcement. Policy implications include:
- **Capacity Building:** Training law enforcement and judiciary in digital technologies and IP law.
- **Technological Adoption:** Encouraging advanced content identification/evidence tools.
- **International Legal Cooperation:** Strengthening cross-border assistance for piracy prosecution.
- **Prioritizing Public Awareness & Digital IP Education:** Low copyright awareness in India contributes to infringement. Policy must include nationwide educational campaigns leveraging communication/behavioral studies to instill IP respect.
- **Proactive Regulatory Stance on AI Copyright:** Challenges from AI-generated content demand proactive policy. This involves defining AI authorship/ownership, regulating AI training data, and addressing AI-driven infringement liability.

## 6.2 Recommendations for Future Research and Legislative Actions

### 6.2.1 Recommendations for Future Research

1. **Empirical Studies on Digital Content Consumption & Economic Impact:** Large-scale, mixed-methods studies on consumer behaviour, piracy patterns, and economic impact on Indian creative industries.
2. **Dedicated AI and IP Framework Development:** Long-term interdisciplinary projects on AI's copyright implications (authorship, originality, fair use in training, licensing models).
3. **Socio-Cultural Studies of Digital Content:** In-depth ethnographic research on India's cultural nuances in digital content and traditional knowledge interaction with copyright.
4. **Feasibility Studies for Advanced Enforcement/Rights Management:** Technical/legal feasibility studies for blockchain-based rights management or AI-driven content identification in India.
5. **Comparative Policy Analysis with Developing Nations:** Studies comparing digital copyright policies with similar developing nations to identify transferable solutions.

### 6.2.2 Recommendations for Legislative Actions

1. **Introduce Technology-Neutral Principles in Copyright Act:** Amend the Copyright Act, 1957, towards flexible, enduring principles applicable to all digital technologies, enhancing adaptability.
2. **Clarify and Modernize Fair Dealing Provisions:** Update "fair dealing" to explicitly address transformative use, UGC, and digital education/research, balancing rights with public interest.
3. **Streamline and Balance Intermediary Liability Framework:** Refine IT Rules, 2021, for a balanced regime: clear responsibilities, simplified takedown procedures, and feasible "notice and stay down" provisions without stifling innovation.
4. **Develop AI-Specific Copyright Guidelines/Framework:** Formulate clear policy guidelines/amendments for AI-generated content, addressing authorship, ownership, training data use, and liability.
5. **Establish Specialized IP Dispute Resolution Mechanisms:** Expedite specialized IP benches/tribunals with technical and legal expertise for efficient digital copyright dispute resolution.
6. **Launch Comprehensive Public Awareness Campaigns:** Allocate resources for national campaigns on copyright and digital literacy, using diverse media/languages to educate stakeholders.
7. **Foster Proactive International Collaboration:** India must actively engage in international dialogues to develop harmonized approaches for cross-border digital copyright issues and emerging technologies.

## 7. Conclusion

The development of copyright and digital media laws in India critically demands continuous interdisciplinary collaboration and rigorous research. This paper highlighted the significance of interdisciplinary approaches in navigating the complex interplay of legal, technological, economic, and socio-cultural forces shaping India's digital content ecosystem.

We showed the urgent need for an integrated perspective on digital transformation's impact on copyright, noting gaps in frameworks, empirical studies, socio-cultural nuance, policy implementation, and future-proofing.

Challenges include an outdated Copyright Act struggling with online infringement, complex

intermediary liability, and jurisdictional issues. Technologically, AI, blockchain, and the metaverse introduce new questions of authorship and enforcement. Culturally, India's "sharing culture," affordability, and diversity create friction. The Shreya Singhal case exemplifies these challenges.

Despite these, interdisciplinary research unlocks immense opportunities: holistic problem-solving, innovative enforcement (blockchain, AI analytics), informed policy-making, fostered compliance, and new business models. Strategies like graduated response systems, collective licensing, "notice and stay down," and specialized IP courts offer tangible progress.

Methodological approaches advocated for robust mixed-methods, computational legal studies, action research, futures studies, and network analysis for nuanced and actionable understanding.

Finally, policy implications stress adaptive, technology-neutral legislation, balancing rights and access, refined intermediary liability, strengthened enforcement, and public awareness. Recommendations call for empirical studies, AI/IP research, socio-cultural investigations, technology feasibility, and comparative policy. Legislative actions include updating the Copyright Act, streamlining intermediary liability, developing AI guidelines, establishing specialized IP resolution, and fostering international collaboration.

In conclusion, India's digital content future hinges on its legal, technological, social, and economic spheres converging and collaboratively constructing a resilient, progressive framework for the digital age.