

Intellectual Property Implications of Generative AI: Challenges to Copyright Act, 1957

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Abstract

Generative Artificial Intelligence (AI), including systems such as ChatGPT, Midjourney, and DALL-E, has transformed the process of creating literary, artistic, and technical works. These systems generate text, images, music, software code, and inventions autonomously or semi-autonomously. The advanced technology has transformed the world, now we have stepped into an innovative tech-driven era. With these technologies, the creativity and productivity, a question arises that who has the ownership? The matter of authorship recognition has become a major question with the advent of new technologies. When the Intellectual Property Rights (IPRs) came into existence, human beings were the true and original inventors of the particular innovation. But with the passage of time, when generative AI came into light, the claim of 'authorship' became a questionable subject matter. When it comes to the matter of legal protection, the person who invented the creation must be given the protection or the software who has created the content on the command of an individual. The paper analysis the implications of generative AI with special reference to Intellectual Property Rights. In addition to this, the authorship claims and IPR protection are discussed in detail in the present study along with some recommendations and suggestions in order to reform intellectual property law to accommodate AI-generated works.

Keywords: Intellectual Property Rights (IPRs), Generative AI, Innovations, authorship, Artificial Intelligence

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1. Introduction to Copyright

Intellectual Property Rights (IPR) is one of the major legislations across the world. It provides an exclusive right to the owner of the original work. It includes Copyright, Trademark, Patents, Geographical Indications, Designs, Integrated Circuits and so on. According to Oxford Dictionary, Copyright is derived from ‘copier of words’ first used in the year 1586. ‘Copy’ word implies a matter that is made for printing. Copyright is a unique right which is granted to the owner of the original work. Under the law of copyright, the person is entitled to get an exclusive right, that restricts the third party from using that right. It is an intangible and incorporeal right granted to the owner of the work. It can be simply said that; copyright is a negative right because it imposes a legal restriction on the third party from using the owner’s original work. Tracing back to the history of copyright, it was first recognized in the 15th century with the advent of literary work.² At that time, the print media was prevalent. With the passage of time, the technological advancements emerged in the world. The digital printing also came into limelight. Basically, copyright is a set of rights that is granted to the true owner of the work subsisting in literary, artistic, cinematography films and sound recordings. Anyone who published any matter falling under these categories is subject to copyright protection. This right is granted for a period of sixty years from the death of the author. It is important to state that copyright is granted for the expression of an idea and not ‘the mere idea’. Only idea of human mind is not subject to copyright protection but it needs to be expressed for its inclusion in the copyright protection. With the advent of technological advancements, the copyright has become the subject of great importance. The issue of piracy has become the common issue in today’s world of digitalization. Copyright law not only subsists in India, but also it is a legislation of international importance and recognition. Various conventions are joined by different countries to deal with the law of copyright.

1.1. Characteristics of Copyright

Copyright has certain characteristics that a true author is entitled. Some of the characteristic features are:

- A. Creation of a statute
- B. Some form of Intellectual Property
- C. Monopoly Right
- D. Negative Right
- E. Multiple Rights

² 1 B L Wadhwa, Law Relating to Intellectual Property 269-270 (5th edn.2017).

F. Copyright only in the form not in Idea

G. Neighboring Rights

2. Development in the law of copyright after digitalization

The Indian Copyright Law, enacted more than six decades ago, serves as the foundation for protecting intellectual property in India. However, with the advent of digital technologies and the rapid growth of the internet, the law faces numerous challenges and has significant implications for copyright holders, content creators, and users alike.

The Indian Copyright Law, while aimed at safeguarding creators' rights and promoting cultural expression, must now grapple with issues such as online piracy, unauthorized distribution, and the fair use of digital content. The advent of social media platforms, file-sharing websites, and streaming services has revolutionized the way content is consumed and shared, posing unique challenges for copyright enforcement. Emerging technologies like artificial intelligence and blockchain have the potential to disrupt traditional copyright practices and raise questions about ownership, licensing, and attribution in the digital sphere. By analysing the existing legal framework, case studies, and international perspectives, this study aims to shed light on the complex interplay between the Indian Copyright Law and digital technologies, ultimately contributing to the ongoing discourse on copyright reform and the effective protection of intellectual property in the digital age.³

The overview of the Indian Copyright Law, 1957 provides a comprehensive understanding of the legal framework that governs copyright in India. Enacted more than six decades ago, this legislation serves as the cornerstone for protecting intellectual property rights in the country. The Indian Copyright Law grants exclusive rights to creators and copyright holders, including the rights of reproduction, adaptation, publication, and performance. It establishes the duration of copyright protection, outlining the term of protection for various types of works. The law also encompasses provisions for fair use, allowing limited use of copyrighted materials for purposes such as criticism, review, or educational use. However, with the rapid advancement of digital technologies and the internet, the Indian Copyright Law faces new challenges in effectively protecting copyrighted works. This necessitates a critical examination of its provisions, their adaptability to the digital landscape, and their implications for copyright holders, content creators, and users. By analysing the Indian Copyright Law within the context of digital technologies and the internet, this study contributes to the ongoing discourse on

³ William Patry, *The Fair Use Privilege in Copyright Law* (2d ed. 2011).

copyright reform and the need for a balanced legal framework that addresses the complexities of the digital age.⁴

The Indian Copyright Law, 1957 encompasses a range of provisions that extend beyond the traditional scope of copyright protection. It recognizes different categories of works, including literary, artistic, musical, and cinematographic works, providing comprehensive coverage for various forms of creative expression. The law also establishes the rights of authors, performers, and producers, outlining their entitlements and ensuring the protection of their economic and moral rights. The legislation includes provisions for licensing and collective rights management, facilitating the administration and enforcement of copyrights. However, the emergence of digital technologies and the internet has posed unprecedented challenges to the enforcement of copyright under the Indian Copyright Law. Issues such as online piracy, digital reproduction, and dissemination of copyrighted materials have raised concerns about the effectiveness of the existing legal framework in addressing the unique dynamics of the digital environment. This necessitates a thorough examination of the Indian Copyright Law's provisions and their compatibility with digital technologies, as well as the exploration of potential amendments and measures to ensure robust copyright protection in the digital era. By critically evaluating the implications of the Indian Copyright Law on digital technologies and the internet, this research contributes to the ongoing dialogue on copyright reform, aiming to strike a balance between promoting innovation, creativity, and cultural exchange while safeguarding the rights of creators and copyright owners.⁵

The emergence of digital technologies and the internet has revolutionized the way information is accessed, shared, and consumed, fundamentally transforming various aspects of society, including the realm of copyright. The widespread adoption of digital platforms, social media, and online content distribution channels has led to an exponential increase in the availability and accessibility of creative works. The internet has facilitated the easy reproduction, distribution, and remixing of digital content, challenging the traditional notions of copyright protection and raising new questions about ownership, attribution, and fair use. Digital technologies have enabled the development of innovative modes of creation, such as user-generated content and collaborative works, further blurring the boundaries of traditional copyright frameworks. The speed, scale, and anonymity afforded by digital platforms have also fueled concerns over copyright infringement, piracy, and the enforcement of intellectual

⁴ Jane C. Ginsburg, *Copyright and the Global Digital Economy* (2020).

⁵ Shannad Basheer, *The Oxford India Handbook of Intellectual Property Law* (2015).

property rights. As a result, the implications of the Indian Copyright Law, 1957 on digital technologies and the internet become crucial to understand and analyse in order to address the complexities and adapt the legal framework to the rapidly evolving digital landscape.⁶

User-generated content has surged, fostering a participatory culture where users actively contribute to the cultural fabric. The internet has provided a global stage for content creators, allowing them to reach vast audiences without the limitations of physical distribution. However, this digital revolution has also raised significant implications for copyright law, including the Indian Copyright Law, 1957. The ease of digital reproduction and the proliferation of online platforms have given rise to issues such as online piracy, unauthorized distribution, and the infringement of intellectual property rights. The Indian Copyright Law must grapple with the challenges of regulating digital content and ensuring the fair use of copyrighted materials in the digital age. Balancing the rights of creators, the interests of users, and the need for innovation in the context of digital technologies and the internet is essential for the effective protection of intellectual property rights and the promotion of a vibrant and inclusive digital creative ecosystem.⁷

The influence of digital technologies and the internet on content creation and distribution goes beyond the democratization of creativity and the challenges of copyright enforcement. These technological advancements have disrupted traditional models of content dissemination, transforming the way content is consumed and monetized. Streaming platforms, social media, and online marketplaces have emerged as dominant channels for content distribution, offering new avenues for creators to reach audiences directly. The shift towards digital formats has also facilitated the emergence of new business models, such as subscription-based services and ad-supported platforms. However, this shift has posed challenges for copyright holders in terms of revenue generation and control over their works. The internet has enabled the global sharing and blending of cultural influences, leading to cultural diversity but also concerns about cultural appropriation and the protection of traditional knowledge. Therefore, understanding the influence of digital technologies and the internet on content creation and distribution is crucial for evaluating the implications of the Indian Copyright Law, 1957. It necessitates a comprehensive analysis of the evolving landscape, business models, and cultural dynamics of the digital realm, and the formulation of strategies and policies that strike a balance between

⁶ Aniruddha Sen, *Copyright in the Digital Era: Challenges and Opportunities* (2018).

⁷ Rajeev Kumar, *Copyright in the Digital Age: A Comprehensive Guide* (2017).

protecting intellectual property rights, fostering innovation, and promoting cultural diversity in the digital age.⁸

3. **Applicability of the Copyright Act, 1957 in digital space**

The application of the Indian Copyright Law, 1957 in the digital space requires a nuanced understanding of its compatibility with emerging digital practices and the need to strike a balance between the rights of creators, the interests of users, and the broader public. The law's provisions for copyright infringement and enforcement must be effectively adapted to address the challenges posed by the digital landscape, such as online piracy, the unauthorized use of copyrighted materials, and the complexities of regulating user-generated content and social media platforms. The law's scope and interpretation in relation to digital practices, including the fair use of digital content, transformative use, and the liability of intermediaries, need to be clarified to provide guidance and certainty to content creators, users, and platforms. Considering the global nature of the internet, it is crucial to align the application of the Indian Copyright Law with international standards and agreements to foster a harmonized and consistent approach to copyright protection in the digital space. By analyzing the application of the Indian Copyright Law in the digital realm, this research aims to contribute to the ongoing discourse on copyright reform, seeking to develop a legal framework that navigates the complexities of the digital age, encourages innovation, and ensures a fair balance between the rights of creators and the evolving needs of the digital ecosystem.⁹

The impact of copyright law on digital innovation and software development is a crucial aspect to consider in the context of the Indian Copyright Law, 1957. Copyright protection plays a vital role in incentivizing innovation and creativity by granting exclusive rights to creators and developers. However, in the digital age, copyright law must strike a delicate balance between protecting these rights and fostering technological advancement. Software development relies heavily on the reuse and modification of existing code, making it essential to address copyright issues such as code replication and fair use. The Indian Copyright Law should provide clear guidelines on the protection of software programs, including issues related to open-source software and licensing. Balancing the rights of software developers and fostering innovation requires considering exceptions and limitations to copyright, allowing for interoperability and the advancement of technology. By analyzing the impact of copyright law on digital innovation

⁸ Shammad Basheer, *The Digital Copyright Divide: Perspectives on Intellectual Property in the Internet Age* (2019).

⁹ Kanchan Sahai, "Copyright Protection in the Digital Era: An Indian Perspective," *Journal of Intellectual Property Rights* 24, no. 4 (2019): 278-287.

and software development, this research aims to contribute to the ongoing discussions on copyright reform, seeking to develop a legal framework that promotes technological progress, encourages software innovation, and aligns with the needs of the digital era.¹⁰

4. Issues in Copyright laws in digital era

The impact of copyright law on digital innovation and software development extends to issues such as open-source software, collaborative coding, and the protection of intellectual property in the digital realm. Open-source software, which encourages the sharing and modification of source code, has fostered a culture of collaboration and innovation. Copyright law should provide clarity on the rights and obligations of contributors and users in open-source projects, ensuring the preservation of the open-source ethos while protecting the interests of creators. software development often involves the integration of third-party libraries, frameworks, and APIs, raising questions about the extent of copyright protection and the permissible use of such components. The Indian Copyright Law should provide clear guidelines on fair use, derivative works, and the interplay between copyright and software patents to foster innovation and enable developers to build upon existing technologies. Striking the right balance between copyright protection and the freedom to innovate in the digital realm is essential to encourage software development, facilitate technological progress, and create a conducive environment for digital innovation. By examining the impact of copyright law on digital innovation and software development, this research aims to contribute to the ongoing dialogue on copyright reform, seeking to develop a legal framework that supports and fosters digital innovation while upholding the rights of creators and the interests of society as a whole.¹¹

The implications of the Indian Copyright Law, 1957 on the internet are far-reaching and require careful consideration in light of the digital era. The law's provisions and enforcement mechanisms need to be adapted to address the unique challenges posed by the borderless and decentralized nature of the internet. Issues such as online piracy, the unauthorized use of copyrighted materials, and the fair use of digital content have become prominent concerns in the digital landscape. The Indian Copyright Law should strive to strike a balance between protecting the rights of creators and fostering the free flow of information and ideas online. the law's impact on internet intermediaries, such as online platforms and service providers, needs to be examined to ensure a fair and effective framework for copyright enforcement without

¹⁰ Vidhi Bharti, "Digital Technology and Copyright Law: Issues and Challenges," *Journal of Intellectual Property Studies* 3, no. 1 (2022): 48-61.

¹¹ Nishtha Jain and Vrinda Gupta, "Copyright Infringement in the Digital Age: An Analysis of Indian Law," *Journal of Intellectual Property Rights* 23, no. 6 (2018): 523-530.

stifling innovation and freedom of expression. The law should also consider provisions for exceptions and limitations that accommodate the evolving practices of the internet, such as transformative use, user-generated content, and the sharing of digital works for educational and research purposes. By analyzing the implications of the Indian Copyright Law on the internet, this research aims to contribute to the ongoing discussions on copyright reform, striving to develop a legal framework that aligns with the dynamic nature of the internet, protects intellectual property rights, promotes innovation, and upholds the principles of access to information and freedom of expression.¹²

5. Conclusion and Suggestions

Intellectual Property Rights (IPRs) are the exclusive rights provided to the owners of the invention. It plays a significant role in the development of the nation as it contributes largely towards the nation's economy. Copyright provides an exclusive right to the author so that his original work is not misused or exploited. It restricts the unauthorized use of the material or content that is created by the author. The idea that exists behind providing the protection to the originality serve dual purpose. Firstly, it restricts the unlawful or unauthorized usage of the original content.

- The copying of material is now easily available and the distribution of same has also become convenient. The copying, duplication, sharing and distribution of works without the prior consent and authorization of the original owner is done by the third party easily. The infringement cases are rising resulting into lowering the credibility of original content. Also, the quality of the content is reduced by such acts of duplication. In addition to this, it is difficult for the copyright holders to control the distribution and monetization of their content especially with peer-to-peer sharing and cloud storage. Copyright is very important for each and work that is done in any field. Be it a literary, dramatic, artistic or cinematograph films or sound recordings. The Indian legislation has formulated a well-established set of laws that is very effective and comprehensive. But, still the cases of copyright infringement are ample.
- The exploitation of copyright is only limited to literary contents but it has also extended its way to the user-generated content like Tik-Toks, YouTube and Instagram. People can easily create and share the content which is a copyrighted one. In this case, whether the platform is liable for the offence of copyright or the user is liable is a matter of question.

¹² Anirban Mazumdar, "Copyright Law in the Digital Age: A Comparative Study of Indian and International Perspectives," *Indian Journal of Intellectual Property Law* 10, no. 2 (2021): 199-217.

The difference between the creators and consumers is very thin in this case and copyright law struggles to adapt to the volume and nature of user-generated content.

- The fair dealing/use provision as specified in section 51 of the Copyright Act, 1957 is certainly vague and ambiguous. Many new contexts have been introduced by the digital media in this digital world such as remixes, mashups and so on. These uses are good to some extent but the doctrine of fair use is not crystal clear in this context.
- The most important issue with the copyright is the piracy taking place now a days. Piracy of music, software, movies is often done. The pirated copies/files are sold, circulated and distributed without any reasonable restriction on it. This is very wrong as it is one of the serious acts of the copyright infringement. The difficulty arises when there is a difficulty in enforcement of laws. Not only formulating certain set of laws is necessary but implementation is the key.

Bibliography

- B L Wadhera, Law Relating to Intellectual Property 269-270 (5th edn.2017).
- William Patry, The Fair Use Privilege in Copyright Law (2d ed. 2011).
- Jane C. Ginsburg, Copyright and the Global Digital Economy (2020).
- Shamnad Basheer, The Oxford India Handbook of Intellectual Property Law (2015).
- Aniruddha Sen, Copyright in the Digital Era: Challenges and Opportunities (2018).
- Rajeev Kumar, Copyright in the Digital Age: A Comprehensive Guide (2017).
- Shamnad Basheer, The Digital Copyright Divide: Perspectives on Intellectual Property in the Internet Age (2019).
- Kanchan Sahai, "Copyright Protection in the Digital Era: An Indian Perspective," Journal of Intellectual Property Rights 24, no. 4 (2019): 278-287.
- Vidhi Bharti, "Digital Technology and Copyright Law: Issues and Challenges," Journal of Intellectual Property Studies 3, no. 1 (2022): 48-61.
- Nishtha Jain and Vrinda Gupta, "Copyright Infringement in the Digital Age: An Analysis of Indian Law," Journal of Intellectual Property Rights 23, no. 6 (2018): 523-530.
- Anirban Mazumdar, "Copyright Law in the Digital Age: A Comparative Study of Indian and International Perspectives," Indian Journal of Intellectual Property Law 10, no. 2 (2021): 199-217.