



The Role of Copyright Law in the Digital Age and Its Enforcement

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Abstract

The digital age is characterised by the rise of internet, instant communication technologies, innovative software, and creative expression. While it has now become easier for any creative mind to showcase his/ her intellectual property to global audience than never before, it has also made it challenging for them to protect it. With any content being just a click away, misusers of technology find new ways to exploit someone's intellectual property without facing legal consequences. The rampant posting of content on social media has made it extremely challenging to track incidents of copyright infringement. Avant-garde technologies like GenAI challenge the existing copyright laws, making it crucial for urgent analysis and amendments in current copyright laws.

Keywords: Intellectual Property Rights, Copyright, GenAI, Artificial Intelligence, Copyright Act 1957, Piracy.

Introduction

Intellectual property rights have come a long way since the issuance of the first patent license in 1331. Specifically, the copyright laws have come a long way since the invention of the printing press in the 15th century. However, the contours of intellectual property rights are undergoing drastic development due to the advent of digitalization. The digital world created by the internet and emerging technologies is raising serious questions regarding the protection of intellectual property rights.

Copyright is a type of intellectual property right. It is a bundle of exclusive rights vested on the author or owner of any literary, dramatic, musical and artistic work, cinematographic film, and sound recording¹. Copyright is granted to the author or owner, so that he can have certain control over the intellectual property that he has created with his intellectual capacity. It provides the author or owner the power to protect the unauthorised use, reproduction, and distribution of the copyrighted work. It is crucial to understand the origin of copyrights and copyright laws so that we can comprehend its role in the digital age.

As aforementioned, the origin of copyright dates back to the time when the printing machine was invented by the German goldsmith, Johannes Gutenberg, in 1440. The printing machine facilitated

¹ Copyright Act, 1957, No. 14, Acts of Parliament, 1992 (India) 1957)

quick printing of pages; it could produce around 2000-3000 pages daily, which was much faster and easier than the traditional hand printing or hand copy method. Less cost production resulted in widespread reading among common people. Soon, the European governments realized the need to regulate the number of reproductions. Hence, they started to issue individual printers exclusive licenses to print a particular work for a specific duration.² The ease of reproduction using printing machine increased public sale of literary works. It also adversely impact the Monarch. So, King Henry VIII banned the import of books and stationery and imposed censorship under the Printers and Binder Act of 1534. Three years later, the Stationers' Company, which was originally a guild, received a royal charter which granted it the right to regulate the book trade. It granted monopoly to the publisher to print a specific work. However, the author had almost no benefit out of the publication. In 1710, for the first time, authors saw daylight in the Statute of Anne, as it stated that copyright belonged to the authors, not the publishers. It played a major role in recognizing authors' right to protect their intellectual properties.

In India, the first copyright law was introduced by the East India Company's regime in 1847, which provided copyright to the authors either for the author's lifetime with seven additional years or 42 years in total. Compulsory licensing by the government after the demise of the author was permitted. The 1847 law was replaced by the 1914 Act (an imitation of the English copyright law of 1911) in order make uniformity between Indian and English copyright laws. After independence, the Copyright Act of 1957 came into force, replacing the 1914 Act.

Since its introduction, the 1957 Act has been amended five times, that is, in 1983, 1984, 1992, 1994, and 2012. Over the years, the Indian courts have contributed a lot in rapid improvement of the Indian copyright law. However, the evolution of the digital world has given rise to several grey areas in the landscape of both Indian and overseas copyright laws.

Framework of copyright law in India

The Copyright Act of 1957, which came into effect from January 1958, is the primary law governing copyrights in India. The Copyright Rules of 1958 provides additional support to the 1957 Act. The 1957 Act attempts to achieve two key objectives: ensure that the authors, composers, artists, designers, etc. can utilize and protect their exclusive right over their creations, and to encourage new expressions of existing ideas. Section 13 of the 1957 Act provides that copyright subsists on original literary, dramatic, musical, and artist work, sound recordings, and cinematograph films.

Section 14 of the 1957 Act defines copyright as the exclusive right to do or authorise the doing of any the following activities with regards to the creation:

1. With regard to a literary, dramatic, or musical work- to reproduce materially, store electronically, issue unpublished copies to the public, publicly perform/ communicate it, make it into a cinematograph film or sound recording, translate, or adapt it;
2. With regard to a computer programme- to materially reproduce, store electronically, issue unpublished copies to the public, publically perform/ communicate, make it into a cinematograph film or sound recording, translate, adapt, or sell/ give on rental;
3. With regard to an artistic work- to reproduce, electronically store, depict in two or three dimensional work, issue unpublished issues to the public, include in any cinematograph film, or adapt it;

² Ms. Sony Kashyap, *History And Development Of Intellectual Property*, 03 IJEMASSS 193, 194-195 (2021).

4. With regard to a cinematograph film- to make a copy of the film, photography of any scene in the film, store electronically, sell/ give its copy on commercial rental, or publicly communicate it;
5. With regards to a sound recording- to synchronize it with any other sound recording, electronically store, communicate to public, or sell/ give it on commercial rental.

Under the 1957 Act, the requirements to avail copyright protection are that the work must be copyrightable, original, and expressed in any material form. Copyrights subsists on the expression of idea, rather than the idea itself. The 1957 Act does not mandate any registration to avail copyright protection. However, it provides the procedure to do so, which would act as prima facie evidence in case of any copyright dispute.

The 1957 Act also provides the term of copyright for each copyrightable work. The concept of authorship and ownership plays a vital role in the copyrights realm. While the creator of the work is the author, the owner is someone who owns the copyright. In most cases, the author is first owner of the work. In addition to the 1957 Act, the Information Technology Act of 2000 also provides certain provisions aimed to protect copyrights.

Impact of digitization on copyrights

Digitization refers to the process of transforming manual processes, data, and operations into digital formats³. It is characterised by the commercial and domestic usage of the internet and devices like computers, mobile phones, etc. Computer systems were developed for specific purposes like defence in the late 1950s. Commercial computer networks were introduced in the 1970s, however, the period between 1990 and 2006 was game-changer in the digital world. As the number of Internet Service Providers (ISPs) exploded across the globe, more than 25 million subscribers started to utilize the internet. Soon, the cost of internet services drastically reduced, making it much more feasible for a large population to access the internet. Further, with the introduction of mobile phones called 'smartphones', which already had access to the internet, social networking started to boom like never before. Social media refers to the forms of electronic communication through which users create online communities to share information, ideas, personal messages, and other content.⁴ Some of the earliest social media sites, like Six-Degrees, Friendster, and LinkedIn were introduced between 1997 and 2002. Soon, platforms like Instagram, Facebook, Twitter, Reddit, Pinterest, Snapchat, and YouTube were founded, which gave a massive rise to global connectivity and instant sharing of information. Between 2005 and 2023, the number of internet user worldwide rose from 1,023 million to 5,400 million.⁵

The increased access to the internet and technology has made both positive and negative impacts on the life of authors and copyright owners, and copyrights. On the positive side, it has opened new avenues for authors and copyright owners to distribute their work globally. Perhaps, the biggest advantage that creators have in the digital age is access to a global audience. Traditionally, the creative world was majorly controlled by studios, television networks, and publishing houses. As only a few people had the money and access to such large entities, most creators' dream of achieving worldwide audience remained just a dream. However, the social media platforms like YouTube and Instagram, and self-publishing platforms like Amazon and Spotify have empowered creators to independently reach wider audience without the relying on intermediaries. Self-publishing platforms YouTube,

³ Stefan F.Dieffenbacher *Digitization Vs Digitalization: Real-life Examples and How to Digitize*, DIGITAL LEADERSHIP, (Feb. 15, 2024) <https://digitalleadership.com/blog/digitization-vs-digitalization/>.

⁴ *Definition of SOCIAL MEDIA*, Merriam-Webster <https://www.merriam-webster.com/dictionary/social%20media>.

⁵ Ani Petrosyan, *Number of internet users worldwide 2023*, Statista (May 22, 2024), <https://www.statista.com/statistics/273018/number-of-internet-users-worldwide/>.

Spotify, Amazon, etc. allow creators to have control over a substantial amount of money that they earn on these platforms. For instance, while the author of book may, on an average, receive 5-25% royalties to publish his book traditionally (through publishing houses)⁶, authors who self-publish on Amazon KDP receive up to 70% royalties⁷. The increased access to content worldwide has also revolutionized the way content is consumed by audience. Digital distribution of copyrightable works has drastically reduced the cost that consumers have to pay to consume the content. For instance, an e-book usually costs much lesser than its paperback version, encouraging more readers to affordably read the book. Ultimately, the internet is helping copyright law to achieve its objective to promote creativity.

However, as global connectivity has become easier than never before, so have the ways to infringe copyright by reproducing, distributing, and accessing copyrighted works. It has also made the enforcement of copyright laws more challenging than never before.

Barriers to effective copyright protection in the digital age

While creators have huge advantages of in the digital age, it also makes them prone to a variety of problems. Perhaps, one of the key issues that copyright owners face in the digital age is piracy. The copyright law exclusively allows the copyright owner of the work to make copies of the same; it also grants them the exclusive right to derive pecuniary benefits from the distribution of the work. The law also empowers the copyright owner to license one or more rights to someone else in exchange for royalties. It incentivises the creator to come up with more creative works. However, the ease of sharing facilitated by the internet has given rise to more chances of piracy. Copyright piracy refers to the unauthorized reproduction, importing, or distribution, either of the whole or of a substantial part of works protected by copyright.⁸ Like any other kind of theft, piracy results in the copyright owners' loss of their legitimate dues. In the 2000s, the pirated films were largely consumed through CDs and DVDs, but now, there is a significant rise in the utilization of pirated movies through the internet.⁹ In the digital landscape, piracy happens in two ways: (i) when an individual gets the copyrighted work in an illegitimate manner, for example, downloading; and (ii) when an individual acquires the work genuinely and legally, but uses it for any unapproved purpose.¹⁰ There are different types of piracy, like, internet piracy, music piracy, book piracy, movie piracy, etc. Piracy can be easily performed in the digital age. For instance, it is quite easy to violate the rights of a dancer by capturing a video of her live dance performance and uploading it on media platforms like YouTube. It violates the dancer's performer's right under Section 38A of the Copyright Act of 1957, constituting copyright infringement under Section 51 of the 1957 Act.

Piracy is a major source of revenue loss for the entertainment industry. 'pirate websites that reproduce and/or distribute any copyrighted content without the copyright the owner's consent, make a whopping \$2 million annually in India. A report by Irdeto, a worldwide solutions supplier in the digital platform security and media and entertainment, the Indian media and entertainment industry

⁶ Scott Allan, *How Much Does it Cost to Publish a Book? [2023 Costs]*, (Feb. 12, 2024), <https://selfpublishing.com/cost-to-publish/>.

⁷ *What Are the Average Royalties for a Book in 2024: Current Rates Explained*, (June 13, 2024), <https://www.publishing.com/blog/average-royalties-for-a-book>.

⁸ Nair et al., *STUDY ON COPYRIGHT PIRACY IN INDIA*, National Productivity Council, (15 Dec., 1999) <https://copyright.gov.in/Documents/STUDY%20ON%20COPYRIGHT%20PIRACY%20IN%20INDIA.pdf>

⁹ Mishra et al., *Indian Film Industry and Copyright Piracy Issues in India: A Growing Concern*, 3 *IJIRT* (2023), 640, 641 (2023) https://ijirt.org/publishedpaper/IJIRT161381_PAPER.pdf.

¹⁰ Stuart Haber et al., *If Piracy Is the Problem, Is DRM the Answer?*, SpringerLink (Mar. 8, 2019), https://link.springer.com/chapter/10.1007/10941270_15.

loses \$2.8 billion of its annual income due to piracy¹¹. During the Covid-19 pandemic, online film piracy surged by 62%.¹² The introduction of Over The Top (OTT) platforms has, to some extent, fuelled film piracy. Users tend to download movies from OTT platforms and share it on social media platforms. Further film piracy is closely linked to music piracy as well.

The Delhi High Court, in the case of *Taj Television Limited v. Rajan Mandal*¹³ issued a “John Doe” order against cable operators to restrain the unauthorized broadcasting of the World Cup football tournament. It was significant order which set the precedent to seek John Doe order prior to the release of any big film or start of any sporting event.

Consumer behaviour is also a key factor contributing to the growth of digital piracy. The cost effectiveness of watching movies on pirate websites encourages audience to enjoy digital piracy irrespective of being aware that it is illegal.

Another rapidly growing challenge to copyright protection is not just India but worldwide is Artificial Intelligence (AI). AI is an avant-garde technology which enables a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings¹⁴. Technology has developed so much that now, a computer can intellectually perform some tasks that would otherwise be difficult for a human. From advanced chatbots like ChatGPT and Bard which can generate a thought-provoking poem to models like Midjourney and DALL-E which can generate beautiful images, AI tools are taking the creative world by storm. Generative AI or GenAI are different from normal AI models because in contrast to other AI models that perform functions like data classification, data grouping, etc., its primary function is to content generation.¹⁵ It includes image generators like Midjourney, large language models like GPT-4, voice generation tools Copilot, and audio-generation tools like VALL-E. As much as it may sound like an exciting step forward in the realms of creativity and technology, GenAI paves the way to various questions and challenges to copyright, some of which are-

- Can the GenAI-generated works avail copyright protection?
- Who owns copyright over GenAI-generated works?
- Does the unauthorized use of copyrighted works as ‘training data’ by GenAI developers amount to copyright infringement?

Without answers to these questions, the very objective of copyright, i.e. to promote creativity will be defeated. Developers of GenAI use vast digital data called “training data” to train the model to generate outputs. However, whether the storage and usage of training data, which is solely exposed to the model, amounts to copyright infringement or not is unclear. As GenAI can generate content in a few seconds at the prompt of the user, more people may depend on technology instead of their intellect to develop creative works. It may also discourage the creators who do not use GenAI. Similarly, multiple people can make an AI tool come up with the same content by giving identical inputs, making it difficult to determine copyright ownership.

¹¹ Sonal Khetarpal, *What entertainment industry should do to fight piracy*, BusinessToday (Feb. 13, 2020), <https://www.businesstoday.in/technology/news/story/what-entertainment-industry-should-do-to-fight-piracy-250023-2020-02-13>.

¹² Lata Jha, *India sees big spike in film piracy post Covid-19*, MINT (June 01, 2022), <https://www.livemint.com/news/india/india-sees-big-spike-in-film-piracy-post-covid-19-11589183182123.html>.

¹³ *Taj Television Limited v. Rajan Mandal* [2003] F.S.R. 24

¹⁴ B.J Copeland, *Artificial intelligence (AI) | Definition, Examples, Types, Applications, Companies, & Facts*, Britannica (Apr. 16, 2023), <https://www.britannica.com/technology/artificial-intelligence>.

¹⁵ Alex Friedland, *What Are Generative AI, Large Language Models, and Foundation Models?*, Center for Security and Emerging Technology (May 12, 2023), <https://cset.georgetown.edu/article/what-are-generative-ai-large-language-models-and-foundation-models/>.

The rise of user-generated content (UGC) on social media platforms is another issue that raises eyebrows as to copyright protection. UGC is any content made by people who use the products or services of a brand. In contrast to traditional advertising methods wherein brands make content to advertise themselves, UGC is created by the brand's consumer. It is considered more authentic and genuine, as the user shares personal experience of using the product or service from a brand. UGC is created by consumers, brand loyalists, or UGC creators. Thanks to the ease of usage and reach that social media platforms offer, content creation and sharing has become effortless. UGC is created by either genuine consumers who wish to share their experience with their social media community or sponsored content creators. The content includes 'selfie' images, unboxing videos, review videos, etc. Most brands in the digital age use UGC as a marketing tool because it is an effective way to acquire the trust of new consumers and make them try the product or service. In exchange for the content shared on their social media accounts, UGC creators get incentives like financial compensation or complementary products or services. However, the rise of UGC content raises the questions of copyright ownership. Under Section 17 of the Copyright Act of 1957, there are certain exceptional situations when the author or creator of a work will not be the copyright owner. When the work is created under a contract of service or in exchange for valuable consideration, the employer or the person who paid the consideration shall be the copyright owner of the work. Usually, when a UGC creator creates content for a brand, he/she is free to be creative enough to attract as many eyeballs as possible. To achieve this, they may include elements like trending background music or a movie clip (Third Party Content). Mostly, the brands do not own copyright over such elements. The unauthorised inclusion of copyrighted works in UGC often becomes a problem for both the brand as well as the creator. The owner of the Third-Party Content loses revenue due to the lack of license fees or royalties, consumer preference of UGC over the Third-Party Content, and usage in an unappreciated manner.¹⁶ Sometimes, the unauthorized use of Third-Party Content in UGC may damage the copyright owner's reputation or distort the content. The UGC containing such Third-Party Content may also be used by the brand as a part of marketing campaign outside the platform where it was originally posted. It often amounts to copyright infringement. For instance, if the creator posts a Reel on Instagram using a trending song from Instagram's song library as background music for a brand's promotional content, it would not amount to copyright infringement because Instagram has received the license from the copyright owner of the song to be used exclusively on the platform by its users. However, if the brand posts the Reel video as a Shorts video on YouTube without the permission of the song's copyright owner, it would amount to copyright infringement. Perhaps, two of the biggest copyright challenges in the UGC realm are creators' lack of copyright-related knowledge and lack of proper contracts between creators and brands.

The digital age has paved way for talented artists, performers, singers, etc. to showcase their talents and gain global popularity. Social media platforms are the easiest way to achieve worldwide reach for no cost. Many people make cover versions and remixes of songs using trending or non-trending copyrighted works and post them on their social media accounts. A cover version is a freshly performed rendition of an existing song by new artists, without changing the lyrics and tune¹⁷. As per Section 31C of the Copyright Act of 1957, any person who wishes to make a cover version of a song must give prior notice to the copyright owner of the original work, provide copies of the covers or labels, and pay the required royalties. The law also mandates the creator of the cover version to avoid

¹⁶ Urjitah Srikanth & Meghana Chandorkar, *The Big "Monster": User Generated Content In The Indian Landscape*, MONDAQ (May 11, 2022), <https://www.mondaq.com/india/copyright/1192076/the-big-monster-user-generated-content-in-the-indian-landscape>.

¹⁷ Ankit Relan, *Mashups, Cover Versions and all that Jazz under the Indian Copyright Law*, IPRMENTLAW (Apr. 14, 2018), <https://iprmentlaw.com/2018/04/14/guest-post-ankit-relan-mashups-cover-versions-and-all-that-jazz-under-the-indian-copyright-law/>.

depicting any connection to the original performers or any cinematograph film wherein the original song was incorporated. However, in real life, most people who make cover versions and upload on social media platforms do undergo the mandatory legal guidelines due to lack of awareness, unwillingness to put effort, time, and money, and the perceived low risk of consequences due to absence of any system to detect illegal cover versions.

Many cover versions makers bypass the statutory requirements to avoid inconvenience. For an amateur or aspiring artist, uploading the cover version on YouTube or Instagram is the best way to exhibit his/her talent and/ or hobby without spending any money and efforts. Further, considering the mammoth amount of content that is being posted on social media platforms every day, it is very difficult for copyright owners to constantly survey, detect, and take down infringing content. Hence, most infringing content go unnoticed or neglected by the copyright owners.

Issues like piracy, GenAI, UGC, and easy online uploads are transforming the landscape of media consumption and bringing into limelight the limitations of existing Indian copyright frameworks.

Enforcement of copyright laws: complexities in the digital age

Let us examine the challenges in enforcing copyright laws in digital India with regard to each of the issues previously discussed.

Piracy has significant impact on the copyright landscape. Several Indian laws attempt to protect against digital piracy in films, music, e-books, etc. The Copyright Act of 1957 safeguards copyright over literary, artistic, musical, and dramatic works, sound recordings and cinematograph films. Section 51 of the 1957 Act provides the circumstances under which copyright is said to be infringed, which are as follows:

- Doing anything with regard to the exclusive right conferred on the copyright owner under the Act;
- Knowingly permitting a place for any public communication amounting to copyright infringement;
- Making any infringing copies for sale/hire;
- Letting infringing copies for hire;
- Displaying or offering for sale/hire;
- Publicly exhibiting infringing copies, and
- Importing into India infringing copies.

Considering the rampant growth of piracy, the Copyright Act of 1957 was amended in 2012 to bring out measures to curb piracy. The 2012 Amendment added two significant Sections, which are-

- Section 65A- It protects the Technological Protection Measures (TPM) utilized by copyright owners to safeguard their copyright. Under the Section, anyone who circumvents the TPM used by any copyright owner can be fined and imprisoned for up to 2 years.
- Section 65B- It protects the Rights Management Information (RMI)

However, Section 65A has certain loopholes. It allows any third party to help someone to circumvent any TPM, provided, such circumvention does not pertain to doing anything prohibited under the Act. It also mandates to manage a record of the persons who seek the third party's help and its reason. It intends to legally protect the people who do not have the technical knowledge to circumvent a TPM for legitimate personal purposes. However, it also unintentionally protects the

people who do not provide professional services to legally circumvent TPM for the public. In the digital age, many people including a hacker, minor, or tech savvy person may have the technical knowledge, making it difficult to identify and exclusively protect the people who genuinely provide legal services. Further, the Section fails to establish any system to inspect the records or regulate the activities of the service providing third-party.

Another loophole in the Indian copyright law regime is the exception of fair dealing under Section 52 of the Copyright Act of 1957. It is an exception under which certain acts would not be considered as infringement. The following are some of the activities that do not amount to copyright infringement-

- With regards to any work, except computer programme, whether the work was used the purposes of-
 - o Private or personal use or research;
 - o Criticism or review, or
 - o Current affairs reporting
- With regards to computer programme, making copies or adaptation by lawful possessor of a copy of the computer programme to-
 - o Use it for the legitimate purpose;
 - o Make back-up copies as security against unprecedented loss
- Transient or incidental storage, etc.

Fair dealing is a defence to copyright infringement in legitimate circumstances. However, there are plenty of instances of people uploading the video of an entire film or web series on YouTube after adding just a few minutes of review on it. Many people also put disclaimers stating that such an act is protected under law. They do it in an attempt to claim defence under Section 52 and bypass the original intention of the provision. However, irrespective of the widespread misuse of fair dealing provision by many people, the Indian courts have often shed light on this loophole by giving certain factors to decide whether or not an act can avail the defence of fair dealing. In the case of *Civic Chandran v. Ammini Amma*¹⁸, the factors given were: (i) volume of the copyrighted content taken and its quality, (ii) purpose for which the work was taken, (iii) the likelihood of competition between two works. Ultimately, whether or not an act can avail the defence of fair dealing varies from case to case. However, in the digital age, due to the vast amount of content posted on the internet daily, it is very difficult to track down infringing content.

GenAI poses more complexities to enforcement of copyright laws. Whether the storage and usage of training data, which is solely exposed to the model, amounts to copyright infringement or not is a question to be answered. GenAI models use the training data as an idea and builds on the idea to give different output or “expression”. As held in several cases including *RG. Anand v. Delux Films*¹⁹ and *Barbara Taylor Bradford v. Sahara Media*²⁰, copyright law solely protects the expressions of ideas, not idea itself. From another perspective, the storage of training data in the AI models may be considered as an infringement under Section 14 read with Section 51 of the Copyright Act of 1957. However, Section 52(1)(b) and (c) expressly exempt transient or incidental storage of a work purely in the technical process of electronic transmission, and transient or incidental storage for the purpose of providing

¹⁸ *Civic Chandran v. Ammini Amma* (1996) 16 PTC 329 (Ker.) (India)

¹⁹ *RG. Anand v. Delux Films*, [1978] 4 SCC 118

²⁰ *Barbara Taylor Bradford v. Sahara Media*, [2003] SCC OnLine Cal 323

electronic link or access where the same is not expressly prohibited or infringing.²¹ This raises the question of whether or not storage of training data can be considered as transient or incidental to providing access to GenAI model to extract output.²² In the case of *MySpace Inc. v. Super Cassettes Industries Ltd.*²³, the court opined the meaning of transient to be temporary, and incidental to be subordinate to something of greater importance. It was deemed to include “cached data” or any data generated automatically to improve the legitimate function. Nevertheless, the courts are yet to answer the question as to whether the storage of such data solely for training AI models is permissible or not.

Perhaps, one of the biggest questions that still needs to be answered is who has the copyright ownership over the out generated by a GenAI model as a result of the prompts or commands given by a user. In 2022, in the United States, Steven Thaler filed application to register copyright over a 2-D image named *A Recent Entrance to Paradise* that he generated using an GenAI model. The US Copyright Office refused to grant copyright, as it did not qualify as human authorship.²⁴ Contrastingly, in 2023, the US Copyright Office allowed the registration of a few elements added by Kristina Kashtanova to an image she generated on MidJourney AI tool using numerous prompts. She created the initial images using hundreds of prompts on the GenAI tool, edited it by adding new elements using Adobe Photoshop, and arranged them into a comic book titled *Zarya of the Dawn*. While the Copyright Office granted registration exclusively for the work covering the original authorship contributed by Kristina, it denied protection to the AI-generated images by stating that the modifications made by her were too trivial to qualify as original authorship.²⁵ Due to the human authorship standard, under US law, an AI-generated work is either: (i) a public domain work from the moment of its creation, or (ii) a derivative work of the training data.²⁶ In India, however, the position is still unclear.

Further, the legal framework in India governing AI and personality rights is still in its nascent stage. There are cases in which the Indian courts have restrained the unauthorized use of celebrities’ voices by AI models. For instance, in the case of *Arijit Singh v. Codile Ventures LLP & Ors.*²⁷, AI platforms using singer Arijit Singh’s voice to train the model, replicate his voice, etc. were restrained, it was opined that it violated the singer’s moral rights under Section 38B of the 1957 Act. Similar contentions and orders were seen in cases like *Jackie Shroff v. The Peppy Store*²⁸ and *Anil Kapoor v. Simply Life and Ors*²⁹.

Concluding remarks

The digital world has opened up a myriad of opportunities for creative minds to cost-effectively and easily showcase their talents and hobbies. Connecting with global audience is easier now than never before. However, the digital era has also opened new avenues for copyright infringement in the form of digital piracy, unregulated UGC, and AI-related complexities. These are multi-faceted issues that need to be tackled by updating current legal framework, creating public

²¹ Akshat Agrawal, *Indian Copyright Law and Generative AI- Part 1*, IPRMENTLAW (May 4, 2024), <https://iprmentlaw.com/2024/05/04/indian-copyright-law-and-generative-ai-part-1/>.

²² Ibid

²³ *MySpace Inc. v. Super Cassettes Industries Ltd* [2016] SCC OnLine De 6382

²⁴ *Stephen Thaler v. Shira Perlmutter, et al*, Case 1:22-cv-01564-BAH (D.D.C., Aug. 18, 2023)

²⁵ *Zarya of the Dawn Letter*, United States Copyright Office (Feb. 21, 2023),

<https://www.copyright.gov/docs/zarya-of-the-dawn.pdf>.

²⁶ Joe McKendrick, *Who Ultimately Owns Content Generated By ChatGPT And Other AI Platforms?*, (Feb. 22, 2023),

<https://www.forbes.com/sites/joemckendrick/2022/12/21/who-ultimately-owns-content-generated-by-chatgpt-and-other-ai-platforms/>.

²⁷ *Arijit Singh v. Codible Ventures LLP*, Com IPR Suit (L) No.23443 of 2024

²⁸ *Jaikishan Kakubhai Saraf alias Jackie Shroff v. The Peppy Store*, I.A. 10961/2024 IN CS(COMM) 389/2024.

²⁹ *Anil Kapoor v. Simply Life India*, 2023 SCC OnLine Del 6914.

awareness, and introducing avant-garde digital copyright protection tools like Digital Rights Management (DRM).

DRM are a set of control technologies which restrict the usage of copyright work.³⁰ It uses a combination of tools and technologies like encryption, digital watermarking, access controls, audit trails, etc. DRM also supports many monetization models like pay-per-view, rental, subscriptions, etc. Using a DRM application, copyright owners can encrypt copyrighted content and have full access to the same using description keys. Considering potential copyright bottlenecks, GenAI developers need to be prepared and get relevant permissions while using training data. They also need to be transparent about their AI training policies. For instance, Meta, which is the parent company of many social media platforms like Instagram, publicly states that they use the information that is publicly available online, licensed information, and shared on the platform's products and services.³¹ Blockchain is another technology which can help in protecting copyright. It is a type of distribution ledger that can be used to track ownership and usage of any digital content. It can help potential users to identify the work and determine the scope of protection.³² There is no doubt in the potential growth of GenAI in the upcoming years. So, there is an urgent need to bring about legislations to clarify the questions relating to copyright ownership and GenAI. Further, legislative amendments are also required to clarify the scope of fair dealing and close the loopholes. Perhaps, one of the most important tasks is to educate public regarding copyright laws and the legal implications upon its violation.

³⁰ Alankrita Mathur, *A Reflection upon Digital Copyright Laws in India*, Volume 25 J. OF IP. 5, 8 (2020).

<https://articles.manupatra.com/article-details/A-Reflection-upon-the-Digital-Copyright-Laws-in-India>.

³¹ *How Meta uses information for generative AI models*, Meta, <https://privacycenter.instagram.com/privacy/genai/>.

³² Sebastian Pech, *Copyright Unchained: How Blockchain Technology Can Change The Administration And Distribution Of Copyright Protected Works*, 18 Nw. J. Tech. & Intell. PROP. 1 (2020).

<https://scholarlycommons.law.northwestern.edu/njtip/vol18/iss1/1>