

Preserving Copyright laws and Economy against the challenges of Deepfakes technology: Navigating the strategies in the Quest for a Legal Regulatory Landscape

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Abstract

The emergence of Artificial Intelligence such as deepfake has made it quite easier to edit, modify, alter or re-create and individual's persona in the digital space with remarkable accuracy, copied their images, voice without any authorization. Indeed, the use of generative AI assists in the creation of deep fakes music, images, content, videos, raised the questions on the ethical and legal implication of the evolving technology on the intellectual property rights of a person. It is hampering the innovations, the creator's originality, economy of the world and the actual usage of the technology. The relation between the developed and developing nations intersecting the economics, technology and copyright. This article explores the current legal framework available to copyright holders to guard against deepfakes, as well as proactive strategies creations can employ moving forward. We will analyse the legislative response, right of publicity and highlight practical measures like monitoring for infringement and utilizing the exist framework. The novelty of this paper is to examine from the economy perspective of the intellectual property laws and technology. This area is unexplored where the intellectual intersecting with the economy of the country with worldwide technology. The originality of the paper will focus on the adequacy of prospective laws, challenges to copyright work with bringing new reforms, fair use and economy of the country.

Key words: AI, Deepfake, copyright, Technology, Economics, Intellectual Property Laws

Introduction

Law and Technology both are developing, both are inseparable. In current era, technology is developing very fast and often humans need to be protected from its uncontrollable use. This is where law emerges to provide oversight and protection against violation created by technology (IJCC 2023). One of such technologies that violate legislation is deep fake technology. As deepfake technology evolves, it challenges the copyright laws worldwide. Deepfake, a form of artificial intelligence has emerged as a powerful tool for creating hyper-realistic, yet manipulated images and audio-video. Indeed, these digital forgeries are rapidly increasing, making it difficult for the average viewer to distinguish between authentic and fabricated content. While deepfake has potential benefits in media and entertainment industry, but its misuses pose significant risks to society, ranging from personal theft to the economy and governance of the country.

Deepfake disfiguring the Med tech, entertainment, education, marketing, e-commerce industry¹. AI has quickly become an increasing trend that is transforming many aspects of society, including how information is generated, communicated, and consumed. As AI technologies such as deep learning progress, new approaches for creating incredibly realistic fake media, known as deepfakes, have arisen. There are several opportunities for technological growth and problems that should be carefully considered, particularly when it comes to Intellectual Property Rights (IPR) and the possible responsibilities of creators. Deepfake is beneficial, but it goes too far when it comes to trademark and copyright regulations and performers' rights by utilizing AI systems to imitate human identities and artistic works on their own. Deepfake, a kind of Artificial Intelligence employing Generative Adversarial Networks (GANs), has evolved as a system capable of producing realistic digital impersonations and manipulating representations Deepfake, a type of artificial intelligence that uses Generative Adversarial Networks (GANs), has developed into a system that can manipulate representations and create lifelike digital impersonations.

Background

Copyright and Artificial Intelligence

Sometimes the content produced by generative AI models closely resembles or mimics copyrighted works. Users showed that generative AI could produce almost identical copies of news article content, movie visuals, and copyrighted

¹ Daniel Hendrawan, Christian Andersen et al. Juridical Review of Copyright Infringement in the Use of Deepfakes in the Creative Industry in Indonesia, International Journal of Cyber Criminology, Vol 17 Issue 1 January – June 2023

characters². Since these outputs modify the originals to some degree, they probably violate the reproduction rights and the right to create derivative works. Depending on the situation, they can also violate the rights to public performance and display³. Copyrighted works are used in different ways during the development and deployment of generative AI models, a transformative work of copyright originator. In assessing transformative is it ‘whether the new work merely ‘supersedes the objects’ of the original creation, or instead add something new, with a further purpose or different character, meaning or message⁴. Such a use is less likely to substitute for the original and to advance the purpose of copyright⁵. In *Warhol*, the Supreme Court clarified the concept of trans formativeness, (US Copyright Office of Registrar), the court explained that while adding new expression can be relevant to evaluating whether a use has a different purpose and character, it does not necessarily make the use transformative⁶. Ultimately it should serve an original work rather than derivative work. Further the court explained that a use that has a distinct purpose is justified as goal of copyright, to promote the progress of science and arts, without diminishing the incentive to create⁷. Such justification may be found when copying ‘is reasonably necessary to achieve the user’s new purpose⁸. For example, where a work is targeted for parody, criticism or commentary, there is a need to use that particular work to effectively accomplish that purpose⁹. The *Warhol* court further emphasized that both transformative and justification are matters of degree¹⁰. The factor depends on whether and to what extent’ the use at issue has a purpose or character different from the original¹¹. Sometimes, transformative often leads to a finding of fair use¹², not every transformative

² Matthew Sag, Copyright Safety for Generative AI, 61 HOUS. L. REV. 295, 327–37 (2023) (describing the “Snoopy problem”); Gary Marcus & Reid Southern, Generative AI Has a Visual Plagiarism Problem, IEEE SPECTRUM (Jan. 6, 2024),

<https://spectrum.ieee.org/midjourney-copyright>

³ Qinhong Yang et al., HQ-50K: A Large-scale, High-quality Dataset for Image Restoration at 1, ARXIV (June 8, 2023), <https://arxiv.org/abs/2306.05390>.

⁴ Campbell Jud, 510 U.S. at 579. The concept of transformativeness was described as follows by Judge Pierre Leval in his influential article, Toward a Fair Use Standard, 103 HARV. L. REV. 1105, 1111 (1990) (“I believe the answer to the question of justification turns primarily on whether, and to what extent, the challenged use is transformative. The use must be productive and must employ the quoted matter in a different manner or for a different purpose from the original. A quotation of copyrighted material that merely repackages or republishes the original is unlikely to pass the test; in Justice Story’s words, it would merely ‘supersede the objects’ of the original. If, on the other hand, the secondary use adds value to the original -- if the quoted matter is used as raw material, transformed in the creation of new information, new aesthetics, new insights and understandings -- this is the very type of activity that the fair use doctrine intends to protect for the enrichment of society.”).

⁵ Campbell, 510 U.S. at 579. Most of the paradigmatic examples listed in the preamble of section 107 (“criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research”) reflect the types of purposes that courts have found to be transformative. *Warhol*, 598 U.S. at 528 (quoting 17 U.S.C. § 107; Campbell, 510 U.S. at 577–78).

⁶ *Andy Warhol Foundation for the Visual Arts, Inc. V. Goldsmith Et Al. Certiorari to the United States Court of Appeals for the second circuit no. 21–869. 2023* (“Although new expression may be relevant to whether a copying use has a sufficiently distinct purpose or character, it is not, without more, dispositive of the first factor.”); *id.* at 544–45 (“[T]he meaning of a secondary work, as reasonably can be perceived, should be considered to the extent necessary to determine whether the purpose of the use is distinct from the original, for instance, because the use comments on, criticizes, or provides otherwise unavailable information about the original. (citation omitted))

⁷ Pierre N. Leval, Toward a Fair Use Standard, 103 HARV. L. REV. 1105, 1111 (1990) (“Factor One’s direction that we ‘consider, the purpose and character of the use’ raises the question of justification. Does the use fulfill the objective of copyright law to stimulate creativity for public illumination?”)

⁸ *Warhol*, 598 U.S. at 532

⁹ *Id.* at 539–40 (2023); Campbell, 510 U.S. at 588 (“When parody takes aim at a particular original work, the parody must be able to ‘conjure up’ at least enough of that original to make the object of its critical wit recognizable.”). Even where the use and the original share the same or highly similar purposes, the first factor may favor fair use where the use is justified. See *Warhol*, 598 U.S. at 532 (“An independent justification . . . is particularly relevant to assessing fair use where an original work and copying use share the same or highly similar purposes, or where wide dissemination of a secondary work would otherwise run the risk of substitution for the original or licensed derivatives of it.”); *Sony Comput. Ent., Inc. v. Connectix Corp.*, 203 F.3d 596, 606–07 (9th Cir. 2000) (holding a use to be transformative “despite the similarities in function and screen output” between the use and the original work because the user’s “product created a new platform,” which was an “innovation [that] affords opportunities for game play in new environments”).

¹⁰ *Ibid*

¹¹ *Warhol*, 598 U.S. at 528 (quoting Campbell, 510 U.S. at 579). See *id.* at 532 (“Once again, the question of justification is one of degree.”); Leval, *supra* note 214, at 1111 (“[I]t is not sufficient simply to conclude whether or not justification exists. The question remains how powerful, or persuasive, is the justification, because the court must weigh them strength of the secondary user’s justification against factors favoring the copyright owner.”).

use is a fair one¹³.

Copyright and Digital Replica

'Digital replica' refers to an image, music, animated films, videos, audio recording that has been digitally created or manipulated too realistically but deceptively misleading depict an individual. A digital replica and deepfakes are used here interchangeably¹⁴, as it may be authorized and unauthorised and can be produced by any type of digital technology and AI. Deepfakes may have both beneficial and harmful uses. It serves as an accessibility tool for people with disabilities¹⁵, enables performances¹⁶ by deceased or non-touring artists, support creative work, allow individual to license¹⁷ and be compensated for the use of their voice, images and likeness¹⁸. One of the examples, voice of celebrities Mr. Anil Kapoor and Legendary Actor Mr. Amitabh Bachchan has misused by using of Deepfake in India. In India, the Delhi High Court extended protections against unauthorised use of their likenesses to actor Amitabh Bachchan in 2022 and Anil Kapoor in 2023¹⁹. The Danish Bill too extends similar protections to ordinary citizen. There are other instances which is not only confined in India but in developed nations such as USA, European Countries as

¹² Barton Beebe, An Empirical Study of U.S. Copyright Fair Use Opinions, 1978–2005, 156 UNIV. PA. L. REV. 549, 605(2008), https://scholarship.law.upenn.edu/penn_law_review/vol156/iss3/1 (finding that of fair use cases decided between 1978 and 2005, “each of the 13 circuit court opinions and 27 of the 29 district court opinions that found the defendant's use to be transformative also found it to be a fair use-and one of the two district court outliers was reversed on appeal”)

¹³ See Fox News Network, LLC v. TVEyes, Inc., 883 F.3d 169, 177 (2d Cir. 2018) (finding that TVEyes service was “at least somewhat transformative” but that the balance of factors opposed fair use because “[a]t bottom, TVEyes is unlawfully profiting off the work of others by commercially re-distributing all of that work that a viewer wishes to use, without payment or license”)

¹⁴ Although the term “deepfake” is often associated with unauthorized or deceptive uses, especially in explicit imagery, see *infra* notes 22–23, some dictionary definitions are broader. See deepfake, MERRIAM-WEBSTER DICTIONARY, <https://www.merriam-webster.com/dictionary/deepfake> (“an image or recording that has been convincingly altered and manipulated to misrepresent someone as doing or saying something that was not actually done or said”) (last updated July 20, 2025); deepfake, CAMBRIDGE DICTIONARY, <https://dictionary.cambridge.org/us/dictionary/english/deepfake> (“a video or sound recording that replaces someone's face or voice with that of someone else, in a way that appears real”). In popular media too, the term has been used to describe authorized uses as well as malicious ones. See Nilesh Christopher & Varsha Bansal, Indian Voters Are Being Bombarded with Millions of Deepfakes. Political Candidates Approve, WIRED (May 21 2025), <https://www.wired.com/story/indian-elections-ai-deepfakes/> (“Politicians are using audio and video deepfakes of themselves to reach voters—who may have no idea they’ve been talking to a clone.”)

¹⁵ E.g., Press Release, Office of Congresswoman Jennifer Wexton, Wexton Shares Video Debuting New AI Voice Model (July 10, 2024), <https://wexton.house.gov/news/documentsingle.aspx?DocumentID=952> (“Today, Congresswoman Jennifer Wexton (D-VA) shared a video debuting a new Artificial Intelligence-generated model of her voice as it was before being impacted by her Progressive Supranuclear Palsy (PSP) condition.”)

¹⁶ Universal Music Group (“UMG”), Comments Submitted in Response to U.S. Copyright Office’s Aug. 30, 2023, Notice of Inquiry at 5–6 (Oct. 30, 2023) (“UMG Initial Comments”); see also Elias Leight, Will AI Be Used to Raise Musicians From the Dead?, BILLBOARD (Nov. 29, 2023), <https://www.billboard.com/pro/ai-bring-back-dead-artists-musicians-estate-managers/>.

¹⁷ see, e.g., Letter from Motion Picture Association (“MPA”), Summary of Ex Parte Meeting on May 13, 2024 Regarding

the Office’s AI Study, to U.S. Copyright Office 2 (May 20, 2024) (“MPA highlighted the importance of this issue to our

members, given the ubiquity of depiction of individuals in docudramas, biopics, and similar works. And we argued that use of digital-replica technology is simply an evolution of the type of technology our members have long used to

make actors more closely resemble the people they portray, including make-up and prosthetics.”

¹⁸ see, e.g., American Association of Independent Music (“A2IM”) et al., Reply Comments Submitted in Response to

U.S. Copyright Office’s Aug. 30, 2023, Notice of Inquiry at 1–2 (Dec. 6, 2023) (“A2IM-Recording Academy-RIAA Joint

Reply Comments”); William Morris Endeavor Entertainment, LLC (“WME”), Comments Submitted in Response to

U.S. Copyright Office’s Aug. 30, 2023, Notice of Inquiry at 2 (Oct. 30, 2023) (“WME Initial Comments”)

¹⁹ The Evolution of Deepfake Laws: Adapting Copyright and Data Privacy Regulations to Emerging Threats 1Priyanka Mangaraj, 2Malini Venugopal, The Evolution of Deepfake Laws: Adapting Copyright and Data Privacy Regulations to Emerging Threats, March 2024 IJSDR, Volume 9 Issue 3

well. Another noted example musician Randy Travis, who has limited speech function since suffering from a stroke, was able to use generative AI to release his first songs in over a decade²⁰. Another potential arose by harming unauthorised deepfakes across the creative sector, the surge of voice clones and image generators has stoked fears that performers and other artists are losing work and income²¹. There are situations where voice actors have been replaced by AI replicas. AI generated replicas featured the new song the voices of Drake and the Weeknd drew over fifteen million views on social media and six hundred thousand²² listens on Spotify. Yet neither artist was aware of the song before its release, because the vocals were unauthorised. As a new proposer by Legendary musician and singer Mr. A.R.Rahman, announced his collaboration with Open AI CEO Mr. Sam Altman for his AI powered project 'Secret Mountain'²³, whose aim is to build a virtual global band that brings singers and mentors to one platform for their futuristic project on Copyright laws. Here the triangle of law, economy and technology an original work of the author which is intersecting a society with each one's effect. On social media and other internet platform in digital technology era, their volume has skyrocketed²⁴.

Deepfakes have been exploited for malicious purposes, like fraud, identity theft. In political arena, deepfakes have been used to create false media depicting political candidates saying or doing things they never did, which can spread disinformation during elections and erode public trust in democratic processes. For example, in India 2024 elections, AI generated deepfakes were actively used by political campaigns to clone candidates' voices and create holographic avatars, to further reach to the voters. Moreover, there was a lot of AI-driven misinformation used, particularly on platforms like what's app and you tube, where low quality deepfakes spread quickly with a potential to incite violence and riots. In other similar case, in Moldova, deepfake videos falsely showed the country's President endorsing a pro Putin party during local elections, while in Taiwan, China state backed actors used AI generated audio to falsely claim that a prominent politician had endorsed a rival candidate. It has been challenging that it is rare to find a country with elections untouched by the misuse of deepfake technology, which poses significant challenges to electoral integrity worldwide. Deepfake has become a major threat to financial systems as well which is shaking the entire economy of the country, in the way like cybercriminals have used deepfake audio and video to trick employees into authorising fraudulent.

Economic Factors

In Indian economy the ICRIER suggested that the 'growth coefficient suggest that on average a unit increase in AI intensity, measured as the ratio of AI to total sales, can return USD 67.25 billion or 2.5% GDP²⁵ in India. The 161st Indian parliamentary report²⁶ acknowledges a significantly contributions of AI and its application to the generation of revenue and the overall economic health of the republic of India, coupled with its demonstrably positive impact on the nation's technological innovation capabilities, require to control and secure expansion of AI across the world. There is an expansion of investment will lead to an approximate 1.3 times enhance in AI intensity translating into spillover benefits of USD 85.77 billion for the Indian economy (3.2%) of GDP). It has also been acknowledged in this report that AI is capable of adding USD 957 billion²⁷ by 2035 to the Indian Economy. The giant IT sectors like Meta, Google, Open AI already have a competitive advantage over the MSMEs an innovation and R&D in the field of artificial intelligence. Easy access of data to train the AI model would help these companies to keep the production cost low and this would put the MSMEs in a disadvantageous position. AI based technologies bringing a new wave at the legal point

²⁰ Dylan Smith, Randy Travis, Harnesses AI to Release His 'First New Music in More Than a Decade' – Another Song Is

Already Being Created, DIGIT. MUSIC NEWS (May 6, 2024),

<https://www.digitalmusicnews.com/2024/05/06/randy-travis-new-song/>.

²¹ Shira Perlmutter, Part-I, Copyright and Artificial Intelligence, US Copyright Registrar Office, page no. 3, July 2024 visited on 28th July, 2025

²² Colin Stutz, The Fake Drake AI Song Earned Millions of Streams — But Will Anyone Get Paid?, BILLBOARD (Apr. 19, 2023),

<https://www.billboard.com/pro/fake-drake-ai-song-earned-millions-streams-get-paid/>.

²³ 25th July, 2025. <https://www.livemint.com/news/ar-rahman-meets-sam-altman-discusses-ai-project-secret-mountain-empower-uplift-indian-minds-11753412368408.html>

²⁴ Don Philmlee, Practice Innovations: Seeing is no longer believing — the rise of deepfakes, THOMSON REUTERS (July 18,

2023), <https://www.thomsonreuters.com/en-us/posts/technology/practice-innovations-deepfakes/>.

²⁵ Kailash Chauhan, Generative AI, Text & Data Mining and the Fair Dealing Doctrine: Examining, the New Problem with the Old Regime, Journal of IPR, 2025, Vol. 77-85, DOI 10.56042

the New Problem with the Old Regime, Journal of IPR, Vol. 30 January 2025, OO 77-85, DOI 10.56042

²⁶ V.Vijayasai Reddy, Review of Intellectual Property Rights Regime in India, 2021

²⁷ Kailash Chauhan, Generative AI, Text & Data Mining and the Fair Dealing Doctrine: Examining

the New Problem with the Old Regime, Journal of IPR, Vol. 30 January 2025, OO 77-85, DOI 10.56042

and on the economy front. MNCs are moving towards developing to developed countries for services that are becoming digitally tradeable and are highly labour intensive especially the medium to high skilled labour services. AI and digital technologies are helping the MNCs to localize their firms from advanced economies to countries with cheap skilled labour. In such a situation it is important to develop policies for the sustainability of the economy. AI language models trained on low quality data could harm the online commons. More data means more precise recommendations by the AI output. The digital replica or false light invasion of privacy leads to economic loss to the creator as well as to the country. Unauthorised commercial use of copyright laws by Deepfake a heavy loss of the GDP of the country a harm to the treasure of the governance. The newer forms of commercial exploitation facilitated by digital platforms such as influencer marketing and brand partnership are high on social media²⁸.

The creative sector is protected by law in terms of both economic rights and moral rights, allowing its participants to grow appropriately. It is believed that a creativity is the outcome of a person's many mental processes, which takes time and effort. Thus, in accordance with the notion of appreciation, the author of a work needs to be protected and given credit for the outcome of his search for it. The purpose of the protection is to prevent someone else from using someone else's creation arbitrarily without that person's consent²⁹. Studies that examine violations brought on by the usage of deepfake technology are scarce, especially when they fall under the category of cybercrimes. Very few studies have looked at the legal violations that occur when deepfakes infringe against the intellectual property rights of individual artists, as well as potential copyright infringement and other acts that may be classified as cybercrimes in practice. Deepfakes can result in cybercrimes, such as the dissemination of false information or pornography, in addition to infringements on intellectual property and heavy loss of the economic rights of the creators. This study assumes that a creation has the right to use copyright from deepfake, preventing infringement. This study questions whether deepfakes created by AI technology, which can perform certain tasks without human intervention, contain legally valid and copyright-eligible elements. This study explores civil liability for creators who believe their creation has been violated by a deepfake that imitates it. Deepfake technologies have gained attention for their usage in celebrity pornography, fake news, pranks, and financial schemes. Congress.gov (2019) encourages individuals, organizations, industries, and governments to monitor and control their use. According to a study conducted at the University of Southern California, Deepfake technology used for harmful purposes, such as fake news, can be even more destructive if awareness is not communicated (Mosley, 2019).

Table 1. Copyrights related to economic rights

Category	Items
Copyrights related to economic rights	i. publication of Works; ii. Reproduction of Works in all its forms; iii. translation of Works; iv. adapting, arranging, transforming the Works; v. Distribution of Works or copies thereof; vi. performances of Creation; vii. Announcement of Works; viii. Creative Communications; and ix. creation rental

This table 1 shows that every person is prohibited by copyright laws from making reproduction, distribution, commercial use, imitation, unauthorised use, commercial advertisement without the written consent of the creator/originator or his heirs. All these works are related to their economic rights.

²⁸ Copyright and Artificial Intelligence, US Copyright Registrar Office
²⁹ Generative AI, Text & Data Mining and the Fair Dealing Doctrine: Examining the New Problem with the Old Regime. Journal of IPR,

Literature Review

AI technology continues to develop, implemented in many forms. One of the forms is Deepfake. Created a deepfake can be done by various methods. One of the methods is Deep Neural Networks (DNN) method, which sets of algorithms designed to recognize patterns and process data in a complex way. As AI is evolving in every industry, the existence of Artificial Intelligence is a simulation of the intelligence possessed by humans which is modelled in machines and programmed to think like humans. AI can do certain jobs itself without human interventions. AI is capable of thinking rationally, acting rationally (Atsar & Sutrisno 2022). AI has penetrated the creative industries such as advertising, novel writing and painting. Expert staff to the Minister for reform and regulation of the Ministry of Tourism and creative economy (Kemenparekraf), Ari Juliano Gema exemplifies several artworks that utilize AI such as “The Next Rembrandt” an advertising project ordered by ING Bank to J Walter Thompson, an advertising agency in 2016.

(The U.S. Copyright Office, 2025) addressed the legal and policy issues related to AI and copyright. The use of digital technology to realistically replicate an individual's voice or appearance, training model and licensing consideration, allocation of liability and economy. AI is still in a nascent stage, due to lack of regulatory measures in copyright laws it is difficult to judge that how copyright laws will respond to AI generated work is not easy. It can be seen that legal framework governing copyright laws will undergo significant transformation to cover these issues. (Journal of IPR, 2024). The contemporary study of AI and copyright are originated by the technological revolution. Despite the considerable advantages of the current technology system, significant reliance on the digital technology adversely affecting the economic, moral and performer's rights of the individual. The system has bolstered the technology, facing criticism from lawmakers, human author and performers.

The case study of US, India's current cases on deepfakes, Denmark are really concerned for the copyright violations. A report of the register of copyright by US copyright office has submitted its report on the copyright and Artificial Intelligence relations and implications in (Shira Perlmutter, 2025). Addressing the issues of copyrightability of works created using generative AI, replica on individual's voice or appearance, training of AI models on copyrighted work, licensing considerations and allocation of liability. The dilemma to the right to read is the right to mine doctrine on Artificial Intelligence and copyright discussed on protection of protected creation, legal applicability on artificial intelligence by developed nations (Jose Maria Anguiano, 2023). The study of Indonesia in the use of deepfakes in creative industry, a juridical review of copyright infringement, violation of copyright laws, creating a criminal acts, expanding the burden of courts, soaring litigation, cybercrimes are intervening the human life by technological developments (K.Jaishanker, 2023).

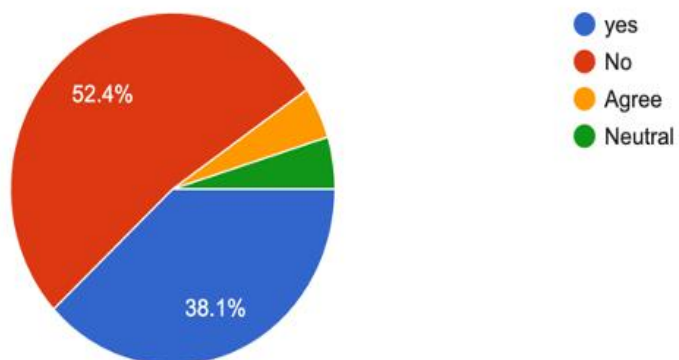
Methodology

This study done on real and actual cases on deepfake and copyright infringement. Absence of legislation, emphasize on the importance to bring reforms in existing laws. This focus on the relationship of technology, economy and intellectual laws. This study is a result of identification and exploration of factors of copyright infringement in the use of deepfakes in the creative industry in India, United States and Denmark, having found those factors through a self-administrated survey of legal documents, Scopus indexed research papers, report of US laws, articles, copyright laws, lawsuit and judgments (Disemadi, 2022). This research paper is focussing on performer's right, violation of their copyright through technology i.e. deepfakes, affecting their legal and economic rights. The framework of technology, economy and intellectual rights all are primary concern of any country and for the development of the country, the key elements for their survival, a decidendi for the author to do research on this topic. This study is mixed of qualitative and quantitative in nature, and the data was analysed through a content analysis using a questionnaire and case study-based approach. The originality, novel and high quality of research covering the wide range impact of deepfake on copyright laws on social media.

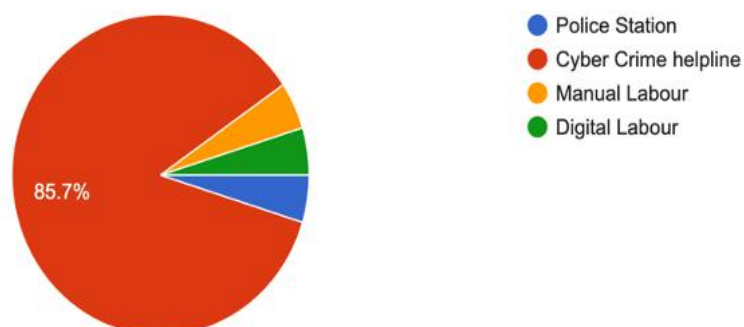
The concept of intellectual delineates the primary sources, references and citizens that motivated the author to create and establish the discipline emphasised in the current research. The researcher took a more critical approach to determine which categories were vulnerable to deepfake technology or where copyright infringements were more frequent. The study of India, developed nations and Denmark bring to reforms in existing copyright laws related to economic rights, moral rights, arts, literature, work of science and copyright protection of works that are valid for lifetime of the author plus of 60 years after his life, in India. The approach in the questionnaire circulated amongst legal, literature experts and social media influencer. The conceptual framework focuses on the key elements and their interconnection within a specific field of study. The structure of this methodology facilitated the mapping and analysis with the digital technology and key words of this research.

Result Analysis and Discussion

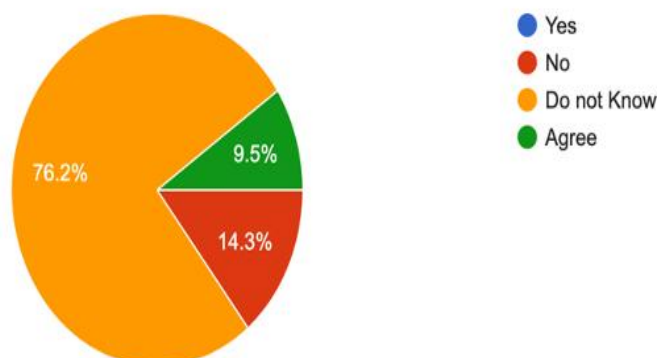
Are you aware about any law which protects the victim from this offence.



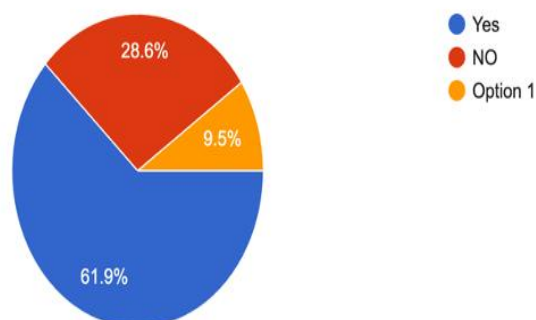
To whom you will file a complaint against this issue.



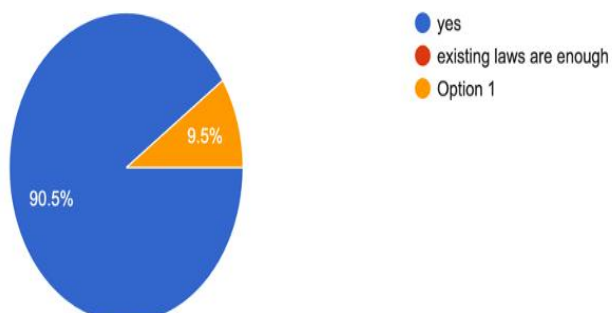
is it easy to report cross-boarder jurisdiction matters.



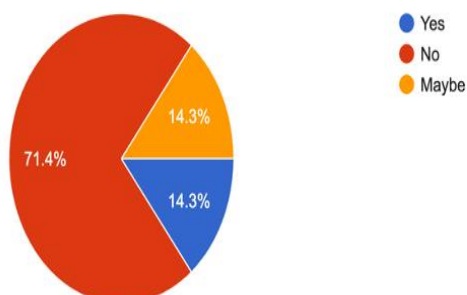
Is Artificial Intelligence destroying the copyright laws and economy of the country.



Do you think that relevant laws should be made for the protection of originator's right from deepfakes.



Have you been ever victim of deepfakes such as pirated images, videos, research papers, articles, without your consent.



In the context of this study, it has been found that the 30 percent influencers are victim of deepfake technology, they have reported the matter to the cyber-crime cell as digital invasion of their rights, but not went for economic loss. Government is hardly taking any initiative to prevent the crime, originated from this technology. The finalized dataset of literature was analysed to highlight the theoretical and conceptual foundation of research on real authors. On People's report they report the matter to cyber-crime but the issues related to copyright infringement goes unheard. Accession to the information and technology has changed the behaviour of society and global civilization. Developments in technology made the world borderless and significant social changes take place so quickly (Ramli, 2004). Digital technology connects each other throughout the world by having the ability to cross national borders easily in this digital era. The geographical conditions and restrictions are not hindered now. Digital transformation through deepfake one of the element of AI, concentrating here on one part of the law i.e. copyright in audio, images, video, content, towards the intersectional evolution of this field with advance technologies. Various levels of society, ranging from entrepreneurs, artists, singers to ordinary persons have enjoyed the benefits of the internet. Not surprisingly, social media or internet have been continuing to grow from time to time. The legislation on Artificial Intelligence has not been enacted by many developed and developing nations such as Switzerland, Denmark, India, Sri Lanka, Africa, south-asian countries and other states of developed nations as well. Deepfake is not restricted by boarder boundy, it can be accessed any part of the world. Various developing and developed nations are contemplating on enacting a legislation to protect the intellectual property rights laws such as copyright law and economy of the country by misuse of deepfake technology. It seems believed that AI could be a threat to the originality and creativity. Deepfakes are blurring the lines of reality from fiction and it is becoming increasingly hard to recognize legit material.

The bill and drafts are proposed for dissimination the harm of deepfake technology on society, originator of the copyright holder. Social media, Artificial Intelligence has overpowered the social media, originality of the work of the creator. Few datas were obtained from the scopus database to examine the relation of deepfake, AI and copyright. The scopus database was selected due to its holistic coverage and incorporation of quality publication in the database. The legal decisions of the courts on the intersection of copyright, AI and deepfake has been obtained to see the implication of this intersection on the government, economy, executive and on the legislators. The implementation of existing legislation can be analysed by the judgments of the court, the necessity to bring reforms or new legislation can be visualized. This section presents a comprehensive analysis of publication trends, thematic structure and collocation patterns among researcher, law and countries. A detailed examination of deepfake technology research reflects the global intellectual laws violations. These findings provide valuable insights into the relevant focus areas, and emerging trends in deepfake and focusing on copyright laws.

Comparative Regulatory Landscape

1. Denmark plan to use Copyright law to protect against deepfakes

Denmark is taking steps towards regulating deepfakes with a new act that includes both deepfakes of artists' performances and the characteristics of natural persons. The Denmark is the first country in European Union who adopted to regulate the use of deepfakes within the framework of copyright law. What is a pioneering effort to tackle the rise of deepfake content, now ubiquitous across the internet. Denmark has proposed extending copyright protection to individuals' facial features, appearances and voices. The proposed amendments to Denmark's copyright law³⁰ will effectively make it illegal to share deepfake content of another person without their content, empowering individuals to get such forgeries taken down from online platforms and seek compensation for their publication- similar to how copyright laws traditionally protect creative works.

Rise of Deepfake

A type of synthetic media known as "deepfakes" presents convincing and lifelike images, sounds, or videos of unrealized occurrences. They depict actual persons talking or doing things they have never said or done. Although media manipulation for evil intent has long existed, artificial intelligence has made it simpler and more advanced than in the past. In recent years, there has been a significant increase in the amount of deepfake content available online, and identifying deepfakes has grown more challenging. The technology that has been utilized to produce pornographic content, disseminate false information, and carry out intricate scams has proven difficult for authorities worldwide to keep up with. The majority of current laws pertaining to deepfakes make some technological damages illegal, such publishing altered media during elections or deepfakes porn. Since it only covers the dissemination of deepfakes and not the specific damages they could cause, the Danish Bill, which was proposed last month and is presently in the consultation stage, is harm neutral. The measure grants people the right to their unique voice and facial traits, which no one may replicate without permission, according to Danish Culture Minister Jakob Eagle Schmid.

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³⁰ Denmark plan to use Copyright law to protect against deepfakes, Indian Express 15th July, 2025

Bill Propose

Three additional methods of defense against deepfakes are introduced in the bill:

1. The first is imitation protection, which prevents people from sharing accurate digital recreations of a person's voice and facial characteristics in public.
2. Performance protection, which includes creative performances that would not normally qualify for copyright, such as impromptu or nonverbal actions (S.65). and
3. Protection of performing artists, with a focus on digital impersonation of actors, musicians, and other performers.

The protection afforded to regular people is the most noteworthy aspect of this. Sharing realistic deepfakes that replicate someone's voice, appearance, or other traits for up to 50 years after their passing is prohibited under the proposed section 73(a). "Realistic" is the key term here. Intent is not a concern of the bill. As long as a deepfake appears authentic and causes confusion, it can be removed. On the other hand, obviously stylized content is not protected. A form of content-based protection was suggested by the bill. Only with the consent of the person being impersonated may deepfakes be disseminated. The individual providing the content bears the obligation of demonstrating that consent was acquired, and consent may be revoked at any moment. Additionally, the measure holds web platforms accountable for removing deepfakes and suggests severe fines for noncompliance. The unique feature of the proposed provisions is that, in contrast to existing articles of the Copyright Act, they provide protection for all natural beings without requiring the existence of a work or performance that is protected by copyright. This holds true whether or not they are legally considered artists or creators. Therefore, personal traits that are intimately associated with an individual's identity are included in protection. There is nothing stopping deepfakes from being made available in the private domain, such as private parties or in connection with the right of reproduction, as the prohibition only covers the public revelation of deepfakes with the exception of parody, caricature, and pastiche, which were codified in section 24b of the Copyright Act as of July 1, 2024, the proposed protection of personal physical characteristics has a significant interface. This section states that imitation is not covered by the protection, primarily expressions of caricature, satire, parody, pastiche, power criticism, social criticism, etc., unless the imitation is misinformation that could seriously jeopardize the rights and significant interests of others. Although there is no fee for breaking the prohibition, the affected parties are only entitled to damages and compensation. The protection will be in place for 50 years following the year of the mimicked person's death.³¹

The measure merely provides protection for publicly accessible material; it does not criminalize the creation of deepfakes; rather, it prohibits their dissemination. Although the measure does not provide a complete exemption, some statements, including satire and parody, are still not protected. Based on the European Convention on Human Rights' guarantee of free expression, civil courts will determine whether content should be removed on an individual basis. Opponents claim that although the law is ambitious and may set agendas, it will be difficult to execute, particularly given Denmark's EU chairmanship. Because the law's scope is limited to Danish territory, it is impossible to bring criminal charges against wrongdoers who operate elsewhere. Denmark may be giving a new right, but its practical impact may be negligible if the procedures to implement it are cumbersome, delayed, or inconsistent. "Regulation without enforcement is a signal, not a shield," said AI's CFO. At the same time, a lot of people are using Denmark as a model for other nations that do not yet have laws that specifically address digital impersonation. When addressing deepfakes, Indian courts have so far relied on the concepts of privacy, defamation, and publicity rights. Businesses' ability to exploit this new technology for entertainment marketing is restricted by the intention to impose stringent regulations against the dissemination of deepfakes without permission. Businesses must make sure they have gotten enough consent, which in some situations may require getting permission from each individual whose traits or abilities they want to use. Businesses that depend on rights, like music and film makers, may see an improvement in their market position as a result of the new regulations. They will negotiate the regulations pertaining to the usage of deepfakes.

European Unions

The first Artificial Intelligence Act, 2023 (AI Act)³², a framework developed by the EU to handle the risks of AI-generated content, such deepfakes, while promoting trustworthy AI. Instead of outright banning deepfakes, the AI Act mandates openness from those who create or use them, forcing them to disclose the content's artificial origin and offer information on the techniques used. According to the Act, there are four risk classifications for AI systems: unacceptable, high, limited, and minimum. Deepfakes are typically classified as "limited risk" owing to their potential to deceive humans who may find it difficult to recognize them as artificial intelligence (AI) products. According to Article 50(3)'s transparency standards, AI-generated content must be appropriately labeled so that consumers are aware

³¹ The Hindu, 9 July, 2025 the Danish Copyright Act: New ban on deepfakes and protection of artistic performances, Bech-Brunn, Copenhagen

³² Jana Kazaz, Regulating Deepfakes: Global Approaches to combating AI-Driven Manipulation GLOBSEC, Centre for Democracy and Resilience, 2023

when they interact with deepfakes. The Act categorizes AI systems under four threat levels: high, limited, unacceptable, and minimal. Deepfakes are frequently characterized as having a "limited risk" since they may deceive people who would struggle to identify them as being made by artificial intelligence (AI). However, as stated in Annex III, deepfakes with the capacity to disrupt democratic processes or elections may be classified as "high-risk," particularly if they do so. However, the particular standards utilized to determine this categorization are not yet known. Critics contend that disclosure regulations may be insufficient to address the threats posed by deepfakes, particularly given their global nature and rapid dissemination. The formation of the EU AI office in February 2024 is a step towards establishing enforceable guidelines to solve these concerns. Experts emphasize the importance of a clear responsibility framework inside the EU, which must be accompanied by rigorous enforcement mechanisms such as strong technological and criminal liability for persons who produce or disseminate deepfakes in order to manipulate, deceive, or harass others.

UK's response: Protecting against non-consensual deepfakes

The UK prioritised the risk of AI in sexually graphic photos produced by AI using the Online Safety Act of 2023. In 2024, the UK government announced plans to make uploading intimate photographs without consent including deepfakes a "priority offence," putting it on par with other major online crimes including the sale of narcotics and weapons, in an effort to further enforce this law. Online platforms will have to act more quickly and forcefully to stop, identify, and eliminate non-consensual intimate imagery under the amendment. The law holds individual users accountable in addition to placing a great deal of duty on platforms to put strict safeguards in place to stop these infractions. Under current laws addressing image-based abuse or harassment, those who produce or distribute non-consensual intimate photos may be prosecuted.

America's AI Leadership at Federal Level

There isn't any comprehensive federal legislation in the US that addresses deepfakes specifically. Despite the introduction of a number of bills, including the Protect Elections from Deceptive AI Act and the Deepfakes Accountability Act, none of them have yet to become law. By requiring openness of AI-generated content and offering victims of damaging deepfakes legal remedies, the former seeks to safeguard national security. By altering the Federal Election Campaign Act of 1971 ("FECA") to forbid the dissemination of misleading information, the latter proposal aims to reduce the use of AI-generated deceptive materials in political campaigns. Controlling Deepfakes: International Strategies to Stop AI-Powered Editing of sounds, pictures, or videos of federal candidates in political or issue-based advertisements. People, political committees, and other organizations are generally prohibited from disseminating intentionally misleading AI-generated materials by the Protect Elections from Deceptive AI Act (Act). However, the act contains significant exclusions for work that is obviously marked as parody or satire as well as for actual news broadcasts in order to guarantee that it does not violate First Amendment rights. Furthermore, this rule does not apply to radio or television stations that air such programming with the appropriate disclaimers.

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However, the lack of federal legislation specifically targeting deepfakes leads to uneven protections around the nation. Federal rules that deal with identity theft and impersonation are occasionally extended to deepfake usage in fraud cases, however their application is restricted. Despite the fact that enforcement tools are still lacking, the FTC's efforts to strengthen protections against AI impersonation demonstrate the growing awareness of this issue.

At State Level

Regulating deepfakes at the state level has gained attention, particularly in light of election integrity and political advertisements. With bipartisan backing, 23 states have passed legislation combating deepfakes as of September 2024; (Jana Kazaz, Regulating Deepfakes, 2023). only this year, 17 states have passed bills or changes to existing ones. Pioneering initiatives to combat non-consensual pornography include Virginia's statute, which makes the dissemination of deepfake pornography a Class 1 misdemeanor punishable by up to a year in prison and a \$2,500 fine. In order to provide those impacted by this abuse some recourse, California has recently passed legislation that permits victims to file a lawsuit for damages if their image is used in deepfake pornography without their knowledge. These safeguards are nonetheless sporadic, though, and victims in places with less robust legislation frequently encounter formidable legal

obstacles. Certain jurisdictions, including Texas, have passed laws specifically making it illegal to employ deepfake technology to trick or mislead people. These laws are significant first steps, but they also show how state-level strategies are disjointed, giving victims differing degrees of protection based on where they live.

Disclosure requirements and temporary prohibitions of deepfake content in the lead-up to elections are the two main types of state laws pertaining to election integrity. AI-generated content in political advertisements must be clearly labelled in a number of states. For instance, Michigan imposes continual disclaimers within 90 days of an election, with offenders facing misdemeanour charges, fines of up to \$1,000, or up to 3 months in jail. Wisconsin provides similar penalties, while New Mexico mixes disclosure requirements with public awareness campaigns to educate voters about deepfake hazards. Arizona takes a more focused approach, prohibiting civil lawsuits against violators and focusing on digital impersonation of officials or candidates. A number of jurisdictions have enacted temporary prohibitions on deepfake content, which forbid the dissemination of political content produced by artificial intelligence without adequate notice during designated election-related periods.

Hawaii, California, and Michigan have implemented such restrictions. For instance, unless accompanied by a conspicuous warning, Hawaii law prohibits substantially misleading content from February through Election Day during election years. Critics contend that since false representations of actual people, politicians or not, are a continual threat, such limitations ought to be in place all year round rather than only during election seasons.

China & Taiwan: Comprehensive Control

With the adoption of the Provisions on the Administration of Deep Synthesis of Internet Information Services in January 2024, (Jana Kazaz, 2023). China has developed a comprehensive strategy to regulate deepfake material. In contrast to the more restrictive deepfake laws seen in the US and Europe, this legislation aims to maintain societal stability. The provisions address the technological and societal issues raised by deepfake technology and cover a variety of AI-generated material types, such as text, photos, audio, and video. The new law imposes obligations on both platform providers and end users. Platform providers offering content generation services must take responsibility for the ethical use of AI, which includes evaluating and verifying the algorithms used, authenticating users to track content creators, and implementing feedback mechanisms for consumers. Another important requirement is the mandatory labelling of all AI-generated content³³. All AI-manipulated media must be clearly marked with a watermark or textual indication, ensuring viewers are aware that the content has been altered. Additionally, the production of deepfakes without user consent is strictly prohibited, protecting individuals from unapproved use of their likeness or personal data. This rule is in line with a larger pattern in which Chinese authorities look to digital firms to support social and political stability. Chinese tech companies like Tencent and Alibaba have been forced to support the government's "common prosperity" goals, which place a strong focus on social and economic stability, as noncompliance can result in serious repercussions like fines, service suspension, or even criminal culpability, this strategy puts tremendous pressure on platforms to comply with government demands. China's regulation of deepfakes reflects its larger objective of regulating the internet to maintain national security, going beyond merely resolving technological problems. China's government acts quickly to control developing technology, in contrast to the US, where the power to enact drastic deepfake legislation is restricted by free speech rights. Since the government views any unchecked use of AI technologies as a direct danger to the stability of the system, this extensive restriction highlights China's reliance on strict control over digital information. Despite these initiatives, the regulatory environment is fragmented and has gaps in safeguards against fraud, election meddling, and personal misuse due to the lack of unified federal legislation. In order to address these issues methodically and uniformly across the US, a comprehensive government approach would be essential.

Some nations have decided to take a more focused approach to the issue, making the most dangerous types of deepfakes is illegal, for example, Taiwan has regulated deepfake technology more specifically, concentrating on its application in fraudulent operations.

The criminal legislation in Taiwan was amended on May 16, 2023, to particularly address the use of deepfakes in fraud. These revisions target the production and distribution of computer-generated images, voices, and magnetic data that are used to fool people. The penalties for those found guilty of deceiving others through AI-generated media have been greatly increased by these revisions; offenders now face fines of up to NT\$1 million (about US\$32,462) and up to seven years in prison. While some countries are focussing on personal rights, are universally protected in democracies; but, adjusting these rights to the difficulties presented by AI-generated content, such deepfakes, calls for certain protocols and unambiguous rules. Theoretically, current rules offer a foundation for combating deepfakes, but as Prime Minister Meloni's example shows, their implementation is frequently insufficiently quick to significantly lessen the harm.

³³ *Ibid*

International judgements and legislative policies on Deepfakes

Legal Challenges in Anthropic case & Meta Judgement of US Court

It is essential to have access to a variety of materials in order to construct and refine Large Language Models (LLMs). These resources might include those that are publicly accessible. AI companies frequently scan books and other materials and turn them into machine-readable language so that data can be retrieved for training, in addition to collecting data from common sites. It is a difficult legal challenge to determine if using copyrighted materials for training without the owners' consent amounts to copyright infringement. Around the world, a great deal of litigation and discussion is taking place. Determining how the courts perceive whether the acts in question come under any of the applicable copyright laws' exclusions to infringement is one of the crucial aspects of this topic. The application of the "fair use" concept under the copyright laws would be one of the main factors determining the results of litigation in the United States³⁴.

Two trial courts have rendered decisions regarding the copyright fair use doctrine. Anthropic used books and other texts from a collection they assembled to educate the LLMs that underpin Claude, one of their well-known Gen AI agents. The library's collection was compiled from a variety of sources, including books that were bought and digitally altered as well as books that were obtained from perhaps illicit sources. The plaintiffs filed the copyright infringement lawsuit because their creations were exploited for training purposes without their consent. In *Andrea Bart et al. vs. Anthropic PBC*, the court emphasized that the transformative aspect of the usage of copyrighted content was what made the conversion of the books they had bought from print to digital format a fair use. It did not, however, grant Anthropic's plea that the downloading and keeping of copies obtained from unlawful sources be considered fair use. How the court would rule on the infringement analysis and remedies in relation to those actions is still up in the air.

In *Richard Kadrey et al. vs. Meta Platforms Inc.*, 13 authors had sued Meta for downloading books from illegal sources and using them for training Llama, the LLM of Meta. The court granted a judgment in favour of Meta. In this case the court delivered that the use of the work for training purposes was highly transformative in character, however, the plaintiff could not prove that is affecting their works market value, so passed in the favour of Meta, though Meta unlawfully distributed their works during the torrenting process.

Fair use analysis in both of the aforementioned cases was significantly impacted by the recognition of the highly transformative nature of using copyrighted works to train LLMs. In many situations, AI training on copyrighted materials may become illegal due to "market dilution." This occurs when the rapid generation of countless works that compete with the originals, even though they are not infringing, can lead to market dilution through indirect substitution. The court determined that using content without authorization is not fair use in *Thomson Reuters v. Rose Intelligence*. The extremely transformative nature of the resources used in Gen AI training is acknowledged in all of these rulings, which supports the conclusion of fair use for the use of copyrighted content for training. However, this represents a lot of copyright holders' concerns. In many situations, the type of proof that rights proprietors will present to demonstrate the detrimental effect on their market value will play a significant part in deciding the conclusion. The claims of fair usage are refuted by the illicit sources; these problems in the field of AI training are far from resolved.

Conclusion, implication and future work

When it comes to copyright laws, the main problem impacts not just the rights of authors but also legal and technological fields. Establishing explicit governance regulations that take into consideration the non-human character of AI, such as deepfake, and the undeniable relevance of their performance in the environment is crucial in a future where the number of autonomous computers whose actions have legal implications is growing. Undoubtedly, deepfake technology solved a major social problem. The harm produced by its misuse—which ranges from widespread deception to personal exploitation—underlines the urgent need for specific and efficient restrictions, even while its creative and educational potential should not be undervalued.

From broad frameworks to more focused measures, this study has demonstrated the variety of regulatory approaches across jurisdictions, reflecting the distinct goals and legal systems of each area. Given how quickly technology is developing, addressing its hazards requires a proactive, international strategy. To regulate the use of artificial intelligence and deepfakes, lawmakers and policymakers must introduce laws. Laws governing technology must be enacted in order to stop harmful applications of deepfakes, create precise procedural rules for enforcing the law and technology, and encourage transparency measures that guarantee the identity of information produced by artificial intelligence.

Finally, finding a balance that protects social integrity, upholds individual economic and moral rights, and promotes technical advancement will be essential to the success of deepfake regulation. Governments and stakeholders can reduce the dangers of deepfake abuse and create an ecosystem based on responsibility and trust by acting swiftly.

Applying existing legislation, it is concluded that exploiting copyrighted works in ways that implicate the owner's exclusive rights occurs at various phases of the development of generative AI. Whether those prima facie infringements may be justified as fair usage is the question. Numerous applications of copyright work in AI deepfake are probably

³⁴ The Hindu 29th July, 2025 Cache how the fair use clause is being applied to generative AI by Arul George Scaria

going to revolutionize the field. Their fairness will vary depending on the sources, the works employed, the goal, and the restrictions applied to the outputs, all of which might impact the creator's rights. Commercially exploiting enormous repositories of copyrighted works to create expressive content that rivals them in current marketplaces, particularly when access is obtained illegally, beyond the bounds of fair use.

Despite their uneven availability, licensing agreements for AI training—both individually and collectively—are rapidly becoming more prevalent in several industries. Alternative strategies, including expanded collective licensing, should be taken into consideration to rectify any market failure and close the gap. Effective license to use deepfake in government sectors, in my opinion, must be granted to organizations rather than to individuals in order to address this issue. Innovation may continue to progress while protecting intellectual property rights with the help of efficient licensing choices. The public as a whole, as well as the inventors who develop them and the content producers who support them, should gain from these revolutionary technologies.

The European report on General Data Protection Regulation³⁵ offers a few suggestions for data security in relation to AI applications. Regulations such as (1) making the criminalization of damaging Deepfakes a top priority, (2) fraud and identity theft, (3) non-consensual exploitation and defamation, (4) establishing precise procedural standards and strong punishments, and (5) guaranteeing thorough transparency measures are all necessary. (6) Encourage education and public awareness. The EU legislator must take action through legislative advances in the absence of flexible tools like the fair use doctrine. There must be a clear definition of deepfake as opposed to other types like cheap fakes or AI-altered material, as well as a provision for compensation and punishment for the wrongdoers.

Authorizing copying for educational and scientific purposes is required, provided that the individual conducting the activities has a valid reason to access the protected content. Deepfake usage must be restricted to entertainment reasons only, not for business goals or to damage someone's reputation. Only the use of machine-readable media, such as metadata and a website's terms and conditions, is subject to reserve of rights when it comes to material that is made publicly available online. Rights holders must be able to take action to guarantee that the specified reserve is upheld thanks to the license³⁶. In India's case, a balance must be struck between advancing AI and safeguarding the rights holders' interests. It could be difficult to fix the biased AI solution that was developed at the developer stage. There is a possibility that AI output might be prejudiced, discriminating, and incorrect if there is little or no data. Articles 7 and 8 of the TRIPS agreement, the Indian Constitution, and the goal of Section 52 of the Copyright Act—the fair dealing principle—are all violated by this. A new clause addressing AI and deepfakes must be added to copyright rules, along with information on how they are violated.

In any form of licensing, licensing a music model that can produce rudimentary jingles is different from licensing a state-of-the-art LLM that can compete on advanced reasoning benchmarks. The sophisticated commercial entities will be easier to find out and negotiate with than individual non-professional. The development of generative AI is going to happen either with a liberal copyright exception with fewer risks and more opportunities and inclusive development or with strict copyright exceptions or with more challenges and risk. The challenges and Indian societal peculiarities to be considered while working in the policy space for AI governance in the IP field. This paper hopes that the international countries and Indian government where similar situation of linguistic and social diversity are present to consider domestic peculiarities before relying on the practices and policies adopted by the countries. Finally, law and technology are relatively nascent and there is a dynamic interplay between them. The unresolved legal issues surrounding fair use might affect the present licensing market. To prevent ambiguity, get access to high-quality materials, or rely on fair usage, some AI businesses may, nevertheless, have licensed works for training. More clarity brought about by courts starting to settle ongoing lawsuits may encourage more cooperation on technical and market-based solutions. By developing the legal and licensing advancements, the solution may be activated. Clear procedural criteria had to be established in order to effectively regulate deepfakes in this new environment. The reporting and directing processes clearly outline the steps authorities will take to look into and lessen the harm on a worldwide scale.

References

- [1] Ali, Z (2009) Legal Research Methods. Jakarta, Sinar Grafika.
- [2] Alvarez-Risco, A., & Del-Aguila-Arcentales, S (2021) A note on changing regulation in International Business, the World Intellectual Property Organization (WIPO) and artificial intelligence in the multiple dimensions of institutional complexity in international business research (pp. 363-371). Emerald Publishing Limited, <https://doi.org/10.1108/S1745-886220210000015020>
- [3] American Association of Independent Music (2023) Harnesses AI to Release His 'First New Music in more than a Decade', Digit. Music New. <https://www.digitalmusicnews.com/2024/05/06/andy-travis-new-song>.

³⁵ The impact of General Data Protection Regulation on artificial Intelligence, EPRS | European Parliamentary Research Service Scientific Foresight Unit (STOA) PE 641.530 – June 2020

³⁶ Jose Maria Anguiano, November 2023, Artificial Intelligence and Copyright from Thaler's dilemma to the right to read is the right to mine' doctrine

- [4] Anguiano Jose Maria (2023) Artificial Intelligence and Copyright, Thaler's dilemma to the right to read is the right to mine' doctrine
- [5] Beebe Barton (2008) An Empirical Study of U.S. Copyright Fair Use Opinions. Univ. Pennsylvania Law Review 549 https://scholarship.law.upenn.edu/penn_law_review/vol156/iss3/1 Accessed 12 August 2025
- [6] Chauhan Kailash (2025) Generative AI, Text & Data Mining and the Fair Dealing Doctrine: Examining, the New Problem with the Old Regime, Journal of Intellectual Property Rights, Vol. 30 (1) doi: <https://doi.org/10.56042/jipr.v30i1.12652>
- [7] Disemadi, H. S., Lenses of Legal Research (2022) A Descriptive Essay on Legal Research Methodologies. Journal of Judicial Review Vol. 24(2) 289-304 doi: <http://dx.doi.org/10.37253/jjr.v24i2.7280>
- [8] European Union (2020) GDPR the impact of General Data Protection Regulation on artificial Intelligence, EPRS, European Parliamentary Research Service Scientific Foresight Unit (STOA) PE 641.530 Accessed 16 July 2025
- [9] Henny, C, Get to Know What Deep Learning Completely IS, (2021) <https://www.linkedin.com/pulse/mengenal-apa-itu-deep-learning-complete-chandra-henny/?originalSubdomain=id> Accessed 7 May 2025
- [10] Hendrawan, Daniel, Andersen, Christian, Tiopan Demson et al. (2023) Juridical Review of Copyright Infringement in the use of Deepfakes in the Creative Industry in Indonesia, International Journal of Cyber Criminology vol 17 (1).
- [11] Jened, R, Copyright Law. PT. Citra Aditya Bakti Mathew, Sag. (2023). Matthew Sag, Copyright Safety for Generative AI, IEEE Spectrum, Vol. 61 (2) <https://spectrum.ieee.org/midjourney-copyright> Accessed 21 July 2025
- [12] Kazaz Jana (2023) Regulating Deepfakes: Global Approaches to combating AI-Driven Manipulation GLOBSEC, Centre for Democracy and Resilience. Available via GLOBSEC. <https://www.globsec.org/what-we-do/publications/regulating-deepfakes-global-approaches-combatting-ai-driven-manipulation> Accessed 25 July 2025
- [13] Koopman, M., Rodriguez, A. M., & Geradts, Z (2018) Detection of deepfake video manipulation. in the 20th Irish Machine Vision and Image Processing Conference (IMVIP) pp. 133-136, <https://www.researchgate.net/publication/329814168> Accessed 3 July 2025
- [14] Lindsey, T., Damian, E., Butt, S., & Utomo, T. S. (2020) Protection of Intellectual Property Rights of the Tengger Adat People's Knowledge International Journal of Innovation, Creativity and Change. Vol.12, (10). <http://www.ijicc.net> Accessed 24 May 2025
- [15] Marcus, Gray and Southern, Reid (2024) Generative AI Has a Visual Plagiarism Problem, IEEE Spectrum <https://spectrum.ieee.org/midjourney-copyright> Accessed 3 May 2025
- [16] Mosley, T. (2019) Perfect Deepfake Tech Could Arrive Sooner Than Expected, WBUR <https://www.wbur.org/hereandnow/2019/10/02/deepfake-technology> Accessed 18 May 2025
- [17] Pelupessy, E (2017) Intellectual property rights. Malang: Media Intelligence
- [18] Perlmutter, Shira (2024 & 2025) Copyright and Artificial Intelligence, Digital Replica, Part 1, US Copyright Registrar Office
- [19] Philmlee, Don (2023) Practice Innovations: Seeing is no longer believing - the rise of deepfakes, Thomson Reuters <https://www.thomsonreuters.com/en-us/posts/technology/practice-innovations-deepfakes/>. Accessed 10 May 2025
- [20] QinHong Yang, Chen Dongdong, Tan Zhentao, Liu Qiankun, Bao Jianmin, Yuan Lu et al (2023) A Large-scale, High-quality Dataset for Image Restoration, ARXI Cornell University <https://arxiv.org/abs/2306.05390> Accessed 30 July 2025
- [21] Reddy V.Vijayasai (2021) Review of Intellectual Property Rights Regime in India, Report No. 161 Parliament of India, Rajya Sabha https://files.lbr.cloud/public/2021-07/161_2021_7_15.pdf?VersionId=S01fcQEC5DzDqKNyMsGxal6YXmJbUwM Accessed 1 August 2025
- [22] Rosadi, S. D. (2015) Cyber-Law Aspects of Data Privacy According to International, Regional and National Laws. Jakarta: Refika Aditama
- [23] Saidin, O. K (2015) Legal Aspects of Intellectual Property Rights. Jakarta: Raja Grafindo Persada
- [24] Stutz Colin (2023) The Fake Drake AI Song Earned Millions of Streams- But Will Anyone Get Paid? Billboard <https://www.billboard.com/pro/fake-drake-ai-song-earned-millions-streams-get-paid>
- [25] Sutojo, T., Mulyanto, E., & Suhartono, V (2011) Artificial Intelligence Bandung: Andi Offset 1st ed.
- [26] Indian Express Newspaper (2025) India Editorial Page,
- [27] The Hindu (2025) The Danish Copyright Act: New ban on deepfakes and protection of artistic performances, Bech-Brunn, Copenhagen
- [28] The Hindu (2025) Cache how the fair use clause is being applied to generative AI by Arul George Scaria.
- [29] UNCTAD (2023) Creative Economy Report. United Nations Conference on Trade and Development, https://unctad.org/system/files/official-document/ditc20082cer_en.pdf Accessed 10 August 2025
- [30] Universal Music Group (2023) U.S. Copyright Office
- [31] Warhol Andy, Foundation, US, WIPO

Covering Letter

Editor-in-Chief,

Respected Sir,

I am submitting a manuscript/research article for your kind consideration of publication in your indexed journal. The research article titled '**Preserving Copyright laws and Economy against the challenges of Deepfakes technology: Navigating the strategies in the Quest for a Legal Regulatory Landscape**' the author highlighted the effect of deepfake on copyright law. The research article has been prepared as per the requisite guidelines. The author is declaring that it has not been published anywhere else and not under consideration for publication elsewhere. I would be privileged if this research paper will be a part of your privileged journal.

I appreciate for your time and consideration.

The details of the author are mentioned below for your reference.

Having fourteen years of rich experience in academia and quite keen to get published more manuscripts and research paper with good quality content on contemporary issues in your respective journal.

Dr Payal Jain

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Compliance with Ethical Standards

Acknowledgement- I would like to thank of all writers, academicians and researchers through this I could able to write this manuscript. I am thankful of reports made by US copyright office on deepfake and copyright for their inputs and latest research work. All the resources are recognised in footnoting and references.

Author contributions- In this study design, the author made the questionnaire, got the responses from technical and academicians. Studies the various reports, research work and latest newspapers on this concerned topic.

Funding-There is no source of funding. Funding is not required.

Data Availability- The responses got at the discretion of respondents. Their personal information kept confidential. Audio data are not available for publication for confidential and ethical reasons. Human participants were involved in the research.

The manuscript has not been submitted to more than one journal for simultaneous consideration.

The submitted work is original and have not been published elsewhere in any form or language (partially or in full), unless the new work concerns an expansion of previous work.

A single study has not been splitted up into several parts to increase the quantity of submissions and submitted to various journals or to one journal over time.

Ethical Approval- To ensure objectivity and transparency in research and to ensure that accepted principles of ethical and professional conduct have been followed.

Conflict of Interest- There is no conflict of interest of anything.

Non-financial interests: Not any kind of interest.