

## THE TRANSFORMATIVE INFLUENCE OF ARTIFICIAL INTELLIGENCE ON INTELLECTUAL PROPERTY RIGHTS

Sneha\*

### ABSTRACT

---

*This article explores the complex relationship between artificial intelligence (AI) and intellectual property rights (IPR) through various angles. It delves into the changing dynamics, challenges, and legal ambiguities arising from AI-generated content, focusing on its effects on patents, and trademarks, with a major focus on copyright laws. The discussion extends to AI's impact on music, arts, and literature, highlighting the absence of clear laws protecting AI-generated creations. Real-world challenges faced by artists and innovators due to AI's rapid advancements have been discussed. While addressing issues of ownership and infringement, it advocates for flexible licensing models and ethical guidelines. The article underscores the necessity for collective action involving policymakers, legal experts, and stakeholders. Such collaboration is essential for effectively promoting innovation, fairness, and responsible use in this rapidly evolving AI-influenced intellectual property sphere.*

**Keywords:** *Artificial intelligence (AI), Copyright, Authorship, Ownership, Traditional, copyright*

---

\* Student, Damodaram Sanjivayya National Law University, Visakhapatnam, Email: snehakrao111@gmail.com.

## **THE TRANSFORMATIVE INFLUENCE OF ARTIFICIAL INTELLIGENCE ON INTELLECTUAL PROPERTY RIGHTS**

### ***Introduction***

The rise of artificial intelligence (AI) marks a significant technological development, reshaping various aspects of jobs, daily life, and the exchange of goods and services globally. This advancement carries extensive implications for technology, the economy, and society. While it is too soon for conclusive statements, it is clear that artificial intelligence will impact traditional ideas of intellectual property (IP). Even though AI-generated music and creations are not commercially a big threat yet. But they are expected to challenge conventional concepts of "composer," "author," and "inventor." However, its precise effects on intellectual property rights remain uncertain.

The creation, sharing, and protection of intellectual property have undergone radical changes due to the rapid progress of artificial intelligence (AI) technologies. Historically, intellectual property rights have played a crucial role in encouraging innovation and defending the rights of creators. However, the advancement of AI technology brings new complexities and challenges to these established concepts. Today the IP system remains relevant and is being utilized by an increasing number of people. However, new challenges are emerging, and the solution may involve adding another layer of intellectual property protection rather than completely altering the existing framework.

### ***Changing dynamics between AI and Intellectual Property Rights***

Across the world intellectual property rights (IPR) systems broadly operate based on key principles. Firstly, the principle of exclusivity grants creators the sole right to exploit their creations, giving them a competitive edge. Additionally, the principle of territoriality ensures that IPR protection is granted within specific jurisdictions, respecting the sovereignty of each country's legal framework. Another fundamental principle is the balance between rewarding innovation and promoting public interest. Intellectual property rights systems aim to strike a balance between granting exclusive rights to creators while allowing for fair use, competition, and access to knowledge for the societal benefit.

Coming to artificial intelligence, at its essence, AI pertains to intelligent machines that can execute tasks that typically require human intelligence. By analysing vast amounts of data and learning from patterns, AI systems can make informed decisions, adapt to new situations, and even exhibit human-like behaviours. However, it is vital to recognize that AI operates within its defined scope and lacks the broader cognitive abilities associated with human intelligence. Therefore, understanding the capabilities, limitations, and ethical considerations surrounding AI is paramount while understanding its transformative impact on industries, society, and the future.

Today, AI algorithms and machine learning models can autonomously create diverse content, including artwork, music, literature, and scientific discoveries. This ability challenges our understanding of creativity and human ingenuity. As AI can analyse data, identify patterns, as well as produce unique outputs, sometimes surpassing human imagination. However, questions arise about authorship, ownership, and the uniqueness of these AI-generated creations. Hence, striking a balance between appreciating AI's creativity and maintaining human-centred perspectives is crucial. As AI technology advances, society must address ethical, legal, and cultural aspects of autonomous content creation. Most importantly, upholding intellectual property rights (IPR) is vital for technological progress.

It is well known that intellectual property rights grant exclusive rights to creators, encouraging innovation and economic growth. It protects ideas, inventions, and creative works from unauthorized use, fostering an environment for investment and commercialization. Intellectual property right also promotes collaboration by encouraging the sharing of knowledge, leading to new ideas and societal advancement. At its core, IPR drives innovation, providing incentives and protection leading to progress and shaping the future.

However, Intellectual property rights (IPR) systems face some limitations too. One challenge is finding the right balance between encouraging innovation and enabling knowledge access. While IPR protection encourages creators and innovation, it can hinder knowledge dissemination. Striking a balance is vital to prevent monopolies and promote overall progress. Additionally, IPR systems struggle to keep up with rapid technological advancements, often lagging behind these fast-paced developments. Therefore, regular evaluation and updates are necessary to address the emerging challenges effectively.

Furthermore, the expenses and challenges tied to enforcing IPR can create hurdles, especially for individuals or smaller organizations with limited resources. The litigation and enforcement processes can be time-consuming and financially burdensome, creating even more barriers to accessing justice for those seeking to protect their intellectual property. Therefore, striving for a more accessible and efficient enforcement framework is essential to ensure that all creators can enjoy the advantages of IPR without facing unnecessary barriers.

The relationship between artificial intelligence (AI) and intellectual property rights is a complex and ever-changing one. One of the critical issues is: the ownership and protection of valuable intellectual property generated by AI systems that needs to be urgently addressed. The concept of ownership becomes particularly challenging as AI algorithms are capable of producing artistic or literary works without direct human involvement. Traditional notions of ownership and copyright may not always apply in such cases, making it more difficult to determine the true author of such works. Furthermore, AI technologies can be misused to infringe upon intellectual property rights, such as copyrighted content very easily. As AI continues to develop, it becomes increasingly important to address these legal and ethical issues in order to protect intellectual property rights while simultaneously fostering innovation in the field of artificial intelligence and similar technologies.<sup>1</sup>

### ***Artificial Intelligence-generated Content and Ownership***

In India, like many other countries including the USA, and Canada, the issue of ownership and protection of content created by AI remains unresolved. While AI-generated products and tools may qualify for IP protection in some cases, the law is silent on the ownership of AI-generated content.<sup>2</sup> According to a study conducted by Dentons on AI, 86% of participants believed that legislation is necessary to clarify IP protection in the context of AI, with 45% considering it urgent. This underscores the urgent need to address the complexities surrounding the rightful ownership and creatorship of AI-generated works, as the traditional notion of intellectual property becomes even more intertwined with AI than ever before.

---

<sup>1</sup> Zack Naqvi, *Artificial Intelligence, Copyright, and Copyright Infringement*, 24 MIPR. L. REV. 15 (2020).

<sup>2</sup>Bradley Budden, *On the Intersection of Artificial Intelligence and Copyright Law*, 47 CAN. L. LIBR. REV. 10 (2022).

The conventional types of IP protection have a human-centred nature, and it raises questions about the ownership of creations which are directly produced or assisted by AI. These blurred lines between authorship and ownership in the case of AI-generated or AI-assisted works present challenges in determining the legitimate creator and owner of the work.

The issue of ownership in algorithmic authorship raises concerns as traditional copyright law assumes the author is the owner of the work who is generally a human being. However, assigning rights to non-human entities is problematic. One potential solution is adopting the "work made for hire" doctrine<sup>3</sup>, treating the programmer as the owner of AI-authored works. Some countries, like the UK and New Zealand, have provisions granting copyright to the person facilitating the creation. While this challenges traditional norms of copyright, as machines lack the intention to create new things and do not value concepts like intellectual property. The traits of true innovation and creativity which are unique to humans are called into question here. As we humans are the only entities which possess this ability to create and innovate using existing technology without external input of data.

### ***Impact of Artificial Intelligence on Patents, trademarks, and copyright laws***

The AI industry's rapid growth has had a huge impact on the intellectual property sector evident from estimates conducted by organizations like WIPO. The World Intellectual Property Organization (WIPO) reports an average growth rate of 28% in AI technology between 2013 and 2016. From 1956 to 2017, over 1.6 million scholarly articles on AI were published, along with approximately 340,000 patent applications for AI-related inventions. In 2017 alone, WIPO received 55,660 AI patent applications, marking a 300% increase from 2011. Developments like these have posed numerous challenges to intellectual property law.

As of now, creations generated solely by AI systems without human involvement are not eligible neither for copyright nor for patent protection in India nor in the USA. However, there is a movement which was started by Thaler, an innovation powerhouse based in Missouri, USA and led by their CEO and President Stephen Thaler, which aimed to challenge the existing norm. Thaler is renowned for developing the remarkable DABUS, a technology responsible for creating an artwork titled "A Recent Entrance to Paradise" after analysing a vast collection of images.<sup>4</sup> Despite the initial denial by the Copyright Office, Thaler's company filed an appeal

---

<sup>3</sup> Zack Naqvi, *Artificial Intelligence, Copyright, and Copyright Infringement*, 24 MIPR. L. REV. 15 (2020).

arguing that the requirement for human authorization was unlawful. However, the Copyright Review Board ultimately upheld the judgment of the US Copyright Office and rejected the copyright application for the artwork.

Copyright, in general, protects creative aspects that reflect the author's originality. Source code is often covered by copyright protection as it represents the author's creative expression. Simply put, an AI's source codes may be protected by copyright laws, similar to any other computer program. However, copyright protection alone does not prevent someone from creating an AI system using an alternative source code and an identical algorithm. Moreover, data plays a crucial role in AI systems, as the selection or arrangement of data can be considered as an intellectual creation and protected by intellectual property (IP) laws.

In copyright infringement lawsuits the specifics of AI development and functionality are thoroughly scrutinized. In such suits proving infringement requires two steps: demonstrating that copying occurred and establishing its illegality due to substantial similarity to the plaintiff's protected content. This can be done directly by showing evidence of copying or indirectly by demonstrating access to allegedly pirated copyrighted material. For this purpose, we have tools and programs like "Have I Been Trained" which allows a user to browse through photos used for training AI art generators, a similar tool for music is yet to be launched.

The rise of machine-authored content is due to AI advancements, leading to a flood of AI-generated material, yet current laws governing creativity innovation do not account for non-human creativity. For example, Thaler's Creativity Machine, can learn diverse subjects and generate original ideas. However, copyright law prohibits works that are solely produced through automated or random processes, or wholly computer-generated output as these blurs the line between copyrightable and non-copyrightable content. Concerns regarding plagiarism and copyright infringement have arisen due to the ease with which AI can imitate existing works. Therefore, protecting intellectual property rights becomes more challenging as AI algorithms scrape content from the internet and generate similar or identical creations without proper authorization or license from the original owner of the copyrighted material.<sup>5</sup>

To deal with this, one useful strategy could be a modified "Abstraction-Filtration-Comparison test" This could be useful in distinguishing copyrightable information from fully automated

---

<sup>5</sup> Gerald Spindler, *Copyright Law and Artificial Intelligence*, IIC 50, 1049–1051 (2019)

works that don't qualify for copyright protection. Systems like RACTER, where a programmer-user guides the machine's output, face less scrutiny compared to autonomously operating Creativity Machines that draw from a broader Internet-based knowledge. Since in the latter case, copyrighting the content would imply claiming ownership of the data extracted from the Internet, which is a byproduct of the machine's way of working.<sup>6</sup> In systems like RACTER, the programmer-user utilizes the machine as a tool and contributes substantial original thinking during the training process. Machine-authored works fundamentally lack a human author because all originality stems from the computational inventiveness of the machine. Hence, granting copyright when not justified will create unreasonable barriers to access.

Therefore, the law must balance the benefits of freely using machine-authored works for the public with the interests of programmers or authors, especially in situations where there is no identifiable user. If allowing AI developers to claim copyright in their machine's work encourages greater creative output, registrars should take relaxed approach while dealing with such copyright claims. Conversely, if protection for the machine generated content or its code can be of greater public utility, works created by such machines should enter the public domain and be shielded from patent and copyright claims.

Since, AI technologies frequently aim to replicate human actions, the question of patenting AI inventions has sparked huge a controversy. Suppose the patent system allows AI-generated innovations to be protected without significant human scrutiny, it could lead to an accumulation of excessive power in the hands of a small number of dominant companies that own these AI systems which can lead to extremely detrimental consequences.<sup>7</sup> There are three important issues in patent law that need to be addressed: first, whether the current standards for patent eligibility should be adjusted to encourage AI innovation; second, whether inventions created by AI should be eligible for patents; and third, how liability should be determined in cases where AI infringes on a patent claim. These impending legal issues necessitate careful consideration and discussions.

It is essential to have further discussions on whether the current high standards promote or hinder innovation to foster innovation. Since, when an AI violates a patent right, determining

---

<sup>6</sup> Zack Naqvi, *Artificial Intelligence, Copyright, and Copyright Infringement*, 24 MARQ. INTELL. PROP. L. REV. 15 (2020).

<sup>7</sup> Chandan Kamra, *A Study on Whether Artificial Intelligence Is Capable of Possessing Copyrights and Patents*, 3 INDIAN J.L. & LEGAL Rsch. 1 (2021).

accountability becomes a critical question. One option to solve this will be the implementation of compulsory insurance programs or the acknowledgment of AI as a legal entity in matters concerning civil liability.<sup>8,9</sup> It is crucial to assess the effectiveness of different liability frameworks, such as strict liability, negligence models, or product liability, to determine their applicability and suitability in the context of AI. Hence, granting patent protection to AI-generated creations has the potential to accelerate innovation and enable exponential growth that would be unattainable through human creativity alone.<sup>10</sup>

As the world of artificial intelligence (AI) expands, so too the complexities surrounding trademark protection. In this age of rapid technological advancements, companies are leveraging AI to create and deliver innovative products and services. However, this unprecedented growth in AI applications brings forth new challenges in safeguarding trademarks. The dynamic nature of AI algorithms and their ability to generate content independently raises questions about who holds responsibility for trademark infringement in AI-generated works.

As businesses embrace the potential of AI-driven technologies to streamline processes, enhance customer experiences, and unlock new opportunities, the delicate balance between leveraging AI's impact on trademarks and preserving the essence of distinctive brand identities becomes even more crucial. While AI brings unprecedented efficiency and scale to trademark searches, monitoring, and enforcement, it also poses challenges in maintaining the uniqueness and distinction that lies at the heart of successful branding. Therefore, the effort to balance these seemingly polar forces requires well-thought-out strategies that can adjust to technological progress and the strategies which can protect the core of brand identities in an AI-driven world.

Moreover, the focus of new policies and amendments should primarily revolve around striking a balance between promoting innovation and advancing societal benefits. One potential approach, for example, could involve relaxing the subject matter criteria specifically for AI

---

<sup>8</sup> W. Michael Schuster, *Artificial Intelligence and Patent Ownership*, 75 Wash. & LEE L. REV. 1945 (2018).

<sup>9</sup> Elisabeth Kasznar Fekete, *Artificial Intelligence and Intellectual Property*, 113 TRADEMARK REP. 717 (2023).

<sup>10</sup> Chandan Kamra, *A Study on Whether Artificial Intelligence Is Capable of Possessing Copyrights and Patents*, 3 INDIAN J.L. & LEGAL Rsch. 1 (2021).



innovations that have significant implications in areas like education, criminal justice, healthcare, or the environment.

### ***Growing concerns related to the use of Artificial intelligence in Music and Literature***

First and foremost, addressing a question that holds greater relevance today than ever before:

#### **Who bears liability for copyright infringement when an AI generates music that closely resembles a copyrighted song?**

If someone used the composer's copyrighted content to feed their AI program to produce new songs, the onus of proof would be on the composer/singer to demonstrate the connection between the two songs to establish infringement. However, this would require him to reverse-engineer the entire neural network, making it practically impossible to demonstrate. Also, the litigation costs would be prohibitive for most budding musicians and artists.

In truth, AI's presence in the music industry is not a recent phenomenon. The pioneer of computer science, Alan Turing, invented a simple melody-generating device as early as in 1951. Fast forward to 1984, songwriter George Lewis utilized three Apple II computers to make a live quartet improvisation. In the 1990s, David Bowie experimented with a digital lyric randomizer. Notably, the first pop album featuring AI compositions, titled 'Hello, World,' made its debut in 2018.

In copyright infringement cases involving AI-generated music, it is crucial to establish knowledge of the original work and prove significant similarity between the AI-generated music and the allegedly infringing music. In the context of AI-generated music, "significant similarity" refers to the degree to which the generated music resembles human-composed music in terms of melody, harmony, rhythm, and structure. It implies a quality where the AI's output demonstrates creative coherence, emotional depth, and artistic complexity, similar to compositions made by human musicians. This level of similarity is often assessed based on subjective human judgment and can vary depending on the specific goals and criteria set by developers and listeners.

The instructions that are given to the AI system also play a vital role in determining substantial similarity, particularly when prompts intentionally draw inspiration from copyrighted works. As the legal scenario evolves, the market is already adapting, with platforms like Songmastr

discontinuing the advertisement of creating songs in the styles of specific artists like Taylor Swift and Beyonce, which is a development in the right direction.

In the world of modern AI, significant progress has been achieved, greatly influencing creative processes. For instance, Google's Magenta program created a new "Nirvana" song by carefully analysing the band's existing works, including lyrics, guitar riffs, chord progressions, and melodies. Similarly, ChatGPT generates lyrics based on text instructions, surpassing previous AI works like IBM Watson's work for Alex da Kid in 2016.

Additionally, MUSICinYOU.ai tailors compositions to individual preferences using a detailed 300-question personality test. Bandlab's "Songstarter," powered by AI, quickly produces royalty-free music. Furthermore, Staccato, an innovative startup founded in 2022 positions itself as an AI MIDI music and AI lyrics generator, describing its function as "an AI Lennon to your McCartney." It generates creative music composition, lyrics alongside real musicians. These examples highlight the various ways advanced AI technologies are transforming the creative world of Arts, Music and more.

Another important legal question is how much human creative input or involvement is required. This is an issue that needs clarification to establish the copyrightability of AI-generated musical pieces in the future. Equally important is the determination of who should be considered the author or creator of these works.<sup>11</sup> Current legal precedent suggests that AI cannot be considered the 'author' of copyrighted works, making it imperative to define the role of human creators in the process.<sup>12</sup>

David Cope's 1997 work, 'Classical Music Composed by Computer,' and his 2010 album, 'From Darkness, Light,' are both protected by copyright. As cope had successfully argued that his creations involved a significant amount of human creative input and interaction, with AI being only a partial component. More recently, the USA Copyright Office granted copyright to a comic book produced using text-to-image technology, a groundbreaking decision for works of its kind, titled 'Midjourney.'

---

<sup>11</sup> Elisabeth Kasznar Fekete, *Artificial Intelligence and Intellectual Property*, 113 TRADEMARK REP. 717 (2023).

<sup>12</sup> Victor M. Palace, *What If Artificial Intelligence Wrote This: Artificial Intelligence and Copyright Law*, 71 FLA. L. REV. 217 (2019).

The rapid progress of AI technology has outpaced the legal system's ability to assess its compliance with existing laws. Those engaged in creating AI-generated music must be mindful of the legal challenges and ensure genuine human involvement in the music creation process. Moreover, AI's capacity to produce original content raises concerns about its eligibility as an intellectual property (IP) holder and the potential infringement of copyright materials. Currently, copyright protection is exclusively granted to works that meet specific criteria, such as those which are being original and independently created by humans. Neither the Copyright Act of 1957 (India) nor the Copyright Act of 1976 (USA) explicitly safeguards content generated by AI. For instance, the Copyright Review Board of the USA withdrew copyright protection from AI-generated artwork in the book 'Zarya of the Dawn' due to it being created solely by artificial intelligence without any human input.

Each work must be evaluated individually because there are no clear-cut guidelines for determining how much input or involvement by an AI's user is necessary. It is a matter of degree. According to traditional understanding, the more human involvement and the more AI is utilized as a tool (rather than the creator), the stronger the case for copyright protection becomes. This approach reflects the evolving scenario of AI-generated creations within the world of copyright laws.

### ***Intellectual Property disputes related to AI-generated content***

The emergence of artificial intelligence (AI) has not been without its fair share of intellectual property rights (IPR) disputes and notable controversies. One such instance is the high-profile dispute between Google's DeepMind and the estate of Marvin Minsky, a pioneer in the field of AI. DeepMind had faced criticism when it used Minsky's copyrighted works to train its AI algorithms without explicit permission or licensing agreements. The case had raised important questions regarding the ownership and use of intellectual property in AI research and development. Another notable case involves the use of AI-generated content and its impact on copyright. When in 2019, a controversial artwork created by an AI program called "Portrait of Edmond de Belamy" was sold at an auction in New York for an unexpectedly high price of 432,500 US Dollars. The artwork sparked debates over whether the AI algorithm itself could be considered the author, raising further questions about copyright protection and attribution to AI-generated creations.

AI algorithms, particularly those equipped with deep learning capabilities, have been involved in copyright infringement disputes. For instance, in 2019, a photographer, David Slater, was engaged in a legal battle with animal rights organization PETA over the copyright ownership of a selfie taken by a macaque using Slater's camera. PETA argued that the macaque should be granted the copyright, claiming the AI-driven nature of the camera's autofocus feature made it a co-creator. The case was eventually settled, with Slater retaining the copyright, but it raised important questions about the role of AI in generating creative works and the associated legal implications. The above examples are only a few taken from a huge number of disputes that continue to emerge because of the unclear guidelines and legal ambiguities with respect to the position of artificial intelligence (AI) generated content.

### ***Future Challenges***

In today's rapidly advancing technological world, the integration of artificial intelligence (AI) in intellectual property rights (IPR) presents both immense opportunities and profound ethical considerations. As AI systems continue to evolve and contribute to the generation and protection of intellectual property, it becomes imperative to establish frameworks that prioritize ethical and responsible use. To ensure the fair and equitable application of AI in IPR, it is crucial for policymakers, legal experts, and stakeholders to collaborate in developing comprehensive guidelines and regulations.<sup>13</sup> These measures should address the ethical challenges surrounding AI-generated content, biases in algorithms, and the protection of privacy and data of the public. By embracing a proactive and multidisciplinary approach, we can foster innovation while safeguarding the rights of creators, promoting inclusivity, and maintaining public trust in the AI-driven intellectual property ecosystem. Only through a concerted effort can we truly harness the transformative potential of AI while upholding the fundamental principles of fairness, accountability, and responsible use in the realm of intellectual property rights.

As AI continues to transform various industries, this delicate balance between innovation and access to AI-generated content becomes a pressing concern. The need of the hour is flexible licensing models that allow for broader access to AI-generated content, one which encourages

---

<sup>13</sup> Elisabeth Kasznar Fekete, *Artificial Intelligence and Intellectual Property*, 113 TRADEMARK REP. 717 (2023).

collaboration and open innovation. <sup>14</sup>By embracing collaborative frameworks, shared resources, and ethical guidelines, policymakers and stakeholders can overcome these challenges of AI-generated content and move forward towards a future where innovation flourishes while ensuring equitable access for all.<sup>15</sup>

Also, the need for international harmonization of intellectual property rights (IPR) regulations has become increasingly crucial more than ever. As AI technologies cross borders, the existing fragmented intellectual property rights frameworks pose significant challenges for innovation, collaboration, and fair competition. Hence, a global effort towards harmonization is crucial to ensure consistent protection and enforcement of AI-related intellectual property rights, while synergistically promoting the free flow of ideas and fostering international cooperation. By establishing such unified standards and guidelines, countries can create a level playing field for AI innovators, enabling them to navigate the legal complexities with greater certainty and encouraging more cross-border collaborations. International harmonization of AI-related intellectual property regulations is not merely a technical matter but a strategic need to unlock the full potential of artificial intelligence and drive global progress in the present digital age.<sup>16</sup>

### ***Conclusion***

In summary, the integration of AI technologies into the realm of intellectual property (IP) brings forth a range of advantages and challenges. AI can be seen as a "double-edged sword," carrying both positive and negative implications. To effectively address the complexities arising from AI-based infringements of intellectual property rights, careful handling of this metaphorical sword by stakeholders and service providers is required. It necessitates a commitment to best practices and a nuanced understanding of the evolving times.

The future of intellectual property rights hinges upon our ability to cultivate an environment that harnesses the capabilities of AI while upholding the core principles of intellectual property protection. This balance is crucial for ensuring a harmonious coexistence between innovation

---

<sup>14</sup> Victor M. Palace, *What If Artificial Intelligence Wrote This: Artificial Intelligence and Copyright Law*, 71 FLA. L. REV. 217 (2019).

<sup>15</sup> Sarah Sharma, *Intellectual property rights and their significance in context of artificial intelligence*, IJCLP (2022), pp. 1-2.

<sup>16</sup> Amitai Etzioni and Oren Etzioni, *Should Artificial Intelligence Be Regulated*, IST. SUM 2017, Vol. 33, No. 4 (SUMMER 2017), pp. 32-36.

and the preservation of creative rights. Thus, paving the way for a future where technology and intellectual property thrive synergistically.