

Virtual Goods and Digital Designs: A Case for Sui Generis IP Protection in India

Kislay Soni^{1†} and Deeksha Singh²

¹Faculty of Law, University of Delhi, Delhi – 110 007, India

²Symbiosis Law school Hyderabad Campus, Symbiosis International (Deemed) University, Telangana – 509 217, India

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Existing Intellectual property laws of India are facing difficulties in safeguarding digital markets and video games alongside metaverse platforms and virtual possessions and digital design items. Studies reveal that virtual property protection is missing under Indian laws through existing copyright regulations and trademark frameworks and design right frameworks. The current legal frameworks fail to provide satisfactory resolution methods for conflicts about virtual ownership of digital assets. A doctrinal, analytical and comparative legal research methodology has been adopted in this paper. Studies show global nations are working to improve their digital intellectual property legislation, but India has been lacking. India requires a new intellectual property regulation framework to establish guidelines that will supervise digital domains and their technological development.

Keywords: Virtual Goods, Digital Designs, Design Law, Sui Generis Protection, Metaverse, NFTs, Intellectual Property

The digital economy is rapidly evolving in four major business sectors which include fashion, gaming, art and metaverse commerce. Gaming skins, NFT art pieces and virtual clothing for game avatars (Virtual Assets) are gaining importance and market share within digital environments. The expansion of Decentraland as well as Roblox and Ethereum platforms represents the rising importance of virtual assets for global trade activities. This development seeks an urgent need for lawmakers to guard and control these assets.

Market analysts estimate that virtual goods will surpass \$81 billion by 2024 before reaching over \$294 billion by 2032.¹ The global NFT market started in the year 2023 with a value of \$27 billion while experts predict that it will reach \$400 billion by 2032.² The creator economy of India shows a projected growth of INR 500 billion by 2030 highlighting the need for prompt reforms in digital IP laws.³

The current IPR frameworks offer insufficient solutions to protect the innovative digital possessions that emerged in the twenty-first century. Under Indian law, a design qualifies as per the Designs Act, 2000, as something which gets applied to physical objects. Digital-only creations that include avatars, virtual fashion items and interactive 3D models lack any form of legal protection according to the current intellectual property laws. The administration of

digital functional design lacks proper recognition under the copyright law. Also, the primary target of trademark law involves only brand recognition rather than visual aspects of virtual items. Digital creators experience severe legal challenges that stem from unprotected intellectual property laws.

This paper aims to resolve the existing gaps and propose a holistic system for safeguarding virtual goods and digital designs under Indian law.

Digital designs as well as virtual goods play essential roles in the gaming, fashion and art sectors so we need to operationalise them. Also, the legal protections in India's present IP laws specifically regarding virtual and digital asset safeguards will be analysed.

This paper investigates global and domestic obstacles to identify the need for a specialized legal reform in India recognizing digital designs and virtual goods uniqueness. This paper proposes establishing a new IP framework that can address specifically the digital creator needs and ensure legal protection for metaverse and beyond virtual assets. The new IP framework shall be designed considering India at the forefront of digital economies.

Understanding Virtual Goods and Digital Designs

Digital technology innovations have created a new IP category known as virtual goods and digital designs. The digital economy contains three distinct concepts i.e. Digital Business Models, digital Assets

[†]Corresponding author: Email: kislaysoni@gmail.com

and Digital Platforms; that relate to each other but maintain individual definitions particularly when applied to gaming as well as fashion-tech and metaverse developments.

Defining Virtual Goods

The virtual environment contains digital products that exist as intangibles and conventional physical ownership goes missing. These objects are shared on the internet platforms, gaming areas and social networks... "Examples of virtual goods include in video games players obtain digital alternative appearances which modify their characters' appearance as well as their weapons' aesthetics and their transportation assets. In Fortnite players can purchase skins to modify their in-game digital appearance and equipment appearance. Players and users can apply customizable features through avatar wearables that exist in virtual worlds such as Second Life and Roblox.

Non-Fungible Tokens (NFTs) represent distinct digital elements that consumers obtain through blockchain transactions mostly containing art or musical pieces or collectibles. NFTs maintain their uniqueness through their unique ownership records which prevent them from being equivalents with any other digital token.

Technical Underpinnings and IP Gaps

Non-fungible tokens (NFTs) utilize blockchain metadata, and smart-contract logic to store ownership and royalty payments and automate transfer conditions. The metadata of each token, stored on distributed ledgers, indicates the unique identifier of the asset, its provenance and any licence terms; smart contracts enforce the terms in a programmatic fashion. In Indian law, however, this metadata and code are not covered by the Copyright Act, s2(ff), definition of computer programmes,⁴ and do not generate a distinct trademark interest unless there has been express assignment of a trademark right by contract. Therefore, tokenization of a digital design does not grant copyright and trademark in India; the creator still has to grant the rights under the conventional licence agreements under the Indian Contract Act, 1872.⁵

NFT ownership does not automatically grant ownership of copyright or trademark rights unless an explicit assignment occurs. The existing legal systems of the UK and Singapore advise NFT buyers to examine sale contracts to verify if reproduction, display, or resale rights are included in the agreement.⁶

Three-dimensional digital representations known as 3D Digital Assets serve different sectors from gaming through digital art to virtual environment development. Virtual fashion show models along with digital clothing exist both in metaverse platforms and virtual fashion presentations.

Modern digital collectibles serve as valuable assets for digital systems that exist on platforms such as OpenSea for NFTs and gaming environments. More importantly, the metadata and smart-contract rules that control transfer or royalty conditions are not considered as copyrightable computer programmes under s2(ff) of the Copyright Act, 1957, which creates a legal gap.

Defining Digital Designs

Digital designs are aesthetically created content that remains in digital form and lacks physical manifestations. Traditional products obtain their design elements from physical forms, but digital designs exclusively serve virtual environments. Digital objects function mainly as functional and aesthetic elements for digital platforms.

Examples of digital designs include digital artwork with avatars and 3D models which are seen in games and virtual reality applications. The metaverse requires digital fashion design tools for creating virtual avatar wearables and digital artworks that exist only as digital items.

The user interface and user experience designs, implemented through software-based elements, serve websites applications and digital platforms. The interaction points for users during website navigation consist of buttons, menus and screen arrangement and visual components.

Fashion Illustrations exist as virtual digital mock-ups that show clothing accessories and fashion collections only within digital space. Digital fashion designers use these designs which can be traded as NFTs.⁷

The digital world heavily depends on these designs which designers create through programs such as Adobe Illustrator, Photoshop, and Blender for 3D modelling purposes.

Contrasting 'Virtual Goods' and 'Digital Designs' from Traditional Physical 'Articles' under the Designs Act, 2000

Under India's Designs Act of 2000, a design represents any visual arrangement of shape or configuration alongside pattern or ornamentation, or

lines or colors put onto an article for manufacture. The traditional design definition requires a design to have a physical presence through objects such as furniture, clothing or cars.⁸

Virtual goods together with digital designs stay intangible entities because they lack physical form. All activities regarding these digital goods occur exclusively within digital domains. Virtual goods exist exclusively as digital entities which include both game skins as well as NFTs but do not extend to physical objects for the users to touch.

The present Design regime offers insufficient protection as the Act specifically deals with physical designs disregarding virtual designs. This insufficiency hinders the development of digital designs and prospects of digital creators.

Use Cases: Gaming, Fashion-Tech, NFT Marketplaces, and Digital Art

Various sectors use virtual products and digital concepts, and they experience a lack of comprehensive IP framework protection causing obstacles and distinctive business requirements.

Virtual gaming products including in-game skins and virtual items find millions of buyers and sellers in the market. Both developers who create games and their gaming players spend meaningful resources to develop and acquire virtual assets. Digital assets that exist only in computer code are beyond the scope of the Designs Act thus making creators exposed to intellectual property theft and fraudulent replication.

Digital fashion designers through Fashion-Tech have seen rapid growth while developing digital-only virtual items for digital avatars. Indian laws lack an effective system to protect the digital fashion designs that get traded as NFTs in metaverse ecosystems. The current legal status of designs in India leaves creators in doubt about protecting their fashion designs from potential theft.

OpenSea and Rarible operate as NFT Marketplaces through which people can purchase artworks and collectibles as well as digital fashion products. The distinction between artistic works and designed objects and practical items becomes unclear when looking at virtual assets which results in confusion regarding their IP protection standards.

The U.S. court in *Hermès v Rothschild* (2023) decided that MetaBirkins NFTs violated Hermès trademark protections regardless of their digital nature.⁹ Jurisdictions that have implemented virtual asset protection laws through intellectual property

laws demonstrated success in *Hermès v Rothschild* yet separate jurisdictions which lack such digital rights laws struggle to defend virtual assets.

Artists today are developing purely digital artistic works that exist only within NFT art markets. Copyright laws in India still lack the ability to safeguard intangible works which makes digital creators vulnerable to legal exploitation and copyright violations.

The Inadequacy of India's Existing IP Laws

India has a strong IP system that retains power in some domains yet encounters difficulties when it comes to embracing new digital and virtual properties. The existing Designs Act of 2000, together with the Copyright Act of 1957 and the Trademark Act of 1999, do not provide protection for virtual goods or digital designs thus creating an unprotected legal space for creators in the expanding digital economy.

Designs Act, 2000

India passed its main IP laws when physical production and printed works of creativity were the dominant means of business, and they were not well suited to the intangibles. The three acts, the Designs Act, 2000, the Copyright Act, 1957, and the Trade Marks Act, 1999 all assume the existence of a tangible article, and this leaves loopholes as the digital marketplace develops.

Industrial products in India receive primary protection for their aesthetic value through the Designs Act, 2000. Any article that is manufactured and sold in the market requires a “design” consisting of shape, configuration, pattern, ornamentation or composition of lines or colors applied to the article according to the Designs Act definition. The Act is silent on the protection of digital and virtual assets.

Physical Article Requirement

The main condition under the Designs Act requires designs to be manifested on physical objects. The physical article requirement in the Designs Act directly conflicts with virtual products including NFTs and gaming skins and avatars because they exist only in digital form. The Designs Act excludes digital fashion items from protection because they exist only in virtual realms such as Decentral and Roblox where no physical embodiment exists. The CNIPA of China initiated changes to trademark classes to allow registration for virtual downloadable

goods such as clothing and avatars. Under the new Trademark Act of South Korea, the digital items are recognised as independent entities that can be registered directly as metaverse apparel.¹⁰

No Recognition for Digital Designs or Interactive 3D Models

The legislation fails to provide any protection for digital-only creations and interactive three-dimensional models that appear in metaverse applications and digital goods. The present legal framework does not provide creators with protection against copyright infringement when they trade their virtual fashion pieces such as avatars and digital items as commodities. These creators face great risk because digital designs and interactive 3D models lack proper legal recognition which makes them vulnerable to piracy counterfeiting and unauthorized duplications. In *Super Cassettes Industries Ltd. v Myspace Inc.* (Delhi HC, 2018), the court made online intermediaries responsible after they were notified about infringing content. Metaphorically, it is the responsibility of NFT platforms and metaverse operators in India to police and take down infringing digital items once legitimate complaints have been made.¹¹

Virtual designers encounter legal vulnerability exposure because the Designs Act fails to provide them with safeguards against violations within virtual domains.

Copyright Act, 1957

The Copyright Act, 1957, grants protection to literary, dramatic, musical, and artistic works. The current Copyright Act contains significant restrictions when used for digital design protection and virtual goods protection. Under the law artistic works receive protection and these works include traditional artwork such as two-dimensional or three-dimensional creations like paintings and sculptures. Digital designs that function as user interface components and virtual fashion products cannot be easily classified under the existing artistic work definitions.

Exclusion of Functional and Applied Designs

The Copyright Act maintains separate classifications between artistic works and applied designs. Copyright protection applies exclusively to artistic designs while it does not cover designs that function as applied elements. The artistic design of an in-game avatar outfit maintains its functional character because it determines player interactions with virtual space. The Designs Act directly conflicts with copyright law because it provides protection for

physical designs while digital design creators must depend on insufficient copyright protection.

Problems of Overlap and Confusion

There exists confusion about copyright protections of virtual goods because copyright law fails to protect functional digital designs. Digital fashion along with 3D models in video games function as interactive virtual objects despite their aesthetic appearance. Indian courts have also developed robust moral rights of authors in some landmark cases. *Amar Nath Sehgal v The Delhi High Court in Union of India* (2005) supported the right of an artist to complain about the mutilation and unauthorised removal of his mural on a government property.¹² The case dealt with physical artwork, but its attribution and integrity principles apply directly to digital creators the most, especially those who deal with NFTs, virtual galleries, and generative design platforms. It shows that the judiciary is ready to enforce the moral rights of the creators to their digital and physical expressions. Legal ambiguity prevents creators from obtaining complete protection for their work since it does not fall within the jurisdiction of the Copyright Act or Designs Act. Section 15 of the Copyright Act, 1957 further compounds this confusion by restricting the protection of copyright on designs which can be registered under the Designs Act.¹³ Reproduction of such designs beyond fifty times causes it to be deprived of copyright protection unless registered. Grey area may include such works as mass-distributed digital works in the form of avatars, skins, or UI/UX templates in games. This provision fails to take into cognizance the intangibility and exclusive licensing of digital goods and so cannot be applied in the virtual environment. The current state of Indian copyright law remains unclear about protecting generative AI-based digital creations. International copyright laws including the U.S. and EU exclude protection for exclusively AI-generated work products which creates new hurdles for virtual creators using generative AI tools.¹⁴

Trademark Act, 1999

Under the Trademark Act, 1999, the law safeguards identify the products and services between different businesses. The Trademark Act mostly protects logos and brand names together with service marks, but it does not extend to design or aesthetic elements.¹⁵

Inadequacy for Standalone Virtual Goods

The Trademark Act proves ineffective in safeguarding fashion skins and digital accessories along with UI designs if they lack the ability to identify a particular source. Virtual fashion and gaming skins do not function as brand identifiers because they exist as components of the interactive platform or gameplay instead of serving as source identifiers. Virtual goods receive trademark protection under the Trademark Act only when they serve as distinctive indicators of commercial origin since the Act does not protect their artistic or aesthetic elements unless linked to a specific commercial identity.

A virtual fashion item for avatars in a metaverse retains no trademark protection status until its creative aspects are used to market a brand that indicates specific goods from a supplier. Fashion-tech designers and virtual goods creators find no legal protection from unauthorized copying because of the current limitations of the law.

Summary of the Legal Gap

Present-day Indian laws fail to safeguard digital goods and virtual designs. The current Indian Intellectual Property laws including Designs Act, Copyright Act and Trademark Act were created for physical items and traditional creative works thus lacking proper coverage for digital goods and virtual designs. IPR protection remains undefined in the vast digital space despite its rapid market expansion.

No concrete protection for Digital Designers

Digital designers operating in India lack protection for their digital works and virtual designs under the traditional legal regime. The absence of legal protection creates an unfavorable condition that exposes creators to infringement and counterfeiting as well as work exploitation. The owners of virtual avatars, gaming skins and virtual fashion sometimes find it difficult to establish ownership rights and defend their intellectual properties within virtual marketplaces.

Enforcement against Infringement in Virtual Spaces

Virtual environment enforcement proves very difficult to execute. Past IP defense approaches like design registration through the Designs Registry along with cease-and-desist orders prove ineffective when used to protect digital assets that spread across national borders. Virtual marketplaces dedicated to NFTs as well as game skins and metaverse assets operate without clear legal frameworks for dispute

resolution primarily because they are minimally regulated. Furthermore, enforcement of rights in decentralized or cross-border platforms is nearly impossible under current laws, as traditional remedies like takedowns or cease-and-desist orders normally don't work in immutable blockchain-based assets. It is imperative to note that the introduction of the DPDP Act 2023 is the turning point in the data-protection governance. The law now demands that platforms have the consent of the user expressly before they process their personal data, a condition that is necessary considering the fact that the so-called algorithmic recommendation engines that metaverse platforms use are highly likely to recreate bias, i.e. they favor a high-profile creator, on a predictable basis. As a result, any sui generis regime, which is deeply rooted in the DPDP Act 2023, must also include the routine algorithmic-impact assessment and privacy audits.

Judicial Perspective in India

Although India courts have not directly faced NFTs or IP disputes in the metaverse, they have ruled on some critical matters pertinent to the enforcement of digital content, intermediary liability, and copyright translation to the virtual world. These precedents are useful in putting into perspective the possible interpretation or challenge of a sui generis framework in practice.

The Delhi High Court in *Super Cassettes Industries Ltd v. MySpace Inc.*, 2011, has ruled that internet intermediaries cannot be permitted blanket exemption against liability when they are engaged in hosting infringing content actively without exercising due diligence.¹⁶ The court also highlighted the importance of taking down the content after being informed by the copyright owner which should apply to the platforms that have virtual goods created by their users.

Super Cassettes Industries Ltd. v Myspace (2011) Delhi HC. In this T-Series has managed to obtain injunctions against copyright infringing uploading and streaming of songs. Although relating to audio material, the case highlights the actionability of copyright in the online environment and how digital hosting systems are facing more judicial attention.

Likewise, *Amar Nath Sehgal v Union of India* (2005) is doctrinally valid to the digital creators. Section 57 of the Copyright Act to distortion or mutilation of the work of an author (even when this was done by a government agency). Such

jurisprudence can be analogously applied to unauthorized digital design or NFT manipulation or commercialization by the designer or their consent.¹⁷

These precedents show that though the court understands digital IP disputes, the existing legislations do not provide localized solutions to the challenges of virtual ownership, licensing and enforcement. Therefore, a well-organized and technology sensitive sui generis framework is more urgent.

Comparative International Perspectives

Leading jurisdictions have started to change their design laws because digital innovation continues advancing at a quick pace. The design approaches implemented by the European Union, the United States and the United Kingdom provide India with vital inspiration for its sui generis legislation.

European Union

The EU implemented its Design Legislative Reform Package during mid-2023 to include virtual assets and digital items in its community design regulatory framework.¹⁸ Key elements include:

- a) The definition of “Article” in proposed amendments extends protection to include digital representations displayed through screen and virtual environment interfaces.
- b) The reforms protect interactive virtual 3D models as designs when they display new features with unique characteristics among other things.
- c) The EUIPO evaluates new application procedures for digital designs that would shift away from physical sample requirements by accepting digital files or screenshot evidence. EUIPO’s 2023 has brought reform with this the applicant can provide as evidence screenshots or 3D renders, so the mandatory physical sample that was needed for design registration is lifted.¹⁹
- d) These reforms protect new digital first creations under EU design law while establishing guidelines for future design office development without altering their base legislations.

United States

The USPTO together with the U.S. Copyright Office maintains active involvement regarding NFTs digital avatars and virtual design filing in the USA.

The USPTO initiated its Digital Designs Initiative to present NFTs and virtual goods framework in existing industrial design regulation policy standards.²⁰ NFTs remain rooted in blockchain technology, but USPTO states that design registration eligibility requires assets to

demonstrate newness and originality and lack obviousness in their visual presentation. The USPTO and Copyright Office clarified that NFTs do not transfer copyright automatically and must be explicitly stated within the smart contract or sale agreement to license or assign it.

The U.S. Copyright Office published Compendium updates about Works Made for Hire and co-authorship which affect virtual art and avatar protection through their discussion of AI-driven digital creation processes. The Office is reviewing whether aesthetic digital avatar elements fulfil the requirements for protection such as pictorial graphics and sculptural works.²¹

The USPTO conducted hearings about DABUS inventions along with case studies because both activities demonstrate their willingness to examine nonstandard creators, however, AI-driven creations are kept outside the purview of IP Laws. Discussions about virtual goods lead towards progressive changes in design law for recognizing only digital creations.²²

These legislative and legal approaches illustrate how the United States attempts to move forward recognising blockchain-based assets within existing IP structures alongside digital creations without developing new laws.

United Kingdom

The UK Intellectual Property Office (UKIPO) actively consults about design law relations with digital fashion and gaming domains.

In late 2022, UKIPO introduced a public consultation about AI-related IP matters that explored how AI-created and modified digital designs should earn protection. The survey participants emphasized the necessity for specific guidelines regarding the registration eligibility of UI/UX assets and metaverse wearables as designs.²³

UKIPO organized the Digital Fashion & Gaming Working Group which connected stakeholders between fashion technology businesses and game producer groups to investigate eligibility concerns for virtual product design registration. Designers experienced two main challenges: they struggled to provide interactive design files to UKIPO, and they needed better clarity regarding digital wearable protection boundaries.

The UK Intellectual Property Office issued temporary guidance to help designers file images from their applications by including screenshots and demonstration videos or exported 3D models.

Through this advisory measure, some virtual designers achieved design rights by demonstrating their applications to UKIPO on an individual basis.

These temporary guidelines along with the consultations demonstrate how the UK maintains stakeholder-based flexibility to connect rigid physical design legislations to changing digital creative requirements. IP creation terms within smart contracts are promoted by the UK Intellectual Property Office while it supports digital design submissions through its new temporary protocol.²⁴

Key Learning

A noticeable trend becomes visible across these different jurisdictions because:

- (i) All three offices now update application procedures by allowing digital files along with screenshots and 3D models as part of their procedures to minimize the use of physical samples.
- (ii) Lawmakers aim to extend legal definitions of “article” or “design” to include electronic creations.
- (iii) The essential input of stakeholders results from public discussions through working groups which led to policy changes that address digital-first sector requirements.
- (iv) Procedural modernization models for downloadable virtual asset registration can be learned from China and South Korea who have adjusted their design and trademark systems to accommodate these assets.

The government of India has not established any confirmed regulatory plan regarding digital design guidelines. The Designs Act, 2000, needs immediate stakeholder consultations to establish procedural guidelines that will connect India to worldwide design legislation trends. India should adopt its own sui generis framework for digital designs through insights gained from the EU legislative package and the USPTO digital designs portal together with stakeholder feedback initiatives from the UKIPO to develop a suitable system for its digital economy and creative industries.

“Adapting Global Models for India”

The federal set-up and the pronounced social and economic heterogeneity of India necessitate the enlisting of a wide range of stakeholders before the intellectual-property regimes are brought into line with the restrictive definitions issued by the European Union. As an example, the centralized trademark registry in China is the direct opposite of the governing reality of India: the latter is forced to strike

a delicate balance between a computerized classification system and the model of the micro-designer.

Moreover, to prevent the triggering of mass litigation involving the registration of digital goods, it would be wise to pilot-test proposed legislative pilot programs. An example can be a restricted fast-track registration of digital fashion, which could be used as an empirical foundation to measure the practicality of more ambitious statutory reforms.²⁵

The Case for a Sui Generis IP Regime in India

India’s intellectual property legislation based on the Designs Act of 2000 and Copyright Act of 1957 together with Trademark Act of 1999 was primarily established for physical assets. The laws in existence show no adaptation toward digital goods or virtual designs despite their rising importance. The attempt to extend current legal frameworks for digital assets would generate unclear legal conditions and deny proper protection for digital creators. India needs to create a new IP system that specifically targets virtual goods and digital designs because such protection will help creators prove ownership and defend their intellectual property rights.

Legal uncertainty will arise from stretching existing laws to include digital designs because they have no clear provisions for such items.

The Designs Act of 2000 in India protects visual article appearances for physical products through law enforcement. Digital designs cannot fit seamlessly into the existing legal framework because they possess an intangible nature. The core requirement of the Designs Act that requires the physical application of designs prevents virtual fashion meant for avatars in games or the metaverse from receiving legal protection. Under the current copyright regulations NFT-based art and interactive 3D models remain unprotected since courts classify them as functional utilitarian designs that fall outside artistic classification eligible under the Copyright Act. Legislators who aim to expand existing laws into virtual goods territory would encounter unpredictable judicial decisions that generate confusing legal situations.

Tailored Originality & Infringement Tests

The current laws employ unyielding criteria to determine originality and infringement cases. The Designs Act requires novelty and originality in designs, yet these principles become hard to enforce

on virtual assets because different creators work together on digital designs.

Such a sui generis framework should be developed for specific examinations for originality and infringement that respect the particularities of virtual assets. The originality test should assess creative digital tool usage while the infringement test needs to evaluate the similarity levels between digital assets and current digital products or designs. Such a specialised framework will establish a balanced system that better serves the digital economy.

Licensing & Transferability of Virtual Assets

The digital marketplaces serve as platforms for transactions involving NFTs as well as virtual assets. The sui generis regime would establish specific laws to handle virtual asset licensing as well as the distribution of digital works to provide creators with ownership control over digital sales. Digital creators would be able to authorise design licences under this law while establishing usage parameters and securing royalty payments from virtual environment re-sales or use. The system would create incentives for creators that would aid in expanding the digital economy.

Smart Contracts and Licensing Clarity

The new framework needs to accept smart contracts as legitimate vehicles for licencing in digital transactions. This means that courts should consider metadata and records in the blockchain as evidence in relation to the terms of the license of the use of the IP, including royalty and reproduction rights.²⁶

AI-Created Designs and Human Authorship Standards

The government of India needs to establish guidelines on the eligibility of AI-generated digital designs for protection. International copyright law

denies protection to works without human authors so nations require guidelines to determine what level of human creativity triggers copyright eligibility (Table 1).²⁷

Propose a Digital Designs Protection Act

A Digital Designs Protection Act must be established to fulfil the requirement for a specific intellectual property framework. A special law would specifically handle legal obstacles from digital designs along with virtual products to guarantee creators equal protection as existing traditional sectors possess for their physical counterparts.

Definitions

A Digital Designs Protection Act must be established to fulfil the requirement for a specific intellectual property framework. The act will specifically resolve legal issues arising from virtual goods and digital designs because it establishes equivalent intellectual property protection for creators within digital and traditional industries. These definitions would establish the **scope** of protection under the law, ensuring that digital creators know which kinds of work are eligible for protection.

Duration of Protection

Digital design protection under the act would probably match creative work copyright duration (the author's life plus 60 years) as its primary term. The duration of protection for virtual goods and NFTs should relate to their marketability and usage because creators should retain control while their digital assets continue to be profitable.

Registration Process

The registration system needs simplification to accept electronic document submissions by creators.

Table 1 — Comparative analysis of existing intellectual property Act the proposed digital designs protection act

Aspect	Existing Acts	Proposed Digital Designs Protection Act
Subject-Matter	Designs (Designs Act 2000); works of art (Copyright Act 1957); brand trademarks (Trade Marks Act 1999).	Virtual commodities, non-fungible tokens, digital designs, UI/UX assets, and AI-generated works.
Originality Test	Novelty and originality in comparison with previous physical or artistic work.	Customized testing, evaluating inventive applications of digital tools and determining the acceptable similarity thresholds for metaverse assets.
Registration Process	Manual filing, Physical specimen requirement	All files submitted must be electronic: 3D models, renders, screenshots and other related materials. Examinations can be conducted through an online portal and thereby accelerated.
Enforcement Mechanism	Cease and desist, civil suits, Criminal fines.	Dedicated ODR platform; CERT-In/IP India task force; standardized cross-border enforcement, provisions.takedown protocols;
Duration of Protection	10 years (Designs); author's life + 60 years (Copyright); 10 years (Trademark, renewable).	Author's life + 60 years for designs and AI works; adjustable terms for NFTs based on commercial lifecycle.

The registration process should accept digital files such as 3D models, digital renders or screenshots instead of physical representations. Internet-based registration systems that easily enable creators to protect their digital property would help them achieve legal action against infringements.

Enforcement & Cross-border IP Issues

Legislative mechanisms should be established under the act to enable creators to defend their rights when operating on digital platforms. This could include provisions for Cease-and-desist orders for infringement.

Digital creators should benefit from specific online dispute resolution (ODR) systems that enable them to solve digital environment conflicts.

Digital creators must have access to cross-border enforcement for their assets sold through international platforms which include OpenSea and Rarible to protect their work worldwide.²⁸

Policy Recommendations

The Indian government needs to adopt a step-by-step strategy that addresses virtual goods recognition and digital design protection. A sui generis framework demands clear implementation that requires various legal changes and procedural and institutional adjustments. These recommendations are organised into short-term, mid-term and long-term policy directions which will help India maintain global standards while protecting its digital content creators.

Immediate Short-Term: Amend the Designs Act to Include Virtual Articles

Amending the Designs Act, 2000, remains the primary objective to extend its definitional scope to digital designs and virtual article protection. The current law prevents design protection for digital creations such as avatar clothing, virtual accessories and gaming skins and 3D UI designs because they lack physical characteristics.

Legislative changes need to include non-physical and virtual items among design registrable subjects while following the EUIPO's proposed reforms. This would see the country fall in line with international standards and offer interim protection until a complete digital IP framework is embraced. The amendment would enable the Designs Office to accept digital files such as screenshots and renders as well as 3D files instead of physical specimens.

Mid-Term: Develop Guidelines for Enforcement of Digital Designs across Platforms

India needs to create enforcement guidelines that can handle infringement problems occurring in virtual spaces because digital assets are spread across worldwide platforms having a dynamic nature. These guidelines should:

a) The guidelines should establish clear rules to identify when digital design use without authorization happens in virtual environments.

b) The regulatory bodies IPIndia and CERT-In should gain the power to work together to inspect NFT platforms and gaming networks along with online marketplaces.

c) The implementation of online dispute resolution (ODR) tools should be promoted to resolve design-related disputes that appear in transnational digital transactions.³⁰

d) The enforcement system needs to connect with platform-specific policies implemented by metaverse and gaming businesses to stop Indian creators from being excluded from private arbitration or community-based IP enforcement methods.

e) International platforms must establish collaborative enforcement systems through cooperation between themselves and regulatory bodies IP India and CERT-In. The establishment of specific platforms known as Online Dispute Resolution (ODR) systems should provide solutions for international digital IP disputes.

Long-Term: Introduce a Digital Designs Protection Bill as a Sui Generis Regime

The draught and passing of a Digital Designs Protection Bill represents the ultimate solution to create a separate legal framework for virtual assets. The sui generis law needs to include clear definitions of virtual goods, digital designs, and NFTs.

The eligibility criteria should consider both originality and aesthetic value in order to determine qualifications. The system requires an updated registration platform that handles electronic submissions followed by verification processes. The proposed law should include provisions regarding the rules governing digital asset assignment through licensing and commercial terms. The proposed legislation should include international enforcement tools that address jurisdictional issues in virtual marketplaces. India would become a leader in digital IP governance through such a framework which would strengthen trust and investor participation in developing digital industries.

Institutional Collaboration: Engage with Stakeholders for Regulatory Dialogue

A comprehensive digital design system requires multi-stakeholder dialogue which ensures inclusivity for its development. The Department for Promotion of Industry and Internal Trade (DPIIT) together with IPIndia should actively work with multiple stakeholders to ensure a robust system for Digital Design protection. Fashion technology businesses continue to create innovations in the domain of virtual apparel. NFT marketplaces like WazirX, OpenSea (India users), and other blockchain platforms.

Developers who create video games together with metaverse platforms also have in-game virtual economies. Such partnerships will enable the development of practical legal instruments alongside technological neutrality and assistance in addressing creator and developer needs working in virtual realms.

Enablers of Broadening

- (i) Enhance enforcement powers- Empower a combined CERT-In/IP India task force to observe and execute in real-time take down of digital assets that infringe upon the rights. Regularize cross-border ODR procedures, including users' privacy and encryption to safeguard users' personalities and transaction details.
- (ii) Encourage education and awareness - Organize workshops to digital creators and IP practitioners and incorporate digital-IP courses to law-schools, and training on best practices over licensing, conducted by the platforms.²⁹
- (iii) Promote cooperation and innovation - initiate public-private alliances between technology companies, the creative sector, and regulators; create sandbox-type testing grounds in which new digital-goods registration and enforcement workflows could be run.

Conclusion

The fast development of the digital economy alongside the rising usage of digital designs and virtual goods demonstrated inadequacies within India's current IP framework. The Designs Act of 2000 along with the Copyright Act of 1957 and the Trademark Act of 1999 were created at a time when creativity and commerce existed within physical boundaries. Digital creators now spend their time developing fashion for avatar users. Creators who work without legal protection face unpredictable

value safety for their work in today's fast-growing global market.

This paper has demonstrated that current IP laws would lose their foundational strength due to legal confusion if they were not modified to fit digital reality. The present legal definitions of physical-world goods do not successfully convey the distinct features that define and characterize virtual goods alongside their operational characteristics. Digital asset protection efforts can be seen across jurisdictions such as the EU, the US, and the UK, therefore India should also adopt new laws to keep pace with the changing times. There is a compelling case for a sui generis legal regime: A particular legal framework should support virtual attributes of digital products and their market potential despite their borderless movement. India should establish a framework to protect creative innovation by first modifying the Designs Act, then issuing enforcement directions and finally passing a Digital Designs Protection Act in stages.

The initiative aims to safeguard creators and developers alongside establishing India as a leader in intellectual property innovation. Indian digital creators need a robust legislative framework and institutional backing for foreign investment to become successful leaders in virtual goods governance. Digital creators need urgent protection because they operate unprotected within the unregulated virtual realm. The modernization of IP frameworks by China, South Korea and EU states should motivate India to emerge as one of the global leaders in digital IP governance. In drafting and putting in place proactively a Digital Designs Protection Act, India can give certainty of law and encourage innovation in its rapidly growing virtual economy.

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