

● GROWING IMPLICATIONS OF METaverse IN HUMAN BEINGS' LIFE: A LEGAL ANALYSIS



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Abstract

"Metaverse" is not a new concept, rather, it has its origin in an ancient Indian Epic- "Mahabharata (Bhishma Parva)". Nowadays, the same technology is being used in different fields of life of human beings, such as Advertisement, Education, Human Resource Training, Sports, Social Media, etc. Imagination is one of the functions of brain of human beings, the Central Processing Unit of a human body has capacity to imagine without any limitation on a particular subject, which might or might not exist in the real world. Physically, every Country has its own definite territory, where its own law of land (Lex loci) applies. The Developed Countries can develop the capacity to govern the world of "Metaverse", a parallel universe with enactment of the new Legal Frameworks and formulation of the new Models in future.

Key words

Metaverse, Augmentative Reality, Virtual Reality, Virtual World, Avatars.

I. INTRODUCTION

A specialist, Mr. Matthew Ball said that "the Metaverse is a massively scaled and interoperable network of real time rendered 3D virtual worlds that can be experienced synchronously and persistently by an effectively unlimited number of users with an individual sense of presence." First of all, the word "Metaverse" was introduced by writer "Neal Stephenson" in his "sci-fi novel- Snow Crash" in 1992. Currently, "Metaverse" is becoming a reality; it did not remain merely a dream. The imagination of a Virtual World, which can be felt with our human senses, where billions of people live, learn, work, interact and shop with each other, such as they are currently doing these activities in this real Globe. It is possible for human beings by remaining under their couches from their computer screens of personal places. This concept is known as "Metaverse"¹. It is pertinent to know that "Virtual reality (VR)" is mainly a technology, which permits the users to observe by way of a "headset or other devices", so that the users can have access to "Metaverse", "a shared virtual area or a virtual environment", where Avatars

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¹Dr. Kashif Laeeq, "Metaverse: Why, How and What," Research Gate 2 (February, 2022).

representing the persons can perform various acts without doing these activities physically, using a variety of device platforms.² Further, “Augmented Reality (AR)” is a technology made to enhance the reality. In other words, “AR allows the users to experience the Real World in an enhanced version, wherein one can find interactive digital elements. An AR app will facilitate visual, auditory, and other sensory interactive information in Real World ecosystems to enhance the experience for the users.”³ The term “Avatar” suggests graphical representation of a person's identity or “digital account”, which is used to have access to “Metaverse”. It may be manifested as an inanimate object, an animal or a person.⁴ Speaking from the discipline of Physics, the term “Metaverse” is similar to or same as Metaphysics, i.e., beyond what is really present before us, but which can be perceived by our naked eyes. In this world, human beings create their own digital facsimiles or avatars, which are looked as real as human beings, which can move freely and can bear our identities and transact with other persons in “Virtual World”.

II. HISTORICAL BACKGROUND

In Ancient times, concept of “Metaverse” had been reflected in an ancient Indian Epic. In “Mahabharata”, the incident of giving “Divya Drishti” to Sanjay by “Rishi Veda Vyasa”^{4a} for watching the war, which came into notice after going through the Epic. In the Modern Era, the same thing is known by way of Meta. The creation of the new concept was first proposed by Mark Zuckerberg, CEO of the most reputed American company “Facebook” in 2021 and he renamed his WhatsApp as ‘Meta’. Recently, he also introduced the features of AR calls on messenger, thus, he increased the ambit of such concept. This is a global project and most of the technology companies are making it on a large scale by investing their huge capital therein.⁵

At present, various legal thinkers have developed “Metaverse Theory” and affirm that it is a new discipline of study that must be recognized as a separate legal field entirely, others reject this view that “Metaverse Law” is a separate legal branch, but they believed that it is a sub-discipline. “Metaverse Law” is a new subject-matter for research, hence, legal research is required to solve the arising new legal problems and to develop a new legal system. This can only be possible by studying this concept with broader approach rather than confining it only to the technologies used for the limited purposes.⁶

“Metaverse” is an old concept, but its power is now felt by various Nations, such as USA, India, Canada, and Russia and its growth is still in its developing stage. It has the

² “Understanding Metaverse and Law: Challenges and Solutions”, IPRD, (Oct. 5, 2024) <https://www.iiprd.com/under-standing-metaverse-and-law-challenges-and-solutions/>.

³ “What is augmented reality and why is it important for the Metaverse?,” Blockchain Council, (Oct. 5, 2024). www.blockchain-council.org

⁴ Supra note 2.

^{4a} Ramkrishna Bhattacharya, “Of Mahabharata and Internet”, frontier, (Oct. 5, 2024) <https://frontierweekly.com/articles/vol-50/50-49/50-49-Of%20Mahabharata%20and%20Internet.html>

⁵ George Lawton, “History of Metaverse Explained,” Tech Target (March, 2024). <https://www.techtarget.com>

⁶ Suwinto Johan, “Metaverse and its Implication in Law and Business,” 10 JURNAL HUKUM PROGRESIF 153-166 (October, 2022).



potential to assist an individual to resolve its problems of any kinds, whether it be social, economic, or legal. In respect of relationship of “Metaverse” with law, the meaning of law is well explained in jurisprudence by various exponents of its various schools. “According to Black’s Law Dictionary, a body of rules of action or conduct prescribed by controlling authority, and having binding legal force. That which must be obeyed and followed by citizens subject to sanctions or legal consequence is a law.” Now, a pertinent question arises- Is there any relationship between “Metaverse” (virtual concept) and Law? To answer this question in an affirmative or negative way, at the initial stage, there is no need for a fanciful interpretation, for the purpose, first of all, there is need to understand the types of activities, which are possible in that parallel Universe. At present, this new techno revolution is limited to the social and economic spheres, but it has the potential to facilitate urban development, places of worship, etc. Today, it is possible in this Virtual World by using VR (Virtual Reality) and AR (Augmentative Reality), there is a dire need to amend the existing laws and enact the new legislations, which deal with these subject-matters. In India, there are various economic laws, which regulate the economic affairs between the individuals, such as “the Foreign Exchange Management Act, 1999 (FEMA)”, “the Prevention of Money Laundering Act, 2002 (PMLA)”, and for development of Urban Infrastructure, there is an authority constituted under “the Public Works Department (PWD)”. Further, if any person enters into the world of “Metaverse” and commits the economic offences by using AR devices, then it is a specific violation of economic regulatory laws and for dealing with such a situation, at present, there is no ready-made solution under any principal law. Further, by way of using “Metaverse”, urban development is possible or not, it is yet to be explored. A question can be arisen- Is the jurisdiction of “Public Works Department (PWD)” maintainable at the use of Meta-tech? Furthermore, could the Places of Worship (Special Provisions) Act, 1991 apply while people are using this tech to exercise their Constitutional, Fundamental and Religious Rights mentioned under Articles 25 and 26, of the Constitution of India ?

In “Metaverse”, human transactions and their legal relationships are possible. In India, there is no legislation to regulate such a situation, when any law is violated with the help of technology in Metaverse and its practical implication is felt in the Real World. There is no well-established law for governing the legal relations, which develop by using technologies in “Metaverse”, universally. The circumference of this universe is narrow and limited only to some activities performed on a tech platform developed by tech giant Facebook and Microsoft following the philosophy of platformization.⁷

There are ample possibilities that the offence of money laundering can be committed in “Metaverse” by using these platforms, as businesses are growing by purchasing virtual land out of the funds evaded from the Real World. Human beings in “Metaverse” can do business as they are doing in the Real World. Further, an inference could be drawn that all rights, which are mentioned under “Part III of the Constitution of India”, which are available to citizens, especially Article 19(1) (g) could be exercised in Metaverse and reasonable restrictions could be imposed in future as imposed in the Real World under

⁷Z. Allam, et. al., “The Metaverse as a Virtual Form of Smart Cities: Opportunities and Challenges for Environmental, Economic, and Social Sustainability in Urban Futures,” 5 SMART CITIES 773 (July, 2022.).

the Constitution of India.⁸ Whether the judgments given by the High Courts and Supreme Court of India regarding these subject-matters in the Real World could have the applicability as a precedent in the cases of Virtual World in future, it is a question of law, which needs to be addressed by the Legislature and Judiciary of the country, particularly by Supreme Court of India. If yes, then there is a dire need to amend “the relevant provisions of the Constitution of India” by Parliament in order to expand the jurisdictional extent of judgments of a Court of Law to Virtual World, if possible.⁹ “Metaverse” is not bound by the Local or National laws, because the human behaviour is governed by “Metaverse Company” itself, a private entity, which governs the human relationship by its own rules. At present, there is no effective and strict interference of a Sovereign Country and its laws for governing the conduct and activities of its subjects performed by them from the Real World over the “Virtual World”. In view of the above provisions, it can be inferred that there must be relationship between Law and “Metaverse” in context of regulating the affairs of human conducts, such as private affairs of entering into contract for the businesses and social interactions, but these conducts are regulated by the rules, which are drafted by the private entities and it is regarded as a creator of the “Parallel Universe” known as “Meta”, where there are no limitations like the real world, where limitations can be imposed by the State in the form of reasonable restrictions on civil and political rights.¹⁰

A. Legal System in the Foreign Countries for regulating the Metaverse

The Countries, such as Singapore, Indonesia and South Korea, are already involved in “Metaverse” and these Countries will likely to develop their regulatory measures and technical laws in collaboration with the technology giants. South Korea’s “Ministry of Science and Computers and Information Technology” and “Military Institute of Science And Technology (MIST)” had signed a Memorandum of Association (MOU) with “Groupe Speciale Mobile Association (GSMA)” in February, 2022 at Mobile world Congress (MWC), Barcelona to cooperate and develop “Metaverse norms”, which can be applied nationally and internationally and to identify opportunities and issues related to it.¹¹ Besides, China is likely to take major steps on the development of “Metaverse”. In October, 2021, China got an input regarding the lacuna of this concept and asserted that it amounts in this growing sector and the US congress is likely to take “wait and watch approach” to regulations of “Metaverse”. The initial focus of congress would ensure the US Companies, so that these companies could invest in this sector by building AR and VR in order to use these technologies. Currently, “the Block Chain and Automation” are now effective in the United States.

“Privacy” is also a major question in “Metaverse” as a user requires to control over its data and “how it is collected, used, and shared”. It can lead to possibility of violation of legislation of protection of data, such as “the General Data Protection Regulation (GDPR) in the European Union”, it came into effect on May 25, 2018.¹² Legislations for protection

⁸The Constitution of India 1950.

⁹M. P. JAIN, INDIAN CONSTITUTIONAL LAW 1299-1316 (LexisNexis, Haryana, 8th edn., 2018).

¹⁰P. Kataria and D. Bothra, “Metaverse: Legality and Regulatory Concerns in India”, Mondaq (May, 2022).

¹¹GSMA, “GSMA PUBLIC POLICY” (March, 2023). <https://www.gsma.com>

¹²“What is GDPR, the EU's new data protection law?,” GDPR.EU, (Oct. 5, 2024) <https://gdpr.eu/what-is-gdpr/>.



of the Privacy in “Metaverse” is being developed, but various legislations provide for protecting the privacy in “Virtual World”, such as “the California Consumer Privacy Act (CCPA), 2018 in the United States”, which provides for certain rights regarding protection of data to an individual, that is, “right to have access, correct, and delete personal information”^{12a}. Besides, “the Health Insurance Portability and Accountability Act (HIPAA) in the United States”¹³ and “the Personal Information Protection and Electronic Documents Act (PIPEDA) in Canada” provide for special protection to sensitive personal data, such as Health Information.¹⁴ A special example of the legislation for protection of privacy in “Metaverse” is “the Children's Online Privacy Protection Act (COPPA) in the United States” that regulates the collection of Personal Information from children under the age of thirteen years. It mentions that Websites and Online Services directed should obtain the verified consent of parent before collection, use, and disclosure of Personal information from Children.¹⁵

“The European Union Intellectual Property Office and the United States Patent and Trademark Office” have recently issued guidelines to classify the terms, such as “Virtual Goods” and “Non-Fungible Token” and recognised IP rights in “Intangible Goods” for the first time. The change in the scope of Protection of Trademark has prompted to seek new registrations for “Downloadable Virtual Goods” and “Online Virtual Services” under the relevant class of the Nice Classification. It is notable that the significance of protection of one's trademarks in the “Metaverse” is now in the general practice of registration of trademark, for example, “filing of McDonald for registration of the mark McCafé for the services of a virtual restaurant at the USPTO.”¹⁶

The U.S. Copyright Act, 1976 “provides for protection of original works of authorship, including literary, dramatic, musical, and artistic works, such as those that may be created in the Metaverse”.¹⁷ In addition to the Copyright Act, the Digital Millennium Copyright Act (DMCA) also “protects copyrighted works in the digital environment. It includes provisions for the safe harbour of online service providers and the notice and takedown system for removing infringing content”.¹⁸

^{12a}The California Consumer Privacy Regulation Act (CCPA), State of California, Department of Justice, (Oct. 5, 2024) <https://oag.ca.gov/privacy/ccpa#:~:text=The%20California%20Consumer%20Privacy%20Act,how%20to%20implement%20the%20law>.

¹³The Health Insurance Portability and Accountability Act, 1996, (Oct. 10, 2024) <https://aspe.hhs.gov/reports/health-insurance-portability-accountability-act-1996>.

¹⁴The Personal Information Protection and Electronic Documents Act (PIPEDA), Office of the Privacy Commissioner of Canada, (Oct. 10, 2024) <https://www.priv.gc.ca/en/privacy-topics/privacy-laws-in-canada/the-personal-information-protection-and-electronic-documents-act-pipeda/>.

¹⁵Children's Online Privacy Protection Rule (“COPPA”), Federal Trade Commission. (Oct. 5, 2024) <https://www.ftc.gov/legal/library/browse/rules/childrens-online-privacy-protection-rule-coppa>. 16.

¹⁶Nayantara Sanyal and Amishi Vira, “Intellectual Property Rights in the Metaverse-Trademarks”, Bar and bench. (Oct. 10, 2024) <https://www.barandbench.com>

¹⁷Copyright Law of the United States”, U.S. Copyright Office, (Oct. 10, 2024) <https://www.copyright.gov/title17>

¹⁸G. Stobbs, “The Digital Millennium Copyright Act,” MULTIMEDIA SECURITY TECHNOLOGIES FOR DIGITAL RIGHTS MANAGEMENT 457–482 (2006).

Currently, legislation for jurisdiction in “Metaverse” is being developed, but various legislations can provide for determination of jurisdiction in “Virtual World”, such as “the Brussels Regulation (Regulation (EU) No 1215/2012) in the European Union”¹⁹ and “the Federal Courts Jurisdiction and Venue Clarification Act, 2011 in the United States” provides rules for determination of jurisdiction in cross-border disputes.²⁰ Besides, “the Convention on Cybercrime (also known as the Budapest Convention), adopted by the Council of Europe”, provides for international cooperation in investigation and prosecution of cybercrime.²¹ It is pertinent to mention that if there is a new legislation enacted for “Metaverse” and regulates the cybercrimes between two countries, it would be complicated due to “nature of cross-border investigation and different legal frameworks of each country”.

B. Relevant Foreign Case Laws

In the case of *Hermes International v. Rothschild*,²² in February, 2023, after the various days trial, a Federal Jury unanimously decided that Rothschild violated the right of trade mark of Hermes and was guilty of cybersquatting. The jurors found that the NFTs were not protected speech under the First Amendment to the Constitution of the United States. The Jury awarded the brand \$133,000 in compensation. The compensation consisted of \$110,000 of estimated profits from sales of Rothschild's NFT and \$23,000 for cybersquatting for registering the metbirkins.com domain. Subsequently, in June, 2023, Judge Rakoff followed up the Jury's decision by issuing a permanent injunction blocking Rothschild from promoting and profiting from the MetaBirkin's NFTs. “Judge Rakoff took into notice that Rothschild would have been entitled to protection of First Amendment to the Constitution of the United States, if the Jury had found even a modest semblance of artistic expression in his work but instead, in fact, the jury found that Rothschild was a swindler purely”.

In *Yuga Labs, Inc. v. Ripps case*²³, a knockoff collection of NFTs was using the “Bored Ape Yacht Club” trade mark, the District Court conducted a bench trial on July 31, 2023 protection under First Amendment to the Constitution of the United States (Protection of Free Speech), and normative fair and affirmative defence of unclean hand as well as defendants' counterclaim for misrepresentation of infringing activity. Further, “under the Lanham Act for false designation of origin and cybersquatting, District Court granted Yuga Labs Inc., creator of Bored Ape Yacht Club NFT collection, \$1.375 million in disgorgement of profits and \$200,000 in statutory damages as well as permanent injunction, attorneys' fees and costs against Ripps, creators of knockoff collection of NFTs”.

¹⁹Dr. Otto Schmidt, “Regulation (EU) No. 1215/2012 of the European Parliament and of the Council, 12 December, 2012 on Jurisdiction and the Recognition and Enforcement of Judgments in Civil and Commercial Matters (Re- cast),” Brussels Ibis Regulation.

²⁰The Federal Courts Jurisdiction and Venue Clarification Act, 2011, (Oct. 10, 2024) <https://www.congress.gov/plaws/publ63/PLAW-112publ63>.

²¹Budapest Convention–Cybercrime, (Oct. 10, 2024) <https://www.coe.int/en/web/cybercrime/the-budapest-convention>.

²²22-cv-384 (JSR) (S.D.N.Y. Jun. 23, 2023).

²³CV 22-4355-JFW (JEMx) (C.D. Cal. Oct. 26, 2023).



In the case of *Nike, Inc. v. StockX LLC*,²⁴ in the year 2022, Nike filed a lawsuit against StockX, an online marketplace for reselling sneakers and other articles. The dispute related to StockX's Vault NFTs, digital tokens linked to physical products kept in StockX's Vault. Nike claimed that these NFTs, which took images of Nike-branded sneakers, violated its trade mark's right and created confusion among consumers. On the other hand, StockX contended that its Vault NFTs were simply digital receipts showing ownership of physical articles kept safely. It claimed that these NFTs offer the collectors' convenience and security making sure the authenticity and reducing the risk of fraud.

"Nike accused that StockX was selling the fake Nike sneakers and also challenged authentication process of StockX's. Initially, lawsuit stressed on violation of trade mark, subsequently, the lawsuit includes claims of counterfeiting and false advertisement after finding the fake shoes. If the court is in the side of Nike, NFTs can be seen as standalone products, which must observe strict law of trade mark. It means companies would require permissions and licenses expressly to utilize the branded images and names in their NFTs. On the other, if StockX wins, it would make sure that NFTs can act as digital receipts for physical articles. Furthermore, it could provide for new opportunities for leveraging NFTs in the market of sports memorabilia, and offer fans a secure and transparent way to purchase, sell, and trade the collectibles. Two questions arise here- (a) Will NFTs require strict control of trade mark? and (b) Can they be operated as Digital Receipts without requirement of permission of branding expressly? The answers of these questions could be obtained after the decision of the case of *Nike v. StockX*".

C. The Indian Legal System for regulating "Metaverse"

The Metaverse is an attempt to increase the ambit of our experiences in areas, such as social interaction, productivity, health care and social well-being by using the "Virtual Reality (VR)" and "Augmentative Reality (AR)" on online platforms by the power of the Internet. However, this futuristic techno 3D advancement raises concerns around the circle related to the issues of vital importance, such as Data Protection, Intellectual Property Rights (IPRs), Social Interactions and Crimes in the Virtual World. Due to increase in investment by the Tech Gants, such as Meta and Google, in developing the Metaverse, every citizen is ready to invest in a financial company like IX Global, which is using this technology in finance. It requires a Country to take notice of and sustainably regulate these activities to avoid the misuse of this boon across all the Countries at the start of a new era, and in order to cope with these new problems, a certain policy is required to be formulated.

The most important issue in using Meta Tech is Protection of Data, after filling the personal information at the relative platform by the users, there is a question- How will the users' data be protected? In future, it cannot be misused by the Tech Company, which operates this virtual platform. In respect of India, the existing data protection system is governed by a set of rules under the "Information Technology Act, 2000". Under a particular rule,²⁵ "a Company shall provide a privacy policy for dealing in personal information including sensitive personal data and ensure that the same are available for

²⁴CV-00983 (VEC) (SN) (S.D.N.Y. Jan. 9, 2023).

²⁵The Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011, rule 4.

view by a provider of information under lawful contract. Such policy shall be published on its website and shall provide for clear and easily accessible statements of its practices and policies, type of personal or sensitive personal data collected, purpose of Security and Privacy Concerns: In Meta Platform, there are the possibilities of sensitive personal data leakage. Clicking on “the Cookies Option” on the website make the data of a person user-friendly. Such a situation requires a type of strong protection policy. Since this platform gathers information connected to mind and body of the users, such as Biometric Data Collection for Aadhar Card and Pan Card, this would come under the definition of “Sensitive Personal Data or Information” under a rule of the IT rules, 201125a. The IT Act, 2000 empowers the Government to issue orders in order to authorize the interception of information to “ensure the Security, Sovereignty, or Integrity of the Sate”.²⁶ By way of application of this provision of the IT Act to the Meta technology, the Government can monitor the data in environment of “Metaverse,” and if it is proved that it is against the aforesaid parameters, then an action could be taken by the concerned authority and can pass an appropriate orders to remove the information inserted in the Meta platform and the company can be penalized for violating the laws. In “Metaverse,” it is expected that the law would make its entry in such a way that could strike the balance between the individual and social interest following the theory of Roscoe Pound of social engineering. Until today, it is a dream, because the controlling power is not in hands of the “State”, directly, but it lies with “the CEO of the Tech Company Meta.” It is pertinent to mention that approximately “80% of users of Metaverse are younger than sixteen years,” it suggests us that “Virtual World” is influencing the new generation and they are aware about circulation of their personal information to some extent, which may lead to cybercrime. Hence, it is the sine qua non to enact a legislation to protect the data in “Metaverse”. “The Digital Personal Data Protection Act, 2023”²⁷ has provisions to protect the privacy of individuals, children or a disabled person. It also regulates the collection of personal information from the persons under eighteen years or the disabled persons. The provision provides for compulsory “Verifiable Parental Consent” before collection, use, or disclosure of personal data of children or the disabled persons from websites or online.

Infringement of Intellectual Property Rights: Since the introduction of Metaverse in technological hubs, the market for virtual products has witnessed an expansion, starting from a fashion company Nike to Adidas, in apparel, users are very interested to expend real money on “Virtual Fashion Article” for their “Avatars”. “Metaverse” has experienced the accusations of a wide range of trade mark infringements, due to the unrestricted trading conditions, hence, the virtual products can be copied. Businessmen are now concerned with the extension of their trade marks to their online media. It is notable that “Reliance has completed registration in India for Ajio Luxe (Application bearing number 5248715 in class 9 with the Indian Trade Mark Registry) to be utilized in “Metaverse” for virtual footwear and apparel.” Now, it appears that owners of big brands are rapidly noticing the requirement to protect their trade marks in not only the physical world, but also in the “Virtual World”. “Though the Nice classification provides scope to register for

^{25a}Id., rule 3.

²⁶The Information Technology Act, 2000, sec. 69.

²⁷Supra note 4; The Digital Personal Data Protection Act, 2023, sec. 9



protection of the Virtual Goods in India, there is no particular exhaustive Municipal Law to protect the trade marks in Metaverse in case of infringement.²⁸

Furthermore, the Legislation for the protection of “Intellectual Property Rights” in India are silent, for example, “the Copyright Act, 1957” and “the Trade Marks Act, 1999”. There is an immediate requirement to amend these laws as they currently deal with the issue of infringement at the physical level, not at virtual level. Though, the issue of infringement is currently handled by the “Block Chain Technology”, which is a temporary and substitutive solution for the companies, but not a permanent one, for which certain regulatory measures are required to increase the ambit of the laws, which protects the creativity of the citizens.

No law for expanding the Jurisdiction of 'State': Since the concept of “Metaverse” is at growing stage, but it may be possible that developed countries could form a parallel Universe to expand their rule of law, but in respect of India, who is not an expansionist State, can make a vision of expansion of its dominion over that parallel world, it can only be possible, if the Central Government starts working on it by creating its own Meta like Techno Company and enacts an appropriate legislation to govern it, at present, it is a big dream for us.

(b) A Recent Landmark Judgment in India:

In *Digital Collectibles Pte Ltd. v. Galactus Funware Technology Pvt. Ltd. case*, the Delhi High Court had an opportunity to analyse the impacts of Non-Fungible Tokens or NFT-based digital player cards in respect of Intellectual Property Rights in India. While the judgment appears to be confined to the scope to assessing the right of publicity in India, it has far-reaching implications for the regulation of NFTs, beyond just the skill-based online gaming sector and fantasy sports. Actually, it is the first example of the Indian Higher Judiciary recognising the challenges of NFT technology through a legal dispute. Under such circumstances, the Delhi High Court considered the key technical aspects of NFTs in a comprehensive way and passed a well-reasoned decision rejecting the plea for issuing the injunction against a “Fantasy Sports Game” for using NFT-based digital player cards. The High Court correctly observed that NFTs are only an underlying technology designed to make sure the security and authenticity as a means of proof of ownership and maintenance of an irrefutable record of transactions. The Court noted that this technology was freely available to any person, and no person could claim to have an exclusive right over the utilisation of NFTs. Ultimately, the creation of an NFT does not, by itself, mean the existence of a valuable asset, but, it is the value of the underlying asset, to which the NFT relates, which decides the value.²⁹

IV. LEGAL CHALLENGES AT THE TIME OF USING THE METAVERSE

There has been much discourse about the “Metaverse” in the field of Science and Technology, but the Techno-Legal Research Articles are less on this subject-matter. It was reported as late as May, 2021 that attention from legal practitioners is nascent in this area. When a person is using “Metaverse”, one of the issues arises as to whether a

²⁸Supra note 16.

²⁹Judgment delivered on April 26, 2023, 2023 DHC 2796

feeling developed by an Avatar for another Avatar in the Virtual World would really transmit in the Real World. If it is possible, then a probable legal complication could arise in front of the administration, for example, when a Male person by using his Avatar develops a feeling towards another female person's Avatar against her will, it results in commission of a sexual offence punishable under the criminal laws of a Nation, such as, "the Protection of Children from Sexual Offences Act 2012 (POSCO)," and "the Bharatiya Nyaya Sanhita, 2023 (BNS)" in India. Would a person, who commits such an act in "Metaverse", by using a tech platform, liable under the Criminal Laws of land? Thus, it presents a problem of Real-World" with the Meta, because it may be possible for people to experience a whole range of emotions in the "Metaverse" without interacting with another person in the Real World.³⁰

When users interact with their Avatars for commission of a particular act by violating the law, there would be a situation, where some sort of messes could occur during interactions, this situation could be the same as violating the law by the persons directly, if they interact with each other in the Real World. Such incidents could be under tort, which covers the damages or crimes under criminal law, which punishes an offender for commission of the crime (*mens rea* and *actus reus*). The legal issue is as to whether an Avatar violates the law or a natural person would be punishable for the act done in the Virtual World. A probable solution to this issue would be that a legal system might make that Avatar liable by imposing some legal liabilities on it, but such liabilities would be complicated as an Avatar is not capable of holding rights and duties and cannot be recognized as a legal person. There are no standards or criteria available to distinguish between an Avatar and a natural person, who operates that Avatar.³¹

In India, "the Company Act, 2013" creates a legal fiction in respect of a company and the company is regarded as a separate legal entity distinct from its shareholders, and if any act is committed by its shareholders in the name of the company, then applying the Doctrine of alter ego and Corporate Veil³², the alter ego of the company i.e., the shareholders and directors become liable for the act committed by them in the name of the company. The same reasoning could be applied in case of an Avatar, it could be recognized as a separate legal person by the law distinct from a natural person, who has created them, and if any act is committed by that avatar in the Virtual World, then a person, who has created it i.e. the very alter ego behind that avatar would be liable for the acts done by the Avatar. There is no such similar doctrine propounded like the doctrine aforesaid under the Company Act, which would provide a legal personality distinct from a creator of an Avatar. One more legal issue, which often comes in the way of the legal system of various jurisdictions, is as to whether an Avatar should be granted the same rights as a human being possesses in this real world. Logically, there are certain rights provided by the Statutes and the Constitution of a Country, which are enjoyed by a natural person by his consciousness of mind, if in the near future, it is presumed that an Avatar could possess a type of consciousness distinct from the natural human beings and accordingly in spite of receiving the commands from their respective

³⁰Arian Dizaji and Ali Dizaji, "Metaverse and its Legal Challenges", 5 SYNESIS e2395-141 (2023).

³¹B. C. Cheong, "Avatars in the Metaverse: Potential Legal Issues and Remedies," 3 INT. CYBERSECURITY LAW REV. 4 (June, 2022).

³²DR. N.V. PARANJAPPE, COMPANY LAW 80 (Central Law Agency, Allahabad, 9 th edn., 2018).



human beings, then a legal system needs to determine and resolve such an issue, which is very crucial, sensitive and far reaching consequences.

Most of the Companies, which are in "Virtual World", they need to protect their trademarks, such as "Second Life, Minecraft, Roblox, and World of Warcraft". They have developed "Terms of Service Agreements" for their users. These agreements particularly specify the Rules and Regulations to have access to "Virtual World" and rights and obligations for "Company and Users". Further, "Virtual Reality (VR)" Companies use several ways under the Terms of Service Agreements to make sure that users have the safe and enjoyable experience in their "Virtual World". The common way is "User-Reporting", where users can report about other users, who have violated the "Terms of Service Agreements". Subsequently, a company investigates and takes an appropriate action, such as "warning or banning the offending users". Some "VR Companies" use automated systems, such as "Machine Learning Algorithms" to detect and flag the possible violation of the "Terms of Service Agreements." Furthermore, some Companies have "Moderation Teams", which monitor the "Virtual World" for violation and act accordingly. Some "VR Companies" also use "Third-Party Software", such as "Anti-Cheat Programmes" for finding and prevention of cheating or hacking in the Virtual World". Besides, there are some other platforms, which have their own "Terms of Service Agreements" to regulate the behavior of users and to safeguard the rights of Company and users. These agreements make rules for availing the platforms, and prohibiting the activities, such as "cheating, hacking, hate speech, and sharing personal information."³³ Some platforms have also started to safeguard the users from such activities, for example, "in Meta's Horizon, Avatars can activate a Safe Zone to create a protective bubble around themselves, where they cannot be touched, spoken to, or interacted with by other users"³⁴ It is notable that most of "Gaming Platforms" in "Metaverse" have drawn the attention of users, who are minors, which results in increasing the violent actions and abuses against them, such as "cyber bullying and sexual harassment." These crimes are completely distinct, therefore there should be a competent Legislation for the world except "Terms of Service Agreements" and existing various Cyber Laws.

V. SCOPE OF METAVERSE AND ITS EXPANSION IN FUTURE

The present circumference of this notion is narrower one, which has extended only to some aspects, of this virtual world, such as Horizon Home, AR (Augmentative reality) Calls, Gaming Sectors, Education, Virtual Stores, Fitness, Future of Work and minor surgical operations of Medical Sector. All these amenities can be felt and sensed in this virtual world by using some of the technologies such as "VR (Virtual Reality) headsets", and "AR (Augmentative Reality) glasses". There has not been much research-work of the affairs regarding "Metaverse." It is pertinent to mention that this notion has wider scope and can be analysed in the ideology of making a parallel world and establishing a rule over the Virtual World by using Computers as a medium to convey the commands followed by the users in the sense of Law. In this context, the Developed Countries, such

³³Maria Kalyvaki, "Navigating the Metaverse Business and Legal Challenges: Intellectual Property, Privacy, and Jurisdiction", 3 JOURNAL OF METAVERSE 90 (2023).

³⁴Sukanya Majumdar, "Online Harms and Safety in the Metaverse", Bairstow, (Oct.12, 2024) <https://www.bristows.com/news/online-harms-and-safety-in-the-metaverse/>.

as America, Russia and China have the vision of expansion of their dominion over “Metaverse,” which is not tangible, but can only be felt by the senses of the human beings. The idea of expanding the State in the real world is at its peak. Such ideology would be used for controlling the “Metaverse,” thus, time would come, when the powerful countries would extend their territorial laws (*Lex loci*) to the parallel Virtual World. By using a medium of computers, these countries will invite a citizen of other countries to join this Virtual World and to become the subject of their own countries ultimately, where the same law of the countries will apply as it applies in the “Real-World.”

It might be possible that a person can acquire the “Virtual Citizenship” by creating “a Virtual ID” and password in order to log in such a “Virtual World”. The country America started working India, if the Government of India focuses on such Imagination, it could be possible, where all the amenities and services could be rendered by the State in a Virtual World by fulfilling the objectives mentioned under the Preamble to the Constitution of India following the ideologies of Socialism and Welfare State. For the purposes, there is a dire need to amend the present laws, most importantly, “the Information and Technology Act, 2000”, which deals with the subject matter of technology. If the country India intends to create a new “Virtual World”, where the State has its own rule of law, then it has to seriously work on it with complete research work in the areas of Jurisprudence, Constitution and application of laws³⁵. Besides, “the Law Commission of India” has to conduct the research on this subject-matter to materialise this big dream abovementioned.

VI. CONCLUSION AND SUGGESTIONS

From the abovementioned provisions of the Article, it can be inferred that the new technologies have the potentials to transform the human lives and pattern of living. Presently, its ambit is narrow and limited to the economic and social spheres, there might be possibility that its unrealized power can be realised in the near future and then, the Developed Countries, such as USA, Russia and China, by using the new technologies, will create a parallel Universe, where everything is possible at the touch of a button and its implications could be felt in this Real World. Furthermore, the creation of “Metaverse” brings the complicated legal menaces in the “Virtual World” in lack of the competent legislations for its governance, therefore there must be the well-established legislations to regulate the “Virtual World”. Eventually, enactment of an exhaustive universal legislation to regulate the “Metaverse” is challenging, but it is the sine qua non to address it immediately for safeguarding the privacy and rights of the users.

There are the following suggestions in order to regulate the affairs of “Metaverse”:

As “Metaverse” cannot be restricted to “Geographical Borders”, it would lead to chaos about the “jurisdiction and application of legislations” and rules and regulations made by various countries in the world. A competent uniform legislative system must be adopted and executed globally, which must address the aforesaid issues and prevent the conflict of various “Municipal Laws” in the world.

³⁵Dr. Radhey Shyam Jha, Dr. Nidhi Tyagi and Dr. Manya Gupta, “Metaverse and Virtual Society: Socio-Legal Challenges”, 75/3 GURUKUL PATRIKA 200 (2024).



- There are possibilities that the users can make and sell Digital Duplications of the articles and goods of “Real-World” in “Metaverse” without any authority, which are branded with the trademarks of “Real-World”. It is challenging to protect the trade marks across various jurisdictions of the States, therefore, there should be a competent unified legal framework to provide a mechanism to the brands' owner to take legal action effectively and to prevent and punish the infringers globally.
- Additionally, it is the sine qua non for the legislatures of the various countries to regulate the affairs of “Virtual World”. The Legislatures require to make the “Domestic Laws, Rules, and Regulations” in such a way, so that they can regulate and cause to show the “unlicensed and unauthorized trademarks” in all digital platforms and “Metaverse”.
- The “Virtual World” attracts a large number of persons as the users including minors, who involve in social interactions and commercial transactions by doing various acts and repose trust in various platforms, their privacy, rights and security should be protected by way of enactment of a competent unified legislation.
- After considering the significance of legal implications of “virtual commerce and property rights”, it is observed that there should be commercial relation between “Virtual World and Real- World”. “Virtual Assets”, such as “Avatars” and “Virtual Property”, hold value of “Real-World”, therefore, there is need of protection and recognition of “Avatars” and “Virtual Assets”, legally and globally.
- There is a possibility that a criminal act of an offender in “Metaverse” can violate the privacy of an individual and can cause harm, there is requirement of a stringent unified legislation to regulate the criminal act and punish a convict, if found guilty.

Besides a competent uniform legislative system, the Developing Countries including India must develop their own Operating Systems (OSs), therefore, a Developing Country must enact and execute its own competent Laws, Rules and Regulations to regulate the affairs of “Metaverse”.

