



INTERNATIONAL LAW
JOURNAL

**WHITE BLACK
LEGAL LAW
JOURNAL
ISSN: 2581-
8503**

Peer - Reviewed & Refereed Journal

The Law Journal strives to provide a platform for discussion of International as well as National Developments in the Field of Law.

WWW.WHITEBLACKLEGAL.CO.IN

DISCLAIMER

No part of this publication may be reproduced or copied in any form by any means without prior written permission of Editor-in-chief of White Black Legal

– The Law Journal. The Editorial Team of White Black Legal holds the copyright to all articles contributed to this publication. The views expressed in this publication are purely personal opinions of the authors and do not reflect the views of the Editorial Team of White Black Legal. Though all efforts are made to ensure the accuracy and correctness of the information published, White Black Legal shall not be responsible for any errors caused due to oversight or otherwise.

WHITE BLACK
LEGAL

EDITORIAL TEAM

Raju Narayana Swamy (IAS) Indian Administrative Service officer



Dr. Raju Narayana Swamy popularly known as Kerala's Anti Corruption Crusader is the All India Topper of the 1991 batch of the IAS and is currently posted as Principal Secretary to the Government of Kerala . He has earned many accolades as he hit against the political-bureaucrat corruption nexus in India. Dr Swamy holds a B.Tech in Computer Science and Engineering from the IIT Madras and a Ph. D. in Cyber Law from Gujarat National Law University . He also has an LLM (Pro) (with specialization in IPR) as well as three PG Diplomas from the National Law University, Delhi- one in Urban Environmental Management and Law, another in Environmental Law and Policy and a third one in Tourism and Environmental Law. He also holds a post-graduate diploma in IPR from the National Law School, Bengaluru and a

professional diploma in Public Procurement from the World Bank.

in Public

Dr. R. K. Upadhyay

Dr. R. K. Upadhyay is Registrar, University of Kota (Raj.), Dr Upadhyay obtained LLB , LLM degrees from Banaras Hindu University & Phd from university of Kota.He has succesfully completed UGC sponsored M.R.P for the work in the ares of the various prisoners reforms in the state of the Rajasthan.



Senior Editor

Dr. Neha Mishra



Dr. Neha Mishra is Associate Professor & Associate Dean (Scholarships) in Jindal Global Law School, OP Jindal Global University. She was awarded both her PhD degree and Associate Professor & Associate Dean M.A.; LL.B. (University of Delhi); LL.M.; Ph.D. (NLSIU, Bangalore) LLM from National Law School of India University, Bengaluru; she did her LL.B. from Faculty of Law, Delhi University as well as M.A. and B.A. from Hindu College and DCAC from DU respectively. Neha has been a Visiting Fellow, School of Social Work, Michigan State University, 2016 and invited speaker Panelist at Global Conference, Whitney R. Harris World Law Institute, Washington University in St.Louis, 2015.

Ms. Sumiti Ahuja

Ms. Sumiti Ahuja, Assistant Professor, Faculty of Law, University of Delhi, Ms. Sumiti Ahuja completed her LL.M. from the Indian Law Institute with specialization in Criminal Law and Corporate Law, and has over nine years of teaching experience. She has done her LL.B. from the Faculty of Law, University of Delhi. She is currently pursuing Ph.D. in the area of Forensics and Law. Prior to joining the teaching profession, she has worked as Research Assistant for projects funded by different agencies of Govt. of India. She has developed various audio-video teaching modules under UGC e-PG Pathshala programme in the area of Criminology, under the aegis of an MHRD Project. Her areas of interest are Criminal Law, Law of Evidence, Interpretation of Statutes, and Clinical Legal Education.



Dr. Navtika Singh

Nautiyal



Dr. Navtika Singh Nautiyal presently working as an Assistant Professor in School of law, Forensic Justice and Policy studies at National Forensic Sciences University, Gandhinagar, Gujarat. She has 9 years of Teaching and Research Experience. She has completed her Philosophy of Doctorate in 'Intercountry adoption laws from Uttranchal University, Dehradun' and LLM from Indian Law Institute, New Delhi.

Dr. Rinu Saraswat



Associate Professor at School of Law, Apex University, Jaipur,
M.A, LL.M, Ph.D,

Dr. Rinu have 5 yrs of teaching experience in renowned institutions like Jagannath University and Apex University. Participated in more than 20 national and international seminars and conferences and 5 workshops and training programmes.

Dr. Nitesh Saraswat

E.MBA, LL.M, Ph.D, PGDSAPM

Currently working as Assistant Professor at Law Centre II, Faculty of Law, University of Delhi. Dr. Nitesh have 14 years of Teaching, Administrative and research experience in Renowned Institutions like Amity University, Tata Institute of Social Sciences, Jai Narain Vyas University Jodhpur, Jagannath University and Nirma University.

More than 25 Publications in renowned National and International Journals and has authored a Text book on Cr.P.C and Juvenile Delinquency law.



Subhrajit Chanda



BBA. LL.B. (Hons.) (Amity University, Rajasthan); LL. M. (UPES, Dehradun) (Nottingham Trent University, UK); Ph.D. Candidate (G.D. Goenka University)

Subhrajit did his LL.M. in Sports Law, from Nottingham Trent University of United Kingdoms, with international scholarship provided by university; he has also completed another LL.M. in Energy Law from University of Petroleum and Energy Studies, India. He did his B.B.A.LL.B. (Hons.) focussing on International Trade Law.

ABOUT US

WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal providededicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

WHITE BLACK
LEGAL

METaverse IN MULTIMEDIA GAMING – LEGAL IMPLICATIONS

AUTHORED BY - H.T. BHARATH

ABSTRACT:

In the ever growing internet space, lots of new technological advancements are being developed every single day. One such development is the emergence of metaverse. This virtual world is the birth of a whole new digital space, which integrates the real world and the digital in ways which was not possible before. This is the new space under which users can interact, participate, and build digital avatars which is not possible in the real world. This space was developed for the main purpose of entertaining; specifically gaming. Creating a virtual world for the players to interact and play and explore and experience has been the revolution in gaming a few decades ago. And now it has evolved and growing at a rapid pace, where it has opened various branches in the cyberspace that are as exciting as it is unregulated. This new digital space has also brought a lot of problems due to it being completely different and new from the existing digital spaces. There have been various instances where the metaverse has been used to collect, steal, and misuse personal data and it not being monitored is a serious problem in the world of cyberspace. This type of new and uncharted territory has resulted in metaverse being used for illegal purposes and various crimes being committed. The multi-purpose of the metaverse is not properly covered under the existing legislation and there exists a grey area under which metaverse regulations falls and especially metaverse gaming and entertainment. This paper aims to analyze the usage of metaverse, the existing framework governing it and how it can be improved.

BACKGROUND OF STUDY

The concept of the metaverse, a virtual reality space where users can interact with a computer-generated environment and other users in real-time, has been a longstanding vision in science fiction and technology. The idea has gained significant traction in recent years, especially in the realm of gaming. A background study of metaverse gaming involves understanding the historical evolution,

technological underpinnings, and cultural impact of this emerging phenomenon.

The term "metaverse" was popularized by Neal Stephenson in his 1992 science fiction novel "Snow Crash," where it referred to a virtual reality space.¹ Earlier works, such as William Gibson's "Neuromancer" (1984), also explored the concept of cyberspace, laying the groundwork for virtual worlds.² Virtual worlds like Second Life (launched in 2003) provided early glimpses into user-created content and social interaction in a digital space. Massive Multiplayer Online Role-Playing Games (MMORPGs) like World of Warcraft (2004) demonstrated the appeal of persistent, shared online spaces.³

Advances in VR and AR technologies have played a pivotal role in bringing the metaverse concept closer to reality. VR headsets, motion controllers, and haptic feedback devices enhance the immersive experience for users. Continued advancements in VR/AR, artificial intelligence, and networking technologies will shape the evolution of metaverse gaming. The integration of AI-driven NPCs (non-player characters) and dynamic environments can enhance the immersive experience.

The development and ownership of distinct virtual assets are made possible by blockchain technology, namely Non-Fungible Tokens (NFTs), in a safe and decentralised way. Transparent and verifiable transactions in virtual environments are made possible by smart contracts. Through the emphasis on socialisation and community development, metaverse gaming allows users to interact, cooperate, and exchange experiences in a virtual environment. The metaverse's events, concerts, and get-togethers are similar to social events outside of it. Metaverse gaming has given rise to virtual economies where players can purchase, sell, and exchange virtual goods with actual value. The emergence of in-game currency and the notion of "play-to-earn" are indicative of the financial aspects of metaverse gaming. Metaverse gaming encompasses more than just amusement; it also involves professional, recreational, and educational aspects. Meetings, seminars, and conferences conducted

¹ Virtual World, Defined from a Technological Perspective, and Applied to Video Games, Mixed Reality and the Metaverse by Kim J.L. Nevelsteen : <https://onlinelibrary.wiley.com/doi/abs/10.1002/cav.1752>

² Virtual World, Defined from a Technological Perspective, and Applied to Video Games, Mixed Reality and the Metaverse by Kim J.L. Nevelsteen : <https://onlinelibrary.wiley.com/doi/abs/10.1002/cav.1752>

³ The Extended Reach of Game Engine Companies: How Companies Like Epic Games and Unity Technologies Provide Platforms for Extended Reality Applications and the Metaverse by Andreas Jungherr 1 and Damien B. Schlarb: <https://journals.sagepub.com/doi/abs/10.1177/20563051221107641>

virtually in the metaverse demonstrate how flexible this platform may be.

RELATED WORK:

Metaverse has been an exciting field to venture into, but its development has been very slow and limited. While the space has immense potential to grow, it is still in its adolescent stage and there has been many branches which are growing every passing day, so there is very little papers which is definitive about its potential.

S.NO	TITLE	AUTHOR	JOURNAL/ YEAR	FOCUS	RESEARCH GAP
1	Virtual World, Defined from a Technological Perspective, and Applied to Video Games, Mixed Reality and the Metaverse	Kim J.L. Nevelsteen	MAY, 2016	Metaverse's implications in and its early stages.	Fails to define its scope and growth.
2	The Extended Reach of Game Engine Companies: How Companies Like Epic Games and Unity Technologies Provide Platforms for Extended Reality Applications and the Metaverse	Andreas Jungherr and Damien B. Schlarb	JUNE, 2022	The growth of virtual gaming platforms, Ex;fortnite, and its functions.	Only talks about one platform and not about how metaverse in used in various other platforms.
3	The actualization of meta affordances: Conceptualizing affordance actualization in the metaverse games	Donghee Shin	2022	Explores concept of affordance actualization in the context of metaverse gaming.	Focuses only on one theory but does not account for dynamic and emergent changes.

RESEARCH PROBLEM:

The increasing usage of metaverse and its growing capabilities question what are the aspects of metaverse gaming that have scope to be misused and hence open for regulation:

Under the current legal framework whether the existing I.T. Act, 2000, would be applicable or relevant in regulating metagaming, since there exists a grey area in its governance.

RESEARCH METHOD AND METHODOLOGY:

This study use a blend of narrative and systematic literature reviews to support its qualitative research technique. This study paper's data came exclusively from a variety of secondary sources, including publications, journals, and online studies. The relevant literature was thoroughly and rigorously examined in order to collect references:

- a) Look into similar keyword combinations
- b) Find and identify articles that have pertinent keyword phrases in the paper's title and text.
- c) Remove articles that have pertinent keywords but don't really relate to the Metaverse.
- d) Arrange the pertinent materials into groups.

A thorough search of numerous internet databases was done to find pertinent literature, including:

- a) IEEEXplore (<https://ieeexplore.ieee.org>).
- b) Google Scholar

The material and articles used in this work are sourced from a variety of web sources. The objective of this research paper was to examine the current usage of metaverse gaming and how the existing legal framework covers it, and if it is not sufficient what changes may be done.

FUNDAMENTAL CONCEPTS:

Metaverse:

A "metaverse" is a communal virtual shared area where users can engage in real time with a computer-

generated environment and each other. These spaces are frequently in the form of virtual reality (VR) spaces or digital universes.

The idea is to create a persistent, seamless, and immersive virtual environment that coexists with the real world.

The term "metaverse" refers to a network of interconnected virtual places rather than a single application or platform.

At its core, the metaverse is a convergence of various technologies, including virtual reality (VR), augmented reality (AR), artificial intelligence (AI), block chain, and the Internet of Things (IoT). These technologies work together to create a seamless and interconnected virtual world where users can navigate and participate in a multitude of activities. The ability to create and personalise avatars, digital personas that enable users to communicate with each other and the virtual world—is one of the fundamental features of the metaverse.

Individual identities can be reflected in customised avatars, allowing for self expression and a feeling of presence in the metaverse.

Users can explore a variety of virtual locations within metaverse, each serving a distinct function or set of interests.

These settings include game environments where users can compete and have immersive experiences, as well as social areas where they can meet and connect with friends and strangers.

The metaverse can also include online learning environments, virtual markets, group work areas, and even digital copies of actual places.

AUGMENTED REALITY (AR):

The technology known as augmented reality (AR) modifies the physical world by superimposing virtual and digital features on top of it, improving the user's perception and interaction with it. Augmented Reality (AR) enhances the real world by including computer-generated content, such as sounds, images, or information, in contrast to Virtual Reality (VR), which submerges users in a completely synthetic environment. A range of technologies, such as tablets, smart glasses, smartphones, and AR headsets, can be used to deliver augmented reality experiences. These gadgets record the outside world using cameras and sensors. For the purpose of tracking the user's position and movements in real time, sensors like accelerometers, gyroscopes, and cameras are essential. These sensors enable AR devices to understand and interact with the physical world. AR devices require robust computing power to process real-time data from sensors and generate seamless

overlays of digital content onto the real world. Specialized software and applications enable the creation and rendering of digital content in alignment with the real-world environment. This can include 3D models, text, animations, or other interactive elements.

VIRTUAL REALITY:

Virtual Reality (VR) is a computer-generated simulation of a three-dimensional environment that users can interact with using specialized hardware, typically a VR headset. The goal of VR is to immerse users in a synthetic environment, providing a sense of presence and allowing them to engage with the virtual world as if it were real. This technology has applications in various fields, including gaming, education, healthcare, training, and entertainment. The primary interface between the user and the virtual environment is the VR headset or HMD. It typically includes a pair of screens, lenses, and motion sensors to track head movements. VR systems use sensors and cameras to track the user's movements, enabling them to navigate and interact within the virtual space. This can involve head tracking, hand tracking, or full-body tracking. Controllers or gloves equipped with sensors allow users to interact with the virtual environment. These devices often incorporate haptic feedback, providing a sense of touch in the digital realm. Powerful computers or gaming consoles are necessary to run VR applications, as they require high-performance graphics rendering and low latency to ensure a seamless experience. Immersive VR offers a high degree of immersion, typically through headsets like the Oculus Rift, HTC Vive, or PlayStation VR. Users feel fully present in the virtual environment.

MIXED REALITY:

It exists in both the real and virtual worlds and combines augmented and virtual reality. VR and AR components are combined by MR to create new kinds of hybrid experiences. As tracking technology have developed, MR has become a term that encompasses the entire range of experiences between AR and VR. Fundamentally, MR is an interactive virtual environment that is made possible by positional tracking in accordance with the real world. MR is not "anchored" to the real world like AR is; instead, it can move between the real and virtual realms. Because it allows for greater flexibility in experience design, this is becoming more common. MR enables the users to seamlessly switch perspectives of natural vision, which could be enhanced with the digital overlays. Fostering new sensory combinations is possible in MR, by embedding real objects within the virtual world.

METaverse IN GAMING:

With the advent of the metaverse, a new era of digital connection has begun, blurring the lines between the virtual and physical worlds. For the gaming sector, the metaverse presents both exciting opportunities and difficulties, particularly with regard to the regulatory landscape. In the Metaverse, users can connect with the outside world in ways that deepen relationships. Multiplayer gaming would take on new dimensions since it allows users to connect with other gamers, form real-life friendships, and much more. Additionally, users can partake in profitable activities. While playing games with virtual currencies based in the metaverse, they can trade goods and services with other players. It also provides an amazing gaming experience that is far flexible.

It's easy to add people, make their content, build league-wide sub games, and use the gameplay as a platform-like area to do other virtual gaming chores. For instance, Epic Games' most well-known product is Fortnite, a world-building platform for some of the most played video games on the market. Concerts have been held using Fortnite's technologies by well-known businesses and performers worldwide as a result of its growing popularity. Timberland has launched a Fortnite-based platform to showcase its gear, giving fans access to corporate updates and competitions only available to them. However, Epic Games and other platforms created extended reality (XR) music videos for the musicians who won awards at the 2022 MTV Music Awards.

Twenty percent of products are already digital, while eighty percent of individuals on the earth are apparently online. Every day, around 200 million people use different platforms, such as Fortnite and Minecraft. These users reportedly engage in a lot more activities, such as attending concerts and playing video games, and it appears that they go further. Immersion gameplay is the main objective of gaming. Now, with the power of the Metaverse, gaming would gain prominence and bring in more money. Among other things, the Metaverse with NFTs, assets, portable game assets, a high level of immersive gameplay, and earnings would be integrated in a new era of gaming and metaverse.

EXISTING FRAMEWORK:

Under the Information Technology Act of 2000, a series of regulations known as the Information Technology Rules, 2011 regulate the current data protection system. These rules state that an

organisation can prove code compliance by presenting information security policies and documented security plans that encompass operational, technological, and physical security measures.

The government released a notification on February 25, 2021, titled "Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021" (IT Rules). The main objective of these regulations is to safeguard consumers against a range of potentially harmful objects. The company must adhere to strict technological and design requirements in order to meet the standards for data accuracy, choice, consent, disclosure, portability, and security. In addition, the company needs to set up management mechanisms to enforce out-dated policies, privacy standards, and recommendations that align with the amount of information needed.

The government may issue orders permitting information interception and decryption to "ensure the security, sovereignty, or integrity of the state" under Section 69 of the IT Act.

Applying current rules to the metaverse has been controversial because of its unique characteristics. Anti-trust has been involved in existential issues since the beginning of the metaverse.

POTENTIAL THREATS:

One of the biggest and most pressing issues with metaverse games is the improper monitoring of communication activity on the platforms, including chat rooms and streaming. This is because the I.T. Act, which is inadequate to address the entire breadth of metaverse gaming, governs the operation of the metaverse platforms rather than a distinct regulation.

Another reason for this is that, despite its marketing as a gaming platform, it also functions like a social networking platform, with features like streaming and chat. As a result, it's unclear how this would be regulated legally.

CONCLUSION:

With the increasing popularity of metaverse gaming, a robust regulatory framework is becoming more and more important. Regulations pertaining to user safety, data privacy, and metaverse security must be established in India. Regulatory agencies and the gaming industry need to collaborate to create a system that balances innovation and user safety. The likelihood of illicit conduct, such as cybercrimes, asset theft, and unauthorised access to virtual environments, intensifies the legislative process. A comprehensive regulatory framework will lower risks and encourage a trustworthy and secure metaverse gaming ecosystem.

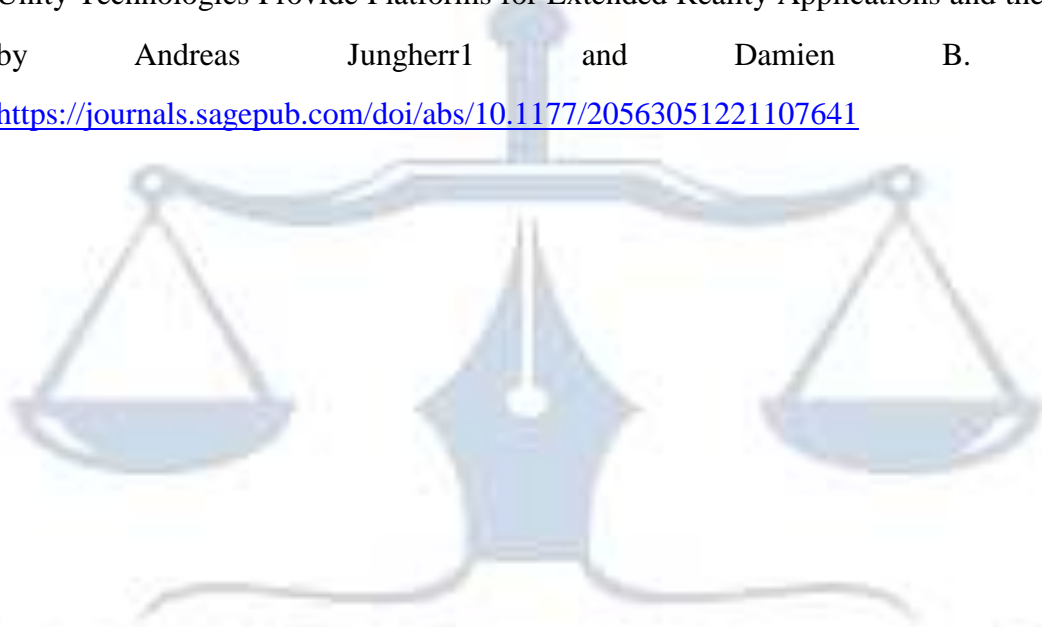
RECOMMENDATIONS:

- To regulate the metaverse and everything related to it, including gaming and entertainment, a distinct act needs to be established.
- The intellectual property legislation governs the ownership and rights of digital assets developed in the metaverse.
- The purchase of digital assets, avatars, and other in-game products with real money must be governed by tax rules because cryptocurrency is illegal in India.

The legal implications of metaverse gaming in India are multifaceted and necessitate a comprehensive approach that may be modified as circumstances change. Taxation, regulatory frameworks, consumer protection, intellectual property rights, and ownership of virtual assets are important factors that need to be taken into account. As the metaverse evolves, cooperation between lawmakers, legal experts, and the gaming sector is essential. By addressing these legal challenges head-on, India can foster a strong metaverse gaming industry that finds a balance between user safety, creativity, and legal certainty. Establishing a legally sound metaverse gaming environment is a shared responsibility that will influence future digital interactions in India.

BIBLIOGRAPHY:

1. Virtual World, Defined from a Technological Perspective, and Applied to Video Games, Mixed Reality and the Metaverse by Kim J.L. Nevelsteen :
<https://onlinelibrary.wiley.com/doi/abs/10.1002/cav.1752>
2. Virtual World, Defined from a Technological Perspective, and Applied to Video Games, Mixed Reality and the Metaverse by Kim J.L. Nevelsteen :
<https://onlinelibrary.wiley.com/doi/abs/10.1002/cav.1752>
3. The Extended Reach of Game Engine Companies: How Companies Like Epic Games and Unity Technologies Provide Platforms for Extended Reality Applications and the Metaverse by Andreas Jungherr¹ and Damien B. Schlarb:
<https://journals.sagepub.com/doi/abs/10.1177/20563051221107641>



W H I T E B L A C K
L E G A L