

# The metaverse: an analysis from a human rights perspective<sup>1</sup>

*El metaverso: un análisis desde la perspectiva de los derechos humanos*

Diana Peña Cuellar<sup>2</sup> , Astrid Vidal Lasso<sup>3</sup>  & Alejandra Buriticá Salazar<sup>4</sup> 

University of the Amazon - Colombia



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## ABSTRACT

This article explores the metaverse in depth, from the literature to the latest technology trends. Key concepts such as Web3, blockchain, AI, VR, AR, haptic technology and the IoT are examined, framing the metaverse as a new space for human and digital interaction in an immersive 3D environment. It highlights how technological development has fostered debate on the prospects of the metaverse, which represents a new virtual frontier where human and digital interaction merge in an immersive environment.

This sensory medium raises questions about human rights, especially in relation to privacy, property and digital identity, consequently, the following problem is formulated: To what extent is the protection of Human Rights appropriate within the metaverse?. Thus, the research was carried out using a qualitative methodology, which included an exhaustive analysis of the existing literature on human rights and emerging technologies, as well as case studies on virtual environments. Finally, it concludes by emphasizing the need for a multidisciplinary approach to address the challenges of the metaverse, highlighting the importance of protecting human rights in this new digital environment.

**Keywords:** Human dignity; Augmented reality; Avatars; Technological evolution; Virtual environments.

## RESUMEN

Este artículo explora el metaverso en profundidad, desde la literatura hasta las últimas tendencias tecnológicas. Se examinan conceptos clave como las Web3, blockchain, IA, RV, RA, tecnología háptica y el IoT, enmarcando el metaverso como

<sup>1</sup> Research article developed within the framework of the activities of the FIBIDE Research Group at the University of the Amazon, Florencia, Caquetá, Code: COL0175628.

<sup>2</sup> Doctor of Law candidate at the Externado University of Colombia, Master in Justice and Protection of Fundamental Rights with an Emphasis on Procedural Law, Specialist in Liability and Compensable Damages, Specialist in Industrial Property, Copyright and New Technologies from the same institution, lawyer from the University of the Amazon. Director of Research for the Colombian Association of Constitutional Procedural Law, member of the Colombian Institute of Procedural Law. Professor at the University of the Amazon, Co-Director of the FIBIDE Research Group at the University of the Amazon. E-mail: [d.pena@udla.edu.co](mailto:d.pena@udla.edu.co)

<sup>3</sup> Doctor of Law candidate at the Externado University of Colombia, Master in Justice and Protection of Fundamental Rights with a focus on Procedural Law, Specialist in Liability and Compensable Damage, Specialist in Labor Law and Industrial Relations from the same university, lawyer from the University of the Amazon. Professor at the University of the Amazon, Co-director of the FIBIDE Research Group at the University of the Amazon. e-mail: [a.vidal@udla.edu.co](mailto:a.vidal@udla.edu.co)

<sup>4</sup> Law student at the University of the Amazon, member of the FIBIDE Research Group. E-mail: [al.buritica@udla.edu.co](mailto:al.buritica@udla.edu.co)

un espacio nuevo para la interacción humana y digital en un entorno tridimensional inmersivo. Se destaca cómo el desarrollo tecnológico ha fomentado el debate sobre las perspectivas del metaverso, el cual representa una nueva frontera virtual donde la interacción humana y digital se fusiona en un entorno inmersivo.

Este medio sensorial plantea cuestiones sobre los derechos humanos, especialmente en relación con la privacidad, la propiedad y la identidad digital, en consecuencia, se formula el siguiente problema: ¿En qué medida es procedente la protección de los Derechos Humanos dentro del metaverso?. Así las cosas, la investigación se llevó a cabo utilizando una metodología cualitativa, que incluyó un análisis exhaustivo de la literatura existente sobre derechos humanos y tecnologías emergentes, así como estudios de caso sobre entornos virtuales. Finalmente, se concluye subrayando la necesidad de un enfoque multidisciplinario para abordar los desafíos del metaverso, enfatizando la importancia de proteger los derechos humanos en este nuevo entorno digital.

**Palabras clave:** Dignidad humana; Realidad aumentada; Avatares; Evolución Tecnológica; Entornos Virtuales.

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## INTRODUCTION

Currently, the consequences of the fourth digital revolution are being experienced, characterized by the transformation of technological systems and the exponential development of technologies. This event has changed the economic, social and cultural spheres of human beings (Gayozzo, P. 2021), generating new experiences in the network, such as the metaverse.

The term “metaverse” was first popularized in the novel “Snow Crash” published in 1992 by Neal Stephenson. In this piece of cyberpunk science fiction, the author presents a future where a young pizza delivery boy and hacker participates in the metaverse, navigating the virtual reality as a samurai avatar, the narrative introduces the computer virus “Snow Crash”, which affects the brains of the users who observe it, eliminating their ability to reason (Leiner, B. M., Cerf, V. G., Clark, D. D., Kahn, R. E., Kleinrock, L., Lynch, D. C., & Wolff, S. 1999).

According to Ball, M. (2022), although the work (Snow Crash) does not define the metaverse, it frames the conception of a cybernetic space where people can create avatars and interact (Luna Salas et al., 2022). The book's influence has been significant in the development of disruptive technologies, inspiring products similar to those described therein.

Stephenson also coined the term 'avatar' to describe a user's digital identity on the network, markedly differentiating between the real and virtual worlds. This concept highlights human interaction with technology through digital interfaces.

Another literary reference is the novel 'Neuromancer' by William Gibson, published in 1984, which narrates a world beyond the internet where people are man-machine hybrids. This work describes how a hacker named Henry Dorsett Case, after being penalized with a Russian Mycotoxin, finds limitations to connect to the network, which reflects a future where navigation depends on the human brain rather than external devices.

Thus, Llano-Alonso, F. H. (2022) argues that the metaverse entails the denaturalization and dehumanization of people, elevating the concept to the category of transhumanism. This term describes the fusion of man and technology to perfect the human condition, endowing people with superior intellectual and physical capabilities (Bostrom, N. 2014).

From these works, the existence of two worlds can be deduced: the real and the digital. The metaverse offers a continuous interaction between both spaces, which has generated legal problems such as the commercial dynamics of NFT and the security of contractual operations (Alarcón Lora, A. et al, 2023). The social consequences of this innovative environment have also affected interpersonal relationships, leading to questions about the need to protect human rights in the metaverse.

Therefore, this text is aimed at answering the question: *what extent is the protection of human rights appropriate within the metaverse?*

The development of the research is carried out in two sections, the first one, the metaverse and its interrelation with other concepts are analyzed, and in the second one, human rights, their applicability in digital environments and the arguments to be taken into account in the metaverse are analyzed, and finally, conclusions are drawn. A legal documentary-dogmatic methodology was used, with a qualitative approach, so bibliographic and jurisprudential sources were used, which allowed to approach in a rigorous and grounded way both the theoretical and practical aspects of the problem posed.

## Results

### 1. From the metaverse

#### 1.1. Concept

Etymologically, the term "metaverse" is composed of "meta", meaning "beyond", and "verse", an abbreviation of "universe". Thus, it can be understood as an immersive virtual environment where human beings can interact and coexist in ways that transcend the limitations of the real world (Ortiz Herrera, 2021).

In this sense, Castronova (2001) identifies three qualities of virtual worlds: interactivity (synchronous participation of users), corporeality (first-person

physical environment) and persistence (the environment continues to function independently of individual interaction).

Similarly, according to Barráez-Herrera, D. P. (2022), the attributes of the metaverse are immersion (users are immersed in the experience), corporeality (interaction is through an avatar) and persistence (development does not depend on the connection).

However, different authors have referred to the existence of two currents related to the metaverse: the premetaverse and the neometaverse.

The pre-metaverse, supported by authors such as Erazo, Sulbarán and Zuckerberg, suggests that the metaverse is still under development, conceiving those current virtual worlds lack of interoperability, and the goal is to achieve a cohesive and fully integrated environment in the future. According to this theory, the metaverse has not yet fully materialized, and more time and refinement is required to consolidate it (Márquez, 2011).

On the other hand, the neometaverse, advocated by writers such as Awan and Ríos-Llamas, postulates that the metaverse is already a reality. This approach highlights the current ability to connect in real time through avatars and points to technological advances such as haptic rings and the HoloTile smart mat, which allow for an immersive, multisensory experience.

That said, this research is aligned with the pre-metaverse theory, since it is shared that the metaverse is a project under construction that seeks to become an interoperable virtual environment. This approach aims to create an exact replica of the physical world, facilitating the practice of all human actions with their respective visual and kinesthetic dimensions.

The above is supported by the fact that the accuracy of sensors and the ability to capture and project body movements and biometric data are still under development (XRSI, 2020).

Now, having defined the concept of the metaverse and explored its fundamental qualities, it is crucial to understand how this virtual environment interrelates with other technological advances that have preceded and facilitated its development. Thus, the evolution of the World Wide Web, from its early stages to the semantic web, along with the integration of technologies such as blockchain, artificial intelligence and virtual reality, have been essential to the formation of the metaverse.

Therefore, in the following section, the way in which these technologies converge and are integrated in the metaverse is analyzed, delineating a digital environment that represents the next frontier of human interaction and coexistence.

## 1.2. The metaverse and its interrelation with other concepts

The metaverse presents itself as a natural evolution of interrelated concepts such as the World Wide Web, blockchain, artificial intelligence and virtual reality.

The World Wide Web (WWW) has been fundamental in the evolution of online interaction. Since its creation in 1989 by Tim Berners-Lee, the Web has gone through several phases. Web 1.0 was characterized by text browsers with passive communication where users could only read the information without interacting with it (Méndez, 2009). Subsequently, Web 2.0, since 2004, allowed greater user participation, democratizing information and facilitating interactivity through social networks and other platforms (García Aretio, 2014).

With the advent of Web 3.0, also known as semantic Web, in 2010, a new level of personalization and decentralization of information was introduced thanks to artificial intelligence (Latorre, 2018). This evolution allows users to manage their own data and personalize the algorithms they consume, making a significant difference compared to previous versions of the web.

For Latorre (2018), the Web 3.0 began to operate in 2010 and for its operation it was indispensable the implementation of artificial intelligence, since it develops ubiquitous software with the particular task of filtering the results of search engines, according to the interoperable database of the cybernaut to provide that most relevant information.

In this context, through Web 3.0 there is an emphasis on the processing capacity of interests and preferences, so that the content depends on the user himself, detaching the algorithm imposed en masse by a corporation, which enhances autonomy and implies that a company will not own the management of the data, making room for blockchain technology.

In view of the above, blockchain technology plays a crucial role in this new phase. Blockchain offers a secure and decentralized method for storing and managing information. It uses hash cryptography to secure data, creating a system that is difficult to manipulate (Bartolomeo & Machín Urbay, 2020). The integration of blockchain into the metaverse ensures the privacy and security of data generated by users as they interact in this virtual environment.

It is vital to expose the data processing of smart devices. In the first instance, the information is encoded in a text string with numbers and letters in a unique order, also known as hash cryptography, which in turn serves as a digital signature. Then, the encrypted text is sent to nodes or computers that are responsible for keeping an identical copy, as a result of this is called the "ledger" in data management, so that, to defraud the system, an alteration in the information must be made at the same time in all nodes, which makes more complex any attempt to falsify or manipulate the data.

Based on the above, it can be inferred that Web 3.0 and the metaverse converge thanks to blockchain technology. This is because network users generate numerous data points, such as their specific interests, geolocation, and physical movements within the metaverse, which are stored on the blockchain. This is where artificial intelligence plays a crucial role, categorizing this information and enabling more seamless and personalized navigation.

Under the preceding, artificial intelligence (AI) is a key technology that allows personalizing and automating experiences in the metaverse. AI can analyze user's preferences and behaviors to deliver a more personalized and efficient experience (Rouhiainen, 2018).

On the other hand, virtual reality (VR) and augmented reality (AR) provide the means to create an immersive environment in the metaverse. VR allows users to experience a fully virtual environment, while AR superimposes digital information on the real world, enriching the user experience (Otegui Castillo, 2017; Burdea & Coiffet, 2003).

Together, these technologies not only make the creation of the metaverse possible, but also ensure that it is a secure, interactive and personalized virtual space. The synergy between Web 3.0, blockchain, artificial intelligence, and virtual and augmented reality promises to transform the way users perceive and experience the Internet, creating a virtual environment that transcends the limitations of the physical world (Ríos-Llamas, 2022).

In addition to this, Ball (2022) argues that the metaverse represents a transition rather than an extension of human activities. Therefore, the world is moving towards digitalization, where happiness, leisure, interpersonal relationships, and more will be controlled by artificial intelligence, as software dictates content, common interests with a collective, and other factors through the algorithm designed while navigating the web.

It is important not to lose sight of the fact that the fundamental premise of the metaverse is to offer a new way of perceiving the Internet. As Redecillas (2022) points out, it is necessary to convert the Internet experience into a more immersive experience. Simply observing a different environment is not enough; therefore, augmented or mixed reality is implemented to enrich this experience and make it more vivid.

Augmented reality provides the metaverse with a modification of the user's appreciation of the external world. By processing spatial location information of real world elements, the user is provided with a coherent perspective of the physical world with three-dimensional images superimposed on the environment.

That is why the metaverse proposal is the digitalization of the world, beyond the visual field, incorporating a multisensory spectrum in real time. In other

words, it is not only to observe other spaces, but also to live and interact in them, giving rise to a dynamic experience with the power to touch, move and perform rituals. According to Ríos-Llamas (2022), this practice determines an interaction and in turn a basic principle of the organization of human practices. In this order of ideas, the design of the metaverse is to duplicate the outside world and thus have a parallel composed of attention to detail, where there are no physical or architectural limitations. In consideration of this, Carter and Egliston (2020) state that, in this process of creating the metaverse, digital sensors will be the ones that will extract more information, not only from public places but also from homes.

The interaction between individuals or users requires several factors that allow a complete immersion, since the dissipation between the real world and cyberspace must not be lost sight of. The metaverse experience is not only configured by vision, since there are characteristics such as weight, texture and sound that, as human beings, are perceived in any environment. Accordingly, for Ríos-Llamas (2022), the metaverse or digital world is not a virtual simulation of the world, but a dimension of human action, so that it provides the kinesthetic and auditory senses with notions to feel how the avatar's skin and the individual's skin concatenate.

Thus, the metaverse is equipped with projects to implement haptic experiences with elements such as haptic gloves, haptic overalls (the term "haptic" refers to a garment that allows the perception of three-dimensional objects; that is, it simulates tactile communication and can be between an inanimate object and a person or between two human beings on the web), augmented reality and virtual reality devices, smart glasses and IoT devices (Internet of Things, a set of things connected to the Internet that implement sensors to receive and transmit information).

In short, the metaverse represents a new digital frontier that transcends the limitations of the physical world, offering an immersive virtual environment where humans can interact and coexist in innovative ways.

After exploring the interrelationship of the metaverse with fundamental technologies such as the World Wide Web, blockchain, artificial intelligence and virtual reality, it becomes clear that this immersive digital environment not only redefines the way humans interact online today, but also poses new dimensions and challenges in various areas of everyday life.

The above shows that the metaverse expands and evolves, so the need arises to consider how human rights are applied and protected within this new virtual context. Thus, in the following section, the foundations of human rights will be explored, their relevance and adaptation in the metaverse environment will be analyzed, opening a dialogue on the protection and extension of these rights in the digital era.

## 2. Human Rights: A new dimension in the metaverse?

### 2.1. Fundamentals of Human Rights

The exodus of individual human rights has a first manifestation in the American Revolution, for which Nikken, P. (2010) affirms that this event demarcates for the first time particular rights with the force of law, insofar as it imposes on the State a protective function based on plurality and respect for freedom of conscience.

To clarify this pillar of human rights, it is valid to emphasize that this first advance does not discuss the recognition by the State but the admission of a right superior to the positive law that is proclaimed from the sacred scriptures, just as Sophocles raised the natural law in his play 'Antigone', where the people sought, like Antigone, the declaration of universal moral values, under eternal natural laws (Gabrielidis, G. 2009). However, these values did not emerge *ipso facto*, those were germinated in a social context of subjugation and slavery as stated by González, N. (1998); in other words, they are the product of the reification of the human being.

In accordance with the above, it is pertinent to point out a primordial foundation of human rights that subsists as a cornerstone and has consolidated characteristics such as universality and progressiveness, namely the "inherent" or "inalienable" property of rights, which ratifies a trait of inseparability of its holder for life. Under this understanding, no one can be deprived of his rights without legitimate limitations, as indicated by Nikken, P. (1994) and Laporta San Miguel, F. J. (1987).

Historically, both the declaration of rights of the good people of Virginia and the declaration of independence of the United States of America (Nikken, P. 2010) solemnly present the individual rights enshrined as innate and inalienable rights (iusnaturalism), in accordance with this, the positivization of human rights (iuspositivism) prevails, not in the magnitude of declaring their existence but to concretize their enforceability and opposability before third parties.

Gewirth, A. (1984) states that human rights are intrinsic requirements of the actions of each person, not subject to the proclamation of a branch of public power or a governmental entity, since they would acquire an 'unstable' character. Therefore, revolutions have generated great achievements for the peoples, legal integration into the legal system and progressiveness.

The mark of progress in human rights indicates a path of irreversibility (Carpizo, J. 2011). It is worth noting the promulgation of the Universal Declaration of the Rights of Man and of the Citizen by the French National Constituent Assembly of 1789 (France, 1789), which illustrates and projects the American Declaration of Independence of 1776. In other words, it continued the legacy of a catalog of rights with the founding purpose of extending universally.



During that time in France, people lived within a socio-economic context of disdain and inequality, based on the belief that not everyone enjoyed rights. Vertical social differences, combined with the horizontal exclusion of certain groups, led to movements aimed at overthrowing the estate-based order to seek not only equality (a principle and value of human rights) but also universality. Following Cassin, R. (1974), this nature encompasses applicability to all humans as rights holders without examining nationality, race, religion, gender, political, or philosophical opinion.

So that the characteristics of human rights are an assembly, it corresponds to an entire structure that meshes, by virtue of the fact that it is understood integrally as a unit and not as parts that can be subtracted, as Carpizo, J. (2011) points out.

In this sense, despite the fact that, there is no unified definition of human rights, from the viewpoint of González, C. P. (1992) they are a set of faculties that every person possesses by the simple fact of being born, on the other hand, Zavala, J. J. A., & Isea, J. (2018) point out that they are the result of social movements driven by the people in unison, ergo, they are not a concession of the State.

The Vienna Declaration and Program of Action adopted by the United Nations World Conference on Human Rights (157/93) reaffirms this sense, stating that human rights are an inherent property of man, which implies the obligation of the State to respect and protect them.

The iusphilosophical interpretation of Kant's legacy, Torres, C. G. (2020) admits that human dignity is the foundation of human rights. In such a way that, from this argument, they should be understood as a system of values present in people. In turn, De Asís, R. (2018) warns that human rights are a derivation of human dignity, framing a protective path of freedom and equality of people.

Thus, the essence of human dignity is presented as a principle, while at the same time it is a purpose of human rights, as are freedom and equality, obtaining the category of values of human rights. In this sense, it can be stated that human rights are based on the principles of interdependence, integrality and indivisibility (Peña-Cuellar et al., 2020).

For this article, particularly, the previously stated conceptions are taken as reference, determining a notion in line with the subject of human rights. They are then understood as the faculties and freedoms that every human being has by the mere fact of being a person; that is, they are inherent, inalienable, transnational or universal, since their existence does not depend on the declaration of a State. On the contrary, the State has a protective and guarantor role insofar as it enshrines the three fundamental pillars: human dignity, freedom, and equality.

## 2.2. Human Rights in the Metaverse: Challenges and Needs

In the midst of rapid technological advancement, a crucial question arises about the applicability of human rights in the context of the metaverse. This fundamental question confronts the metaverse from two perspectives: a utilitarian one, which considers it simply as another virtual platform, used both for entertainment and for accessing justice, among other uses; and another vision that conceives it as a space intended to experience and feel the whole of the Internet, together with the community, friends and family, thus transcending its mere utilitarian function. This dichotomy poses important challenges in terms of how to guarantee and protect the fundamental rights of users in this emerging digital environment.

By viewing the digital world solely as a medium, tool, or instrument, the possibility of permeating human rights within it is limited. Information and communication technologies are increasingly integrated into everyday life to facilitate tasks and enhance people's lifestyles. However, the metaverse represents a new paradigm: it is not merely a tool for solving practical problems but encompasses daily activities in a comprehensive way.

The utilitarian view of the metaverse as a pragmatic tool for improving mental health is supported by the study of Browning et al. (2023), which demonstrates how virtual reality can mitigate cognitive decline and enhance psychological well-being by reducing anxiety, stress, and depression among university students. This research highlights the potential of the metaverse not only as a recreational space, but as well as a therapeutic and emotionally supportive environment.

Furthermore, the judicial implementation of the metaverse, exemplified by the pioneering virtual hearing led by Quiñones Triana (Turdialiev, 2023), underscores its ability to facilitate access to justice in an efficient and effective manner. Although this perspective sees it as a tool for the exercise of human rights such as access to justice, it does not always recognize its interactive, immersive level and the complexity of virtual social experiences.

On the other hand, Noblecía's (2012) theory argues that the metaverse redefines active life and the human condition by fostering new forms of community interaction and coexistence. This approach argues that life is no longer limited to a physical plane, but expands into human development through meaningful virtual experiences.

Ríos-Llamas (2022) states that the digital world not only manages, exchanges and protects data, but also extends the dimensions of human action. The metaverse is presented as a scenario where people live virtually, not merely as a means to achieve specific goals, but as an integral experience of life.

Similarly, according to Carissa Véliz (2021), corporations look for power to influence and predict behaviors rather than to sell data, highlighting the

relevance of control over information and privacy in the metaverse. Virtual reality platforms and artificial intelligence, in accordance with the Metcalfe Act, reinforce this dynamic by increasing the number of users and the amount of data collected (Ball, 2022).

Anacona et al. (2019) discuss how virtual environments such as the metaverse, although not initially designed for education, have demonstrated adaptability and significant social impact through participation, collaboration, and interaction.

In addition, augmented tactile perception and haptic feedback (Sun et al., 2022) illustrate how advanced technology facilitates the integration of physical and virtual experiences in the metaverse, providing a sense of continuity and connection between actions and environments.

Naqvi (2023) argues that the metaverse can preserve cultural and historical heritage in interactive and realistic scenarios, as in the case of Tuvalu, highlighting the social impact of these digital representations.

From all of the above, in the metaverse, where virtual reality, artificial intelligence and blockchain converge to create multi-sensory experiences, it makes the application of human rights imperative.

Thus, in terms of this research, it is argued that within the metaverse, human rights should be applied, and to do so, it is relevant to resort to their expanded dimension or an extension of those rights, based on their universal and indivisible nature. This is supported by the following arguments:

- This digital environment not only replicates aspects of the physical world, but also poses significant challenges in terms of privacy, intellectual property and digital identity protection, thus having a social impact.
- Legal evolution has shown that human rights are adaptable to new technological and social contexts. From the Declaration of the Rights of Man and of the Citizen of 1789 to the philosophical interpretations of Kant, human dignity remains the ultimate foundation of human rights, applicable in both the physical and digital worlds.
- Since their foundations in the American Revolution and the Universal Declaration of Human Rights, human rights have been established as inherent to every person, regardless of nationality or condition. They have been conceived as intrinsic to human action and founded on principles of dignity, equality and freedom, universal and inalienable (Gewirth, 1984).
- As history has fought for equality and universality of these rights, it is now crucial to ensure that technological advances do not undermine the basic principles of dignity and freedom that underpin society.

- The need to protection of privacy, property and digital identity in the metaverse highlights the importance of logically extending traditional human rights to these virtual spaces. Technological advances should not undermine individual rights; rather, they should strengthen the application of these rights to ensure that people maintain their autonomy and dignity in all dimensions of their lives, whether physical or digital.
- Human Rights are adaptive and evolutionary, so much so that, throughout history, these rights have demonstrated an intrinsic capacity to evolve and adapt to new social and technological realities. This evolutionary characteristic ensures that the rights of individuals are effectively and consistently protected in all spheres of their existence, including the digital environment of the metaverse. In this context, it is imperative to recognize that, as in the physical world, human rights can be applied and enforced in the metaverse, thus ensuring comprehensive and adequate protection for contemporary needs.
- Specifically, it highpoints the comprehensive protection in the search to safeguard human rights, regardless of the territory and the comparison of rights in the metaverse and in the physical world, since in any case it is the responsibility of the States, not only to seek protection within a geographically demarcated country, but to promote various actions such as the regularization with internal and international regulations.

In conclusion, the metaverse is not simply a virtual entertainment or work space, it is an extension of the real world where human rights must be safeguarded and applied with equal force and relevance. This integration not only protects individuals in their digital interactions, but also promotes an ethical and equitable environment for all participants in this new digital age.

That is why it is postulated that the applicability of human rights in the metaverse is justified and based on their capacity to adapt and evolve. Thus, this research underscores the need to recognize and protect the rights of individuals in the digital environment, ensuring that dignity, freedom and equality remain guiding principles in all dimensions of human existence.

### **Conclusions**

In the course of this research, the emerging concept of the metaverse and its intersection with human rights in the digital context has been thoroughly explored from its literary foundations to its current technological evolution, whereby the metaverse is revealed as an immersive virtual space that transcends physical limitations, offering new forms of human interaction and experience.

In other words, the metaverse is an immersive digital environment where users can interact, work, play and socialize through avatars in a three-dimensional

environment. This environment offers an immersive and persistent experience that simulates aspects of the physical world.

In the development of the research, it was realized that it is an ongoing matter, with its own characteristics that differentiate the digital world from the internet and the web, e.g. immersion, persistence, and interoperability; in relation to the latter factor, the theory of the neometaverse was defended, where immersion is preferred over interoperability.

It is considered that the metaverse is living the internet since it implements a whole set of technologies to consolidate the multisensory experience such as haptic technology, virtual reality, augmented reality, the internet of things, transmitters and receivers of movement, speed, contact and it is worth mentioning artificial intelligence.

The integration of the metaverse with technologies such as artificial intelligence, blockchain and virtual reality highlights the need for a multidisciplinary approach. Given the impact and broad spectrum of the metaverse, it poses important challenges in terms of human rights, particularly with regard to privacy, intellectual property and legal personality.

At the end of what has been said and starting from the origin of human rights, it is emphasized that these have been conceived as universal, inalienable, and indivisible, based on fundamental principles of dignity, equality, and freedom. Therefore, it is argued that, in the context of the metaverse, these values and characteristics apply fully, as users, through their avatars, participate in an environment that reflects aspects of real life. Furthermore, the need to protect privacy, property, and digital identity in the metaverse reinforces the argument that there should be a logical extension of traditional human rights, ensuring that individuals maintain their fundamental rights even in virtual spaces.

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