

Spaces in Metaverse and its Effects to the vulnerable groups

The science-fiction book "Snow Crash" by Neil Stephenson from 1992 is the inspiration for the idea of the metaverse, a virtual world with endless possibilities for human interaction. Since then, with organisations like Meta, formerly Facebook, actively developing this ground-breaking technology, the idea has transformed from the pages of science fiction into the edge of our reality. The metaverse is positioned to become a future pillar of societal and cultural interaction because to its promise to revolutionise every facet of life and livelihood, from work to travel and tourism. With such tremendous potential, there are significant challenges, though. A central argument of this essay is that the disadvantages of the metaverse may currently outweigh its benefits, with particular reference to its potential impact on communication and, more importantly, the safety of vulnerable groups such as children. In the following sections, we will delve into these difficulties, exposing the complexities of metaverse interaction and looking into pressing issues concerning kid protection in these rapidly growing virtual places.

The metaverse, a digitally enhanced extension of our physical world, has the potential to be transformative, especially in work settings. By enabling immersive remote workspaces, this possibility redefines conventional work paradigms. Consider a group of architects working on a shared building design in the metaverse who are spread out across the world. Here, real-time adjustments, different perspective changes, and scenario tests are possible, potentially speeding up the design process and enhancing the final product. Furthermore, in the metaverse, distances, which were once major obstacles to cooperation, are irrelevant. In order to stimulate cross-border teamwork and access to global talent, a Sydney start-up might easily collaborate with a Silicon Valley specialist. This would increase productivity. Additionally, the metaverse's three-dimensional data visualisation revolutionises problem-solving and decision-making. A logistics company could visualize its entire supply chain, identify real-time issues, and simulate potential network alterations, all within the metaverse, leading to more informed decisions and improved efficiency.

The travel and tourist industry is also greatly affected by Metaverse. The metaverse brings international attractions closer than ever before by simulating and enhancing real-world experiences in a virtual environment. Consider the opportunity to see the Louvre Museum in Paris or the historic Giza Pyramids all from the convenience of one's home. In this perspective, the metaverse offers accessibility to the most important historical and cultural locations on a scale that was previously unthinkable. It is more than just a tool for virtual reality tourism. The metaverse's virtual travel industry may help encourage more environmentally friendly travel strategies. The negative impacts of excessive tourism on local people and landscapes have long been an issue of concern for the tourism industry. We may drastically lessen travel's negative effects on the environment thanks to the metaverse, protecting our natural and cultural heritage for upcoming generations.

However, Edward Hall's idea of proxemics to the metaverse raises several serious difficulties that must be addressed. As described by Hall, proxemics is the study of how people utilise

space and how population density affects behaviour, communication, and social interaction. Based on the physical distance between communicators, proxemics divides places into intimate, personal, social, and public categories. But the concept of space has a new meaning in the metaverse. The physical distances we're used to in daily interactions are being replaced by virtual ones, where people's proximity to one another is determined by algorithms and computer interfaces rather than by their own comfort or social conventions. In the VRChat platform, the infamous "Ugandan Knuckles" phenomenon serves as an illustration of this. In this case, users took on a deformed avatar from the Sonic the Hedgehog series and used it to harass other users by invading their virtual personal space without their permission, violating long-standing rules on privacy. It demonstrates how common social norms can be ignored in online settings, leading to discomfort and even serious distress.

Ensuring child safety in the Metaverse, specifically on platforms like VRChat, is a complex challenge due to the nature of its interconnected virtual reality spaces. Because there is no oversight of the content or user behaviour in publicly available areas, there is a risk of exposure to explicit material, rude behaviour, or even cyberbullying, as demonstrated by the "Ugandan Knuckles" meme incident. Children are exposed to adult themes in semi-private settings where established groups with common interests gather, and they develop a false sense of security that can be used for child grooming. Furthermore, if utilised improperly, private areas on virtual reality platforms like VRChat could expose kids to sexual material or predatory behaviour. Real-world examples of "grooming," in which an adult develops a bond with a youngster in order to earn their trust for sexual exploitation, have been documented on a number of internet platforms. In VR settings, where interactions might be more engaging and lifelike, this risk is increased. A comprehensive strategy is required to reduce these hazards, one that includes educating parents, educators, and kids about digital literacy so they can properly navigate these new digital frontiers. Perfect safety, however, cannot be assured due to the Metaverse's continuing evolution, which highlights the need for ongoing awareness and efforts from all stakeholders, including platform developers and politicians.

In conclusion, the metaverse is a two-edged sword that simultaneously brings difficult obstacles and incomparable chances for innovation and connectivity. It requires us to reconsider how we think about things like communication, relationships, and physical space. We may shape the metaverse into a virtual world that enhances our lives while upholding our values and safety if we are dedicated to education, awareness, and responsible development.