

Metavers: valuable or futile?

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Metaverse as the future of the Internet

In order to define the Metaverse, it is necessary to distinguish two concepts: virtual reality and augmented reality. Virtual reality is disconnected from physical reality as the user is immersed in a fictional universe without any link to the real world. This is the case, for instance, for an immersive video game. Augmented reality, on the other hand, superimposes virtual objects with which the user can interact on physical reality (the mobile application Pokemon Go is an example of augmented reality). The Metaverse combines both virtual and augmented reality: there are no longer tangible boundaries between the real and the virtual worlds. With these new properties, the Metaverse may be considered as the next version of the internet. The real world becomes the screen on which layers of data, information or physical representations are superimposed. Once connected to the Metaverse, the user is free to interact with its components as well as other users.

In the same way the digital economy moved from computers to the smartphones, smartphones will move to the Metaverse in the years to come.

Metaverse has many purposes in the health sector

Many players are developing virtual and augmented reality projects: video games, social networks and media, as well as collaboration and remote working tools. Indeed, several professions are already using these technologies (architects, trainers, etc.). The investments are significant. The consulting firm McKinsey estimates that the value of the Metaverse could reach 5 trillion dollars by 2030. The fields of application of these technologies are numerous: entertainment, education, productivity, retail, marketing, and health. In the latter, Metaverse can have several purposes. On the one hand, it can support the preparation of surgeries by creating digital twins of patients. For instance, InHeart, a French start-up, is working on the development of virtual universes applied to heart surgery. On the other hand, virtual reality headsets enable the interactive training of health-care providers (the French company Simango is developing these services). Also, several companies such as Hypno VR and Ability are developing immersive teleconsultations or digital therapies so as to relieve pain and anxiety. On a different note, the Metaverse can be used as a place for expression and exchange. Indeed, the use of avatars allows users to be anonymous. Thus, they can freely discuss their issues or their questions (e.g., Narcotics Anonymous...).

The development of new technologies also gives rise to innovative medical projects

The use of medical data is one of the major challenges regarding innovation in the health care sector. Indeed, the large amount of data, complicates its traceability and availability to players in the field of health. In addition, the regulatory framework requires confidentiality standards to comply with. Blockchain technology provides a solution to this last issue. The system allows to trace data while guaranteeing its security. The latter is based on the Non-Fungible Token (NFT) system, an innovation that enables the encoding of medical data uniquely and authentically and then includes it within the Blockchain. The use of medical data that abide by legal standards would ease the exchange of data between health-care providers and institutions. This would allow, for instance, to deliver online medical prescriptions or the interoperability of medical tools and software.