

Metaverse: A Virtual Reality

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Abstract —

In 1992, the concept of a metaverse was first introduced to the public. As the name suggests, Metaverse is a combination of the words 'meta' and 'universe', where 'Meta' means 'Beyond'. As a result, it means beyond our current understanding of the universe. It exists in the virtual world but feels just as real. In Metaverse, people get to experience virtual and augmented versions of reality by interacting with their digital avatars. In other words, it means that there is more to the universe than what we are assumed to. Recently, Facebook announced that it is planning to rebrand its family of firms around the metaverse. Zuckerberg's press release brought it to the forefront of the public's attention. This study presents a bibliometric evolution of metaverse technology, which has been discussed in the literature since the nineties. In recent years, a number of related technologies have attracted enormous attention around the world to the metaverse. There would be a realistic metaverse, where direct and physical interactions would be encouraged, with racial, gender, and physical disability concepts weakened, which would be highly beneficial to society.

Introduction —

Several technology companies racing to build the 'metaverse'. Facebook Inc. announced on Oct, 2021 that it would restructure and assume the name Meta Platform Inc. Technology experts predict that Metaverse will replace the internet where people will be able to do anything including shopping, studying and attending meetings. Metaverse is not a recent idea, science fiction writer Neal Stephenson coined the concept in 1992, and it has become a standard feature in video game companies. Metaverse offers Virtual communities, activities, events, all accessible without the need to sign into multiple apps. It is a network of always-on virtual environments in which many people can interact with one another and digital objects through virtual representations of themselves. In the Metaverse, social connection is the focus of the next version of the internet. Described as the next generation of the internet, Metaverse is focused on social interaction. It can be defined as a simulated digital environment using Augmented Reality (AR), Virtual Reality (VR), and blockchain, along with concepts from social media. Metaverse will certainly be a huge part of India's economy, since India's online gaming sector has experienced rapid growth over the past few years, one of the key components of Metaverse. The virtual reality market today is dominated by entertainment and gaming but we have to prove that this platform can be used to teach us about ourselves, the people around us, and our place on this planet. In both technology and business, the Metaverse is a work-in-progress. In addition, it represents an evolving style of experiences and services built on top of new technologies and a possible decentralized value creation and exchange model.

Methodology —

There are many experimental methods and techniques where Metaverse is used as follows:-

1. Prospecting For Marketing Prospects:

One of the most pressing use cases is the potential to unlock their digital avatar with another participant in multiple activities as they are their digital avatars. Metaverse users can shop or socialize or participate

in recreation and learning activities. Companies could capitalize on the exclusive marketing opportunities in the different virtual worlds in the Metaverse. A company has employed ads for tracking real-time views in gaming environments throughout mobile and console platforms. Same as, a clothing company advertisements in the game or branded clothing worn by characters in Games offer promising brand exposure.

2. Blockchain Technology :

The term 'Metaverse' refers to a virtual space created with in the new internet using 3D technologies. This concept is directly related to such technologies as blockchain, AR, VR, mixed reality, NFT etc. Some experts predict that virtual assets used by the players will be presented in the form of non-fungible metaverse tokens. The metaverse blockchain benefits could support the development of new, realistic and engaging NFT marketplaces. NFT marketplace could become more interactive where user can communicate with other users. Metaverse can allow users to view the NFT for making informed purchase location.



3. Virtual Environment and Learning Spaces :

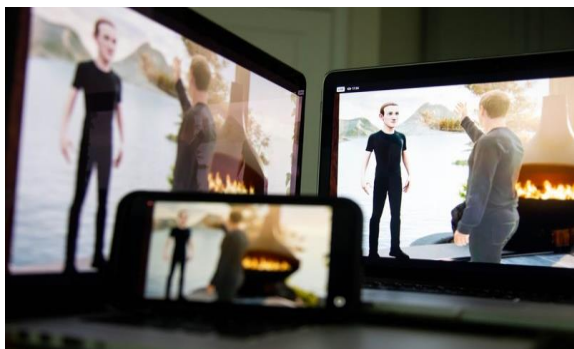
Many employees working remotely were forced to do so because of the pandemic. Professionals across companies in different sectors became adept in with Skype calls, Google Meet, Zoom meetings during pandemic. The metaverse presents many prospects for developing a virtual office space and learning environment. The company has developed a hybrid of VR and mixed reality world with digital avatars. Team members could access different functionalities such as events, meetings, conferences, virtual training programs and any trade shows. Educational institutions have been using online platforms such as Minecraft and Second Life for improving learning experience of students. VR and AI simulations in the metaverse could help students in architecture and virtual reality world.

4. Virtually Tourism :

As a result of technological advances, one can travel without actually visiting a destination. The metaverse, virtual reality (VR) and augmented reality (AR) could come together for creating an virtual digital environment. With an immersive digital reality featuring realistic content, you can have the perfect platform for raising the imagination of the audience. In this way, they can get a sense of the location as if they were physically present there. Virtual reality tourism is one of the emerging metaverse use cases, which is poised to gain mainstream acceptance and recognition. Content hosting services like YouTube, popular video streaming platforms, and others are expanding their collections of 360-degree videos.

5. Web Real-Time Communication :

You don't need intermediary servers for the purpose of transferring communication between Web clients in real-time. Metaverse technology provide a favourable foundation for defining the new standards of web communication. The value of web real-time communication can also double up with multiple media streams, which are developing a virtual world. An open source initiative that provides real-time communication capabilities to mobile applications and web browsers is known as web real-time communication. It is one of the most use cases of metaverse, which can transform the normal approaches for audio and video communication.



6. Innovation in Healthcare :

Providing a forum for interaction between patients and healthcare providers, the metaverse has great potential. Healthcare professionals can interact with patients in real-time using virtual worlds in the metaverse. Healthcare can benefit from the metaverse enhancing various areas of treatment just as it is enhancing e-commerce. At least not now but in the near future a metaverse in healthcare can take the responsibility of frontline workers, enabling them to save lives without putting themselves in danger. A metaverse can assist front-line healthcare workers in saving lives without placing themselves at risk.

Result —

There is an evolving digital universe called the Metaverse that extends beyond the world of today's Internet. We are witnessing a wave of transformation in social interactions, business dealings, and the internet economy as a whole due to this vision for the future state of the web. Web 3.0 open virtual world crypto networks offer a glimpse of what the internet may look like in the future, but Metaverse is still a work in progress. It's possible that the Metaverse could be worth over \$1 trillion in annual revenues, and that it could compete with companies that currently have market value of \$15 trillion. Facebook has been attracted to the potential of the Metaverse, which may serve as a catalyst for other Web 2.0 tech giants and investors to follow suit. A virtual economy could also be developed around customizing avatars in a metaverse. In the future, metaverse avatars may become the new social media profile that hides who you really are behind the scenes, perpetuating narcissism and contributing to mental health issues and creating insecurity. Virtual economies might also develop around the customizations of metaverse 'avatars'. People may even start ignoring their real world needs in favor of virtual interactions, according to some experts.

Conclusion —

A new generation of the internet called the metaverse is geared towards social interaction and group activities. Social interaction and group activities are key features of the metaverse, the latest development in internet technology. As a Metaverse user, you are the center of attention. Easily access virtual communities, activities, events without the need to sign into multiple apps. This is a key aspect of the Metaverse that can work in its favor from a user-centric perspective. It is possible to sign up as a virtual avatar for your virtual office, take a break and speak to your friend in IT, or return to the game room for a game of foosball. A client can be met virtually all in one place-moving seamlessly into the next step without discrepancies. You can do all this while sitting in the warmth and comfort of your own home, without having to rely on the subway or drive two hours to work in full traffic circles. The pandemic has almost made us unable to leave our homes for work, but the Metaverse takes it to a whole new level. Imagine seamless cross-platform interaction with your friends across the world. Cross-platform play is still relatively new even in the gaming industry Metaverse will provide seamless virtual interaction across platforms, paving the way for seamless virtual interaction. As long as they are run purely for profit motives, the benefits would likely be smaller. However, metaverse have great potential to revolutionize areas such as education and health care.



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