

УДК 004.891.3

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TECHNOLOGIES OF VIRTUAL AND AUGMENTED REALITY IN THE GAMING INDUSTRIES

The video game industry is ripe for augmented reality (AR) and virtual reality (VR) applications. For the first time, the VR and AR market have added an entirely new dimension to the games sector, bringing in more than \$7.5 billion in revenue in 2020, as demonstrated through hardware sales and software investment.

VR and AR have reached a level of sophistication to truly engage the gamer. Manufacturers have introduced an innovation that goes beyond imagination to offer its users a smooth and fun experience with the right hardware.

Virtual and augmented reality are technologies that enable the creation of immersive and interactive experiences for users. In the gaming world, the use of these technologies can provide more immersive and realistic gameplay, allowing players to feel part of the virtual world.

VR technologies see an illusory world that is difficult to distinguish from the real world. The owner of the VR headset can interact with objects in the surrounding world, as well as with other involved people.

AR is a technology that overlays digital information, such as images, videos, or 3D models, onto the real world. AR is achieved by using a device such as a smartphone or tablet, which has a camera and a screen, and software that can recognize and track the environment.

AR technology is well-known for bringing together the virtual and the real, creating a dreamlike middle-path for users. Game manufacturers will be able to use real-time digital interaction to enhance their products. Real-time interaction with gamers around the globe will enhance their perception and allow for better levels of engagement.

One of the benefits of using virtual and augmented reality in the gaming industry is the ability to provide greater immersion and interactivity to players.

With these technologies, players can feel part of the virtual world and manipulate it through body movements and gestures.

The release of the Pokemon GO game in 2016 was a watershed moment that demonstrated the potential of AR in the gaming industry. The game quickly became a global phenomenon, with millions of people playing it on their smartphones. The success of the first AR mobile games has led to a renewed interest in AR technology from the gaming industry. Several major game companies, including Nintendo, Microsoft, and Sony, are investing heavily in AR technology.

Compared to flat-screen games, VR games allow players to be more involved with the help of a number of tools. VR offers players a gaming experience where they feel directly involved in every event and are solely responsible for the outcomes of the scenes. In addition, 3D games take the user one step forward by placing them within the game environment, making them feel as if they are holding the weapons themselves and firing or are being attacked by the opposition.

In addition, virtual and augmented reality can provide new opportunities for game retailers to create unique and innovative products.