



## How is Virtual Reality (VR) Changing the Way We Interact with the World

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Virtual reality (VR) is revolutionizing the way we interact with the world. VR is a simulated three-dimensional (3D) environment and a simulated experience that allows the user to explore and interact with the virtual environment to approximate reality and give the user the feeling of being immersed in a virtual world. It has gained amazing growth and popularity in transforming industries, such as entertainment, education, and others. Back then, learning was limited to textbooks and lectures. Complex topics were explained through static images and text. In addition, films were shown on flat screens. Interaction with video games was possible but was limited by the screen and remote controls. Nowadays, however, VR enables immersive excursions and 3D simulations for learning. This article begins by discussing how VR is changing the way we interact with the world.

First and foremost, VR is changing the way we interact with the world by having a revolutionary impact on the entertainment industry. VR in the entertainment industry opens up a world of possibilities for both audiences and directors. Similarly, VR allows viewers to immerse themselves in the story and explore it in their own way. The Walt Disney Company, for example, offers entertaining animated films for children and adults to enhance their movie-going experience on Apple Vision Pro.<sup>1</sup> VR is also having a huge impact on gaming. VR in games is a technology that allows you to interact with virtual objects. VR headsets such as the Oculus Rift, Apple Vision Pro, and PlayStation have already gained the interest of many followers. In addition, the Apple Vision Pro offers people a number of benefits. For example, it helps increase people's productivity. This device allows viewers to control and manage multiple virtual screens simultaneously. This will save the viewers' time and create a more efficient workflow. Other than this, it can also improve the quality of communication. For instance, the Apple Vision Pro allows holographic meetings where participants appear virtually present. Moreover, VR also enhances e-commerce. In this case, maybe you have products with different configurations; a VR headset could provide possibilities for shoppers to try clothes virtually in their homes.<sup>2</sup> In summary, VR has a revolutionary impact on entertainment, gaming, productivity, communication, and e-commerce, enhancing immersion and interactivity significantly.

Additionally, VR contributes a lot to the medical industry and provides a host of advantages, including medical training. It helps medical school graduates immerse themselves in a surgical experience with risk-free conditions. They can observe surgeries and see

surgical procedures from a first-person perspective. To put it differently, medical students no longer need to rely on teachers to train them. For example, they can use VR now for advanced human anatomy such as the central nervous system, cardiovascular system, and bones in an immersive environment.<sup>3</sup> This will help them flourish with additional exposure. Moreover, it helps patients destress and feel less pain during procedures. While in the hospital, for many patients, not knowing exactly what will happen before the surgery can create a lot of fear. Therefore, patients use VR to allow them to be transported to picturesque locations, including beaches, rainforests, and waterfalls. In a recent pilot study, it was stated that patients at St. George's Hospital had the option to use VR headsets during wide-awake surgeries to reduce anxiety. Almost all of the participants said that their overall experience was improved by wearing the headsets.<sup>4</sup> Hence, VR creates a significant impact in the medical industry.

Moreover, VR is playing a dominant role in the education industry by providing immersive experiences and making complex subjects easier to understand. In a recent market summary, the VR market is expected to increase from USD 25.85 billion in 2024 to USD 67.02 billion by 2029.<sup>5</sup> VR provides inclusive learning to students. It provides a personalized learning experience where students can collaborate and engage regardless of physical limitations. It is really hard for students to understand theory-based conceptual subjects if they cannot visualize them clearly. However, VR can easily bring conceptual subjects to life. As a result, students can grasp complex conceptual subjects in ways that traditional methods might not support, and students' brains create detailed mental maps, helping improve knowledge. Moreover, in this information age, technology is everywhere, so it is crucial for students to learn computing. VR offers a perfect opportunity for students to learn and develop their computing skills in an exciting and engaging way. Students can practice their computing skills through VR simulations that include gamification that enhances competency-based training. Thereupon, students would learn a lot of new job skills because almost every job this day involves technology and computers. Teaching students computing skills opens up a world full of possibilities for them. Lastly, virtual educational tours are quite prevalent today.<sup>6</sup> It allows students to explore places they could only read about, such as visiting the surface of the moon, the history of our country, and much more without leaving the classroom. Virtual field trips are really convenient because they are cost-effective for schools and are engaging. Overall, VR enhances education by

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making complex subjects easier, fostering personalized learning, and offering immersive experiences.

In conclusion, VR is taking an increasingly critical role in our lives. VR has a lot of ethical impact on users and on the world. For example, VR offers improved access to education. It also has the capacity to achieve one of the Sustainable Development Goals, which is quality education. Moreover, the future of VR promises to transform the way we interact with the world, such as creating and designing homes using VR technology. The main purpose of VR is to give users an unreal and thrilling experience. The technology of VR is increasing rapidly, and it will not be long before it becomes the most exciting source in our homes.

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