Virtual Reality:
Benefits of Utilizing VR, or not?

By Rinn Teo | August 2, 2021, 12.00pm

Virtual reality, more widely known as VR, is a topic that people of all ages would have heard of at least once in their life. Not to be mistaken with augmented reality (AR), both technologies are known for their enriched experience that brings together a virtual world and the real one with enhanced, 3-D visuals. VR takes adding to the user's real-life experience to another level by producing an entirely computer-generated simulation of an alternate world. These vivid reenactments can make practically any visual or spot possible for the player utilizing special equipment such as computers, sensors, headsets, and gloves.

What's the Difference Between the Two?

The distinctions between VR and AR comes down to the devices they require and the experiences itself:

- AR uses a real-world setting while VR is completely virtual
- AR users can control their presence in the real world; VR users are controlled by the system
- VR requires a headset device, but AR can be accessed with a smartphone
- AR enhances both the virtual and real world while VR only enhances a fictional reality

The Future of VR

Over the course of the following years, in VR, as in all fields of innovation, will see things that make what is state of the art today. What's more, the impacts of this change will be far more extensive, addressing our work, schooling, and public activities.

The present most famous VR applications include taking total control of a user's senses (sight and hearing, particularly) to make an absolutely vivid encounter that puts the user in a completely virtual environment that feels pretty realistic.

VR in Education and Training

VR is now making incredible advances into education, with countless new businesses and organizations offering bundled packaged experiences and services aimed at schools. Also, it was demonstrated that medical students trained by utilizing VR had the opportunity to complete certain tasks speedier and more precisely than peers trained using traditional methods due to the realistic visions and practices.

Education: Better Understanding of Contexts

Enhance your classroom experiences by immersing in new experiences and defying physical limitations with virtual trips to Mars, the seabed, or anywhere else you can imagine. Virtual environments and objects help you to create specialized lessons which improve learning retention and class interaction.

One of the less frequently considered benefits of VR in the classroom is the unparalleled opportunity it gives to truly inhabit the perspectives of others. Imagine the understanding and emotional experience a student could gain from standing in the trenches during World War 1, or the insight into life in other cultures.

Training: How Surgeons Use VR Technology to Train and Adapt

Surgical training platforms that leverage VR can provide vivid learning experiences for students and surgeons to evolve the skill sets required for advanced operations. Realistic visuals help provide experiences tantamount to the real thing. By supplementing key sensations of holding surgical instruments and touching patient body parts, it allows for a greater understanding before a real operation.

"The center has a room with a surgical simulator, offering true VR where surgical trainees can go through various general surgical procedures using laparoscopic instruments," Dr. Rondi Kauffmann, an assistant professor of surgery at Vanderbilt, tells *HealthTech*.

Disadvantages of Using VR:

1. Advanced technology is often expensive. If we wish to expand this VR trend and reach the masses, we must spend billions of dollars on these features.

2. VR is often an isolating, individual experience – it takes you to somewhere else removed from the existing environment. The traditional education is based on personal human communication and interpersonal connections. This is the opposite of events where one of the main goals is to bring people together live in a group.

3. VR takes time to sanitize the headset, to put on/adjust the headset, explain the controls, and for the user to view the content. When things go wrong, a student's learning activity is over until the tool is fixed.

4. In a classroom, you can be flexible, ask questions, and receive answers. If you're using specific software which has been programmed to work exactly the same, you won't be able to do anything else except what you're supposed to do.

5. The possibility of users getting addicted to their virtual world is big. We've seen what video games and strong experiences do to people. When what users experience is better than their normal life, there's a big chance of them getting addicted.

Conclusion

The VR environment is consistently evolving. It could bring dozens of benefits to almost any field, but it can also prove to be harmful. Costs aside, in my own opinion, VR could definitely be the leading tech to our future generations. Take the current COVID-19 as an example, where we are all locked down in isolation in our own homes.

Would being on video calls all the time be better than having the opportunity to "meet" each other "in person"? Most likely, if you were a new recruit in a huge company or a student wanting to learn a skill from a teacher, your learning experience would be more conducive and fruitful should you be able to do it "in person".

References

1. Tulane University. (n.d). *What's the Difference Between AR and VR?* Retrieved from https://sopa.tulane.edu/blog/whats-difference-between-ar-and-vr

2. Bernard M. (Dec 2020). *The Future of Virtual Reality (VR).* Retrieved from https://www.forbes.com/sites/bernardmarr/2020/12/18/the-future-of-virtual-reality-vr/?sh=3a77d95f27be
3. Nathan E. (Nov 2020). *How Surgeons Use VR Technology to Train and Adapt.* Retrieved from https://healthtechmagazine.net/article/2020/11/how-surgeons-use-vr-technology-train-and-adapt
4. Scott H. (Jul 2018). *Facebook Creates New Internal Organization to Build "the Metaverse". Retrieved from* https://www.roadtovr.com/facebook-reality-labs-metaverse/
5. Corbin B. (2018). *Virtual Vs. Augmented/Mixed Reality for Events: The Pros and Cons for Each Medium and the Likelihood of Adoption.* Retrieved from https://www.corbinball.com/article/36-mobile-and-wireless-technology/243-vrvsar
6. Paula H. (Dec 2016). *The Pros and Cons of Using Virtual Reality in the Classroom.* Retrieved from https://elearningindustry.com/pros-cons-using-virtual-reality-in-the-classroom

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