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2023 VIRTUAL REALITY DEVELOPMENT TRENDS: THE FUTURE IS NOW

As we navigate 2023, virtual reality (VR) technology continues to advance at an exponential rate. The possibilities for VR technology are endless, from video games to medical training to engineering simulations.

The potential of VR is truly manifesting, with an increasing number of industries adopting the technology. The rising VR trends that will influence the industry in the upcoming years are examined in this article.

Virtual Reality Development Trends for 2023

New hardware and software products are constantly emerging; it never ends. As technology continues to evolve, what are this year's VR development trends we should expect? Here they are:

1. Increased Focus on Accessibility

One of the primary limitations of VR is accessibility. VR headsets can be expensive, bulky, and uncomfortable for extended periods. Furthermore, there are people with disabilities or limited mobility who may not be able to use VR technology at all. Fortunately, developers are working to make VR more accessible to a broader range of users.

In 2023, we can expect to see more focus on accessibility in VR development. Companies are already working on developing lighter, more comfortable headsets and developing more accessible software for people with disabilities. Additionally, many developers are working on creating VR experiences that are more inclusive, taking into account a more comprehensive range of abilities and backgrounds.

An example of a successful VR accessibility initiative is Microsoft's SeeingVR, a project from Microsoft Research that aims to make VR more accessible to people with low vision or blindness. Oculus also released on December 2020 their new Fit Pack for the Quest 2 VR headset with two interchangeable facial interfaces that allow users to choose the most comfortable fit.

2. More Integration with Other Technologies

Another emerging trend in virtual reality is the integration of VR with other technologies. This includes artificial intelligence (AI) and machine learning. Businesses can use AI and machine learning to improve the accuracy and realism of VR experiences, which in turn makes them more immersive and engaging for users.

Expect to see more VR applications that incorporate AI and machine learning. Companies can use machine learning to improve the accuracy of VR engineering simulations. This innovation makes it easier for engineers to test and refine designs.

You can see this exact scenario through the partnership between HTC and Volkswagen. Volkswagen uses the platform with HTC's Vive Pro Eye headset, which incorporates eye-tracking technology to allow for more natural and intuitive interactions in VR. The training scenarios simulate real-world situations that Volkswagen employees might encounter, such as assembling parts or troubleshooting issues on the factory floor.



3. Advancements in Hardware

VR hardware is also evolving rapidly, with new devices and accessories constantly being developed. Some of these hardware improvements to be anticipated in 2023 are lighter and more comfortable headsets, more accurate motion tracking, and more immersive haptic feedback.

One promising advancement in VR hardware is the development of brain-computer interfaces (BCIs). BCIs allow users to control VR experiences with their thoughts. In turn, this eliminates the need for controllers or other input devices. BCIs may still be in the early stages of development. However, they have the potential to revolutionize the VR industry in the coming years.

4. The Rise of Social VR

Social VR is another emerging trend likely to shape the industry in the coming years. When we say Social VR, it is when users experience social interaction

with one another in virtual environments. Social VR is very similar to face-to-face social interactions but in the virtual world. This experience makes connecting with people worldwide in new and exciting ways possible.

These experiences range from casual social spaces to more structured social events like concerts or conferences. As social VR becomes more popular, we can foresee its potential for education, training, and entertainment.

One recent example of social VR is Facebook Horizon, which launched in public beta in 2020. Facebook Horizon is a social VR platform that allows users to create virtual worlds and interact with other users in VR.

5. The Future of VR Gaming

Gaming has always been one of the primary drivers of the VR industry. If you are an avid gamer, you know the thrilling rush of excitement of playing in an environment where you feel just like reality. These are the advancements that a lot of developers want to achieve, a realistic gaming experience!

We may see more VR games incorporating AI and machine learning, which creates more realistic and engaging virtual environments. We may also see the development of advanced haptic feedback systems, allowing gamers to feel the virtual world around them in new and exciting ways.

In addition to these advancements, we can expect more cross-platform VR gaming experiences, allowing gamers to play together regardless of their hardware.

The Current State of Virtual Reality Development

Virtual Reality has been constantly present in popular culture. We've seen depictions of Virtual Reality in movies such as Ironman and Star Trek. But VR is not just in film, and we will be experiencing more VR in the coming years.

VR technology has many applications—from gaming and entertainment to education and training.

For example, the medical industry can put VR to use by simulating medical procedures. VR allows doctors and nurses to practice and refine their skills in

a safe environment. The education sector can also use it to create immersive educational experiences, such as virtual field trips or historical reenactments.

One of the critical benefits of VR is its ability to create a sense of presence, allowing users to feel as if they are actually in the environment. This very reason makes VR experiences more engaging and memorable than traditional media, such as video or text.

Because of this key benefit, the state of virtual reality development is one of rapid innovation and growth. VR is reaching further than businesses and organizations. It is now reaching directly to consumers. Over the past few years, there has been a surge in the number of VR hardware and software products hitting the market. VR is becoming increasingly accessible to consumers and businesses alike.

The Future is Now!

The future of virtual reality development is exciting, and there are many reasons to be optimistic about its potential. As VR technology evolves, we can expect to see even more innovative and engaging VR experiences, from gaming to education to healthcare. While there are still challenges to overcome, such as accessibility and user comfort, the progress being made in these areas is encouraging.

As a leader in the software development industry, **Full Scale** recognizes the importance of staying up-to-date with the latest trends in technology. Virtual reality is no exception. This means a tremendous opportunity exists to leverage virtual reality technology to create engaging and interactive user experiences.

Whether it's developing a VR game, creating a virtual training program, or exploring new ways to market products or services, virtual reality can potentially transform businesses in various industries.

At Full Scale, we have a team of experienced developers who are passionate about exploring new technologies and creating innovative solutions for our clients. If you're interested in building a team of experienced software