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Making the Metaverse Accessible Is Better for Everyone

This is our chance to build accessibility from the start

By Sascha Brodsky Published on February 4, 2022 10:14AM EST
Fact checked by Jerri Ledford

Key Takeaways

Experts say that the metaverse needs to be designed with accessibility in mind.

For people with vocal challenges, a voice changer provides the ability to feel more comfortable presenting themselves verbally.

Augmented reality is one way that the metaverse could help those with disabilities.

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The metaverse is rapidly taking shape amid a growing movement to make sure the virtual worlds are accessible to users with disabilities.

Meta (formerly known as Facebook) provides accessibility guidelines for software developers making apps for its virtual reality headset. Those rules could help shape the network of 3D virtual worlds focused on the social connection that makes up the metaverse. But observers say that more needs to be done.

"Every person has a different set of abilities from very poor to really great eyesight, excellent hearing to completely deaf, and so on," Joe Devon, the co-founder of Diamond, an accessibility-focused digital agency, told Lifewire in an email interview. "If you develop virtual reality to work well for People with Disabilities, you will automatically be making affordances for older people, for people with mobility issues, for people in wheelchairs, and you will have a much better product for every user."

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There's a large potential audience for an accessible metaverse, Svetlana Kouznetsova, an accessibility consultant who is deaf, said via email. About 1.85 billion people worldwide are living with disabilities. It's a group larger than the population of China.

Making the metaverse accessible is good business sense, she contends. Those with disabilities control $1.9 trillion in annual disposable income.

"If our needs are ignored, businesses will lose not only us, but also our family, friends, and colleagues that make up another 3.4 billion potential customers," Kouznetsova said. "Together, we control $13 trillion."

Even though the metaverse is in its infancy, developers are already working on making it more accessible. For example, interactive interfaces make the metaverse more accessible for people with sensory challenges, noted Jaime Bosch, the CEO of Voicemod, a voice-changing app.

For people with vocal challenges, a voice changer provides the ability to feel more comfortable presenting themselves verbally, as it allows them to express themselves in ways otherwise not possible, Bosch said.

other people," he added. "Individuals who are fully nonverbal can use a soundboard to have conversations. On a soundboard, they can build sentences, use text-to-speech, and create a unique voice for their character or avatar."

> ”If our needs are ignored, businesses will lose not only us, but also our family, friends, and colleagues that make up another 3.4 billion potential customers,”

There are also efforts underway to help those with visual limitations. Some games, for example, have a colorblind mode, Bosch said. There are also games where users can interact through audio or motion interfaces without seeing the picture—for example, a responsive vibration in your controller. Spatial audio technology can help people better navigate through online spaces.

A Better Digital Future?

Some experts are hopeful that since the metaverse isn't yet fully formed, it can be designed for all users from the ground up.

"If inclusion and accessibility are at the forefront of its design, the metaverse could prove to be more usable than current digital experiences," Geoff Freed, a digital accessibility expert, told Lifewire

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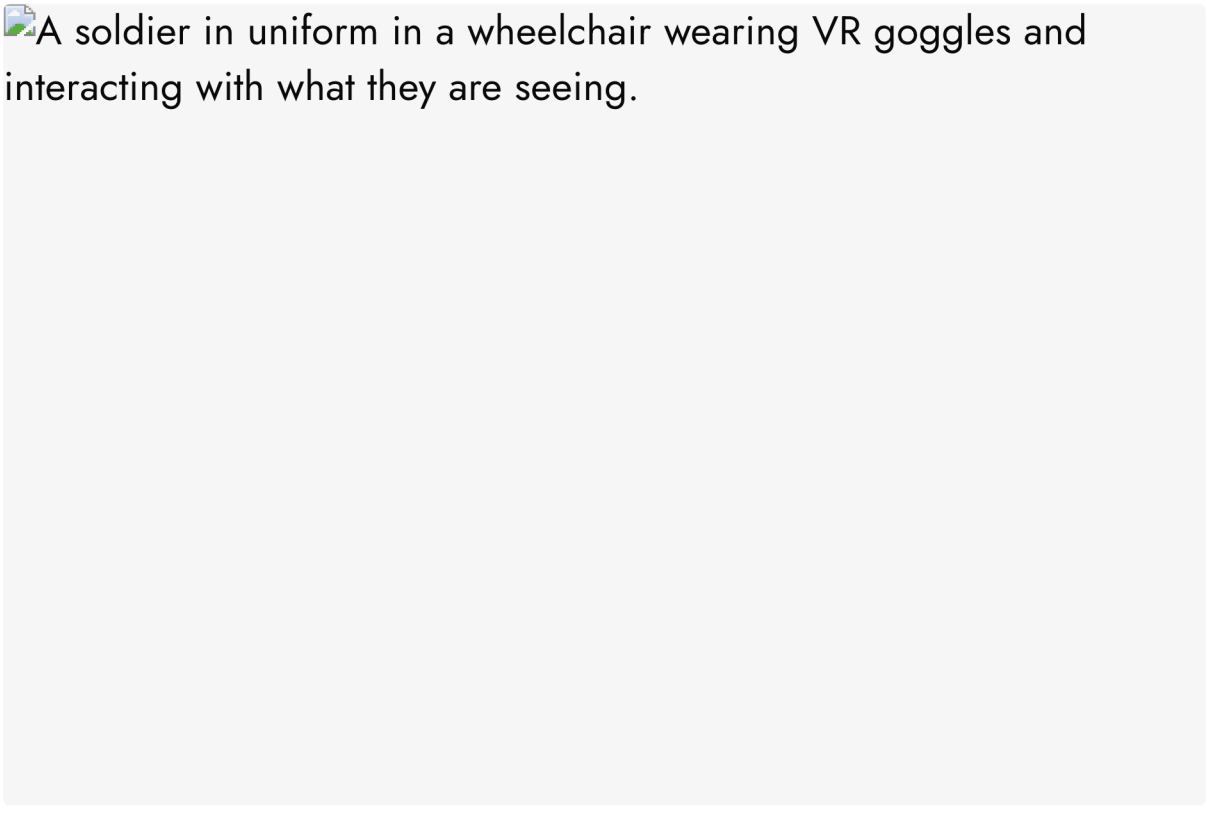
the Web Content Accessibility Guidelines (WCAG). While the "W" stands for "Web," the principles described in these guidelines also apply to non-Web technologies, he said.

"The metaverse, which encompasses virtual reality (VR), augmented reality (AR), extended reality (XR), gaming worlds, and things we don't even know about yet, are just a few examples of non-Web tech," Freed added. "Existing recommendations and guidelines specifically for virtual worlds are constantly changing as technology evolves."



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Augmented reality, the experience of a real-world environment that's enhanced by computer-generated information, is one way that the metaverse could help those with disabilities, Glenda Sims, the accessibility team lead at Deque Systems, a web accessibility consulting firm, said via email. She cited the example of a future traveler in an airport.

"Because you are sighted, you choose to use your metaverse glasses

chooses to receive haptic signals via his metaverse shoes, as well as audio guidance in his headphones, and they quickly move to their next flight with confidence."

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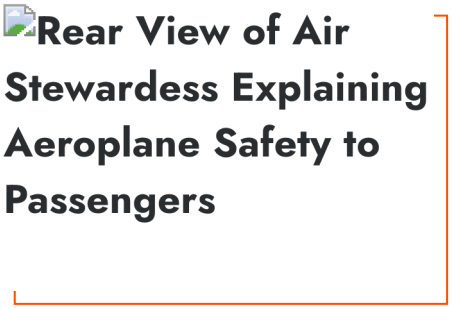

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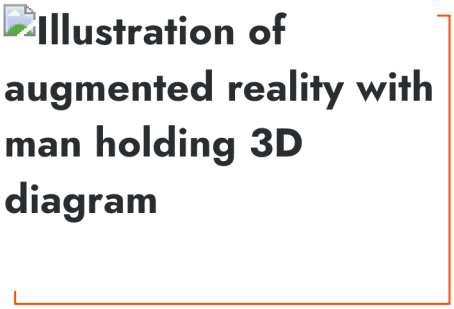

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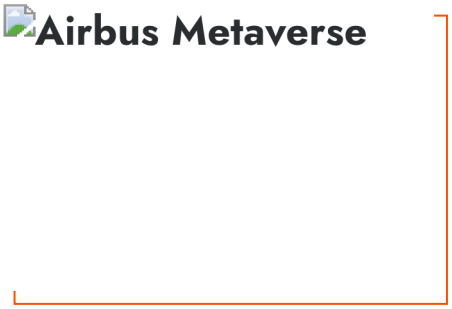

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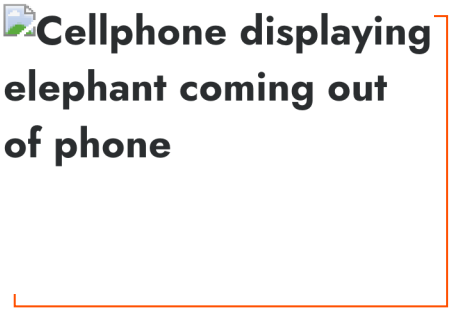

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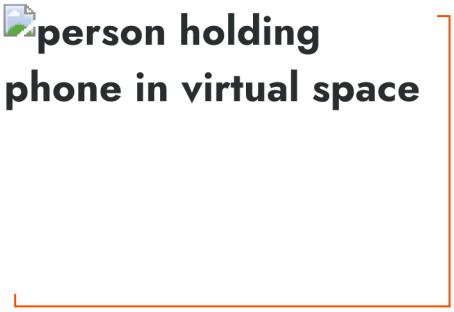

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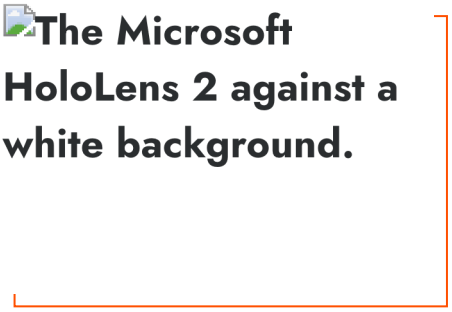

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