WHAT LEADERS NEED TO KNOW

Inclusive, Immersive Workplace Technologies

Bringing Accessible XR Technologies into Fast-Growing Fields

Organizations that prioritize accessibility in the extended reality (XR) technologies they adopt can gain a competitive edge in a tight labor market.

As organizations accelerate their digital transformations, they can use XR to engage employees in new ways. XR technologies enable businesses to attract and hire more diverse talent pools. These technologies also have proven benefits that include improved job training and enhanced collaboration. To ensure people with disabilities can access these benefits, XR tools must have accessibility features by design.

Inclusion Strengthens Businesses

Organizations that hire and retain people with disabilities earn 28 percent higher revenues, two times the net income, and 30 percent higher economic profit margins than their peers, according to Accenture.

Accessible Technologies Enable Everyone to Succeed

The flexibility that comes with accessible XR technologies helps employees without disabilities as well. Usability features such as volume control, captioning, voice commands, and different ways to interact with a tool are just a few examples.

XR Technologies Are Key to Fast-Growing Jobs

Some of the fastest-growing jobs in the U.S. are in industries that are rapidly adopting XR technologies. Uses of XR include warehousing and inventory management, product engineering and design, immersive job training and upskilling, and virtual healthcare patient monitoring. Current and future employees will continue to experience expanding access to immersive technologies at work.

Employee Training

Immersive technologies help organizations train and upskill employees faster and safer. Simulations and AR/MR applications allow employees to practice dangerous or difficult tasks in a safe environment.

Remote Assist & Collaboration

Immersive technologies facilitate knowledge sharing among coworkers. The overlay of digital information onto physical environments helps employees in different locations collaborate in real time.

Customized Interactions

Personalized modes of interaction can increase accessibility and help ensure broad usability. Different types of users benefit from the flexibility to choose options such as voice commands, eye-tracking, and gesture control.

PEAT XR ASSOCIATION

PeatWorks.org xra.org

Inclusive XR Technologies Are Key to Business Success

XR accessibility must be a top priority for employers and integrated into organization-wide Diversity, Equity, Inclusion, and Accessibility (DEIA) policies and programs. This will ensure all employees, including those with disabilities, can easily use the tools. Before procuring a new XR technology, organizations should consider the following questions.

Think about how the technology will be used by employees with different sensory, physical, and cognitive needs, including those with temporary or situational limitations.

Consult Employee Resource Groups (ERGs) to learn employee perspectives and requirements.

Speak to suppliers to determine their accessibility testing protocols and learn whether people with disabilities were consulted in the design process.

Assess whether the technology is flexible and supports different input modalities, as well as interaction modes. For example, supporting different ways of communicating (voice, text, sign language) might help employees in loud or quiet environments.

Develop a business case for inclusive XR and immersive technologies that clearly maps to established organizational goals and objectives. Document how accessibility can support these goals.

To learn more, read our companion resource, Inclusive XR in the Workplace, and refer to the sources below.

XR Access Initiative, a community of cross-sector participants from advocacy organizations, industry, and academia who are dedicated to ensuring XR is accessible to people with disabilities.

The Accessibility Playbook for Emerging Technology Initiatives, a blueprint from PEAT for launching a successful initiative to drive the development of accessible emerging technologies.

XR Association's Developers Guide, Chapter 3: Accessibility & Inclusive Design in Immersive Experiences, provides software developers with best practices to make XR accessible to people of all disability types.

W3C XR Accessibility User Requirements help developers understand what people with disabilities may need when they access immersive applications and content.

Terms to Know

Virtual Reality (VR)

Replaces a user's real surroundings with a simulated environment, such as a construction site, a subway system, a coastal floodplain, or an energy grid

Augmented Reality (AR)

Layers computer-generated imagery onto a user's view of the real world, thus providing a composite view

Mixed Reality (MR)

Blends augmented and virtual reality, allowing users to experience simulated content within their physical worlds and to manipulate and interact with virtual elements in real time