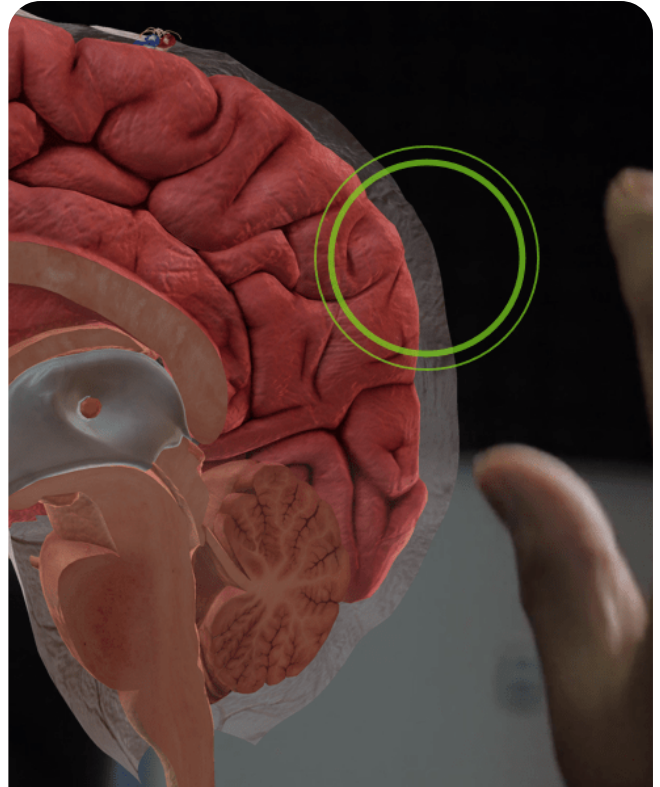


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XR proves its value in the enterprise



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The future of the “metaverse” is up for debate, but there’s no question the pandemic digitized everyday life and disrupted companies’ digital agendas.

CIOs are tapping into newer technologies to create a competitive edge despite ongoing challenges with no end in sight. We’re seeing three pervasive themes emerge across industries: the need to operate more efficiently; compete amidst talent

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shortages; and train and reskill a high-turnover workforce. Advances in extended reality (XR) offer compelling new ways to address these challenges.

For the past two decades, XR's high price tag has limited it largely to military and medical applications. Not anymore. New solutions and falling costs are bringing immersive tech into reach for today's companies. The extended reality market is [expected to grow](#) from \$33 billion in 2021 to \$125 billion by 2026, at a CAGR of nearly 31%. Global brands have already adopted VR and AR (together known as XR) in their employee training practices, and forward-thinking organizations across all markets can incorporate XR to minimize risk, address the talent gap, and improve the customer experience (CX).

Taking the risk out of high-consequence training

As employers onboard and upskill employees, XR can immerse workers in high-stakes situations that let them learn—and even fail—without any real-life repercussions. From slicing open virtual patients to scaling virtual heights, the technology is ideally suited to minimizing risk in dangerous settings, like:

- **Patient safety** – The market for VR solutions in healthcare is expected to grow at a [CAGR of 35%](#) over the next five years, and there are now more than [5,000 published studies](#) supporting VR use in a medical setting. Applications reach well beyond robotic-assisted surgeries. For example, [UConn Health](#) is using VR to take the risk out of training its orthopedic residents, enabling surgeons to master their skills outside of the operating room and practice procedures without jeopardizing patient outcomes.

Innovative VR applications are also opening new avenues for treatment. [Cedars-Sinai](#) is a front-runner in VR adoption, using the tech to safely control pain for opioid-addicted people, provide side effect-free pain relief to cancer patients, and help treat anxiety and depression across all age groups. As medical XR investments and advancements continue, their findings will help accelerate innovation and adoption across all sectors.

- **Public safety** – Police departments across the country are turning to VR for de-escalation training that lets officers safely “see” how their split-second decisions play out across a range of scenarios. Wearing VR headsets, officers are immersed in 3D experiences with characters of different races, ages, and cognitive abilities. Characters respond to the user's questions and commands in real-time, and change their answers and actions based on the officer's behavior. The goal is to hone communication, de-escalation, and problem-solving skills while letting officers practice high-stress scenarios in a risk-free environment.

In March 2022, [Axon](#)—a leader in high-tech solutions across the public safety sector—announced new [cutting-edge VR training](#) that pairs a wrist tracker with a VR headset. This innovative approach creates a more holistic learning environment that tracks officers' hand motions and use of Tasers as they interact with VR characters. While not intended to replace in-person training, VR is proving to be a valuable addition to public safety training curricula.

- **Worker safety** – From repairing high-voltage power lines to inspecting 300-foot-tall wind turbines and handling combustible materials on an oil rig, today’s energy workers face dangerous situations every day. Launch by NTT Data partnered with DTE to launch the utility industry’s first immersive training environment that helped workers safely practice making repairs at heights. Now, augmented reality is transforming remote maintenance and repair procedures across industries. Gartner predicts that over [50% of field service](#) management deployments will include mobile AR collaboration and knowledge sharing tools by 2025—up from less than 10% in 2019. It’s a sizable leap that is likely to be amplified across high-risk industries as new tech-powered tools improve on-the-job safety.

Addressing the talent gap

The talent shortage started brewing long before the “Great Resignation” and will continue long after. Precise numbers vary, but most studies are dire: Korn Ferry’s [latest research](#) predicts a global talent shortage of more than 85 million people by 2030. XR is helping enterprises compete for workers in this talent-scarce environment and quickly upskill the employees they already have.

As companies scramble to attract the next generation of talent, they’re learning to embrace digital acceleration. The number of [AR/VR users in the U.S.](#) surpassed 175 million in 2023, and the digital natives of Gen Z grew up attached to their phones and immersed in virtual gaming experiences. With minds built for multi-tasking and a strong preference for hands-on learning, this generation considers [access to the latest technologies](#) a key part of their career progression. Companies that incorporate XR into their learning programs send a clear signal that they’re investing in their employees’ skills and success.

Bringing workers up to speed quickly is the next step, and XR use cases are delivering on the promise of increased productivity. In a recent PwC study, employees who had taken VR training said they felt [40% more confident](#) to act on their training than classroom learners and 35% more confident than e-learners.

Companies using AR have reported even stronger results: a 46% reduction in time to complete tasks, and average productivity improvements of 32%. The success stories span industries—like assembling wiring harnesses at Boeing or filling warehouse orders at GE Healthcare—and as AR prices fall, adoption is rising. According to IDC’s IT Buyer Sentiment Survey, [64% of companies](#) will maintain or increase their AR spending this year. Much of that will go toward remote expert assistance, one of AR’s most promising applications. This process connects novice technicians with a remote expert who can see the machine in question as if they’re standing right next to the technician, allowing them to walk the novice through troubleshooting and repair procedures or even draw schematics right into the user’s view. The combination of remote training and immediate real-world results drives powerful ROI.

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Strengthening the softer side of CX

While XR has proven highly effective in training workers for physical tasks, it's also starting to be used to immerse employees in high-pressure human interactions that require mastery of "soft skills." VR platforms have the dual advantage of immersing learners in stressful, emotional scenarios while also capturing data on their virtual decisions and responses. Although lives might not be at stake in these scenarios, brand reputation could be.

[Bank of America](#) is an early adopter of using VR training to improve the customer experience. After a successful pilot in 2021, the firm is rolling out VR headsets to all 4,300 of its financial centers and plans to train 50,000 employees using immersive tech. Teammates will have 20 different VR simulations that let them practice a wide range of skills, from navigating difficult conversations to listening and responding with empathy. Real-time analytics embedded in the technology will enable managers to identify skill gaps and provide personalized coaching to teammates. So far, the results are hard to beat: 97% of BoA participants say they felt more comfortable performing their tasks after completing the VR training.

Looking ahead

XR has countless applications for everything from recreation to scientific research—but it's equally valuable for business leaders tackling everyday challenges within their own orbit. If you're considering how immersive technology could benefit your enterprise, consider taking these steps:

- Define the problem you're trying to solve before assuming XR is the right solution. If you're not sure how to capture your end-user and business needs, engage with a partner like [Launch by NTT Data](#) to clarify the voice of the customer.
- Test the waters with a small pilot.
- Follow an agile methodology: listen to customer feedback, make adjustments, listen again, and repeat until your XR solution is delivering the results you need.

When you're ready to get started, [we're here to help!](#)