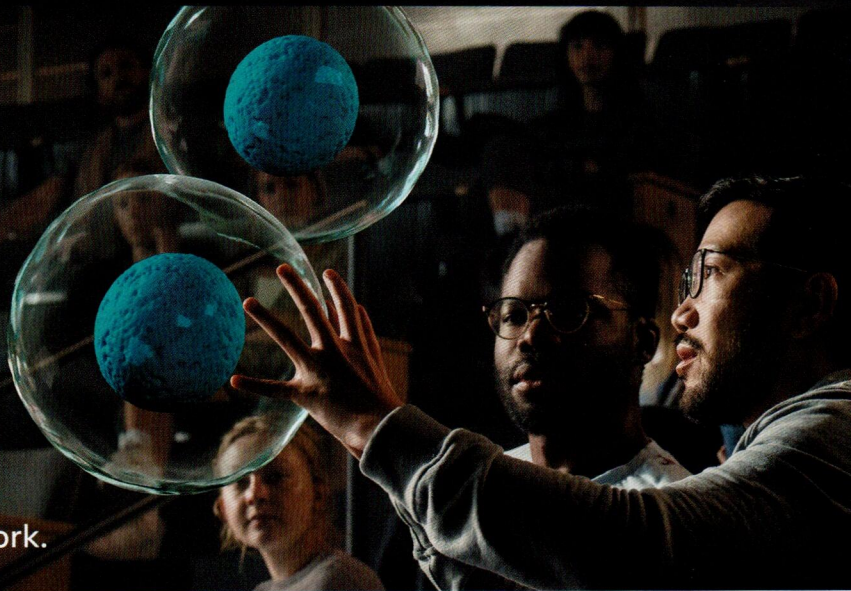


The Social and Economic Value of the Metaverse

Virtual and augmented reality technology already impacts so much—from the way we learn to the way we work.



The metaverse is the next evolution in social connection and the successor to the mobile internet. It is a set of digital spaces that people will be able to move seamlessly between. Gaming and entertainment will play leading roles in our journey to this 3D world, but the true societal and economic benefits of the metaverse are only now beginning to emerge.

The building blocks of the metaverse are being created by individuals, companies of all sizes, civil society and governments. It unites new and existing technologies in innovative ways, making it difficult to accurately estimate its future impact. But if the metaverse were to grow in a similar way to mobile technology, it could add an estimated \$3.01 trillion (2.8%) to the global economy after 10 years, according to research conducted by economists at Analysis Group.¹

The metaverse will grow by delivering real benefits in workforce development, health care, education and other areas. Meta is working alongside a range of global organizations and companies to develop programs, research and educational experiences to accelerate the realization of these advantages which could help benefit billions of people.

For instance, in India, “Meta is working with the Ministry of Electronics and Information Technology to help startups get ready for

the metaverse,” says Rob Sherman, vice-president and deputy chief privacy officer at Meta. “We also helped the Organization of American States launch free online courses to train more than 10,000 creators on how to develop augmented reality applications, and we’re working with Jobs for the Future in the US to upskill workers using virtual technology.”

Enhancing workforce development

Nestlé Purina PetCare uses virtual reality (VR) via Meta Quest headsets to help plan effective retail shelf displays and train salespeople who are not in the same geographical location. By training their teams in VR, Nestlé Purina PetCare cuts costs on travel, increases collaboration and helps its salespeople work more efficiently.

Advancing health-care training

Medical school and residencies remain essential, but VR and augmented reality (AR)—which overlays computer-generated content in the real-world environment—can help medical students learn and practice specialized surgical techniques before they ever operate on a real patient. Haptic technology connects trainees with physical sensations (such as the feel of soft tissue or the vibration of a saw on the bone) that can help reduce risk in the operating room.

The Johnson & Johnson Institute uses Meta Quest headsets to help surgeons

master new techniques. In one study of a simulated orthopedic procedure, VR-trained medical students scored 233% higher and completed 252% more steps than students using passive learning tools.

Improving education

Immersive learning is not only bringing new excitement to education, it is breaking down geographic barriers too. Students can learn with others, whenever and wherever they want. In a study by Stanford University and Technical University of Denmark, VR-based immersive learning produced a 76% increase in learning effectiveness compared with traditional methods.

Meta is partnering with EdTech company Prisms, which represents the first formal educational VR platform aligned with the core curriculum in the US for an immersive learning platform for mathematics. The platform brings math concepts, such as exponential and linear functions, to life by modeling a viral outbreak and a melting glacier.

“VR makes abstract things tangible,” says Anurupa Ganguly, Prisms’s founder and CEO. “By immersing students in real-world problems, we answer the question every kid asks, ‘Why do I need to learn this?’”

While the journey to the metaverse is just getting started, the possibilities are many—and inspiring.



¹ “The Potential Global Economic Impact of the Metaverse”, Analysis Group, 2022. www.analysisgroup.com/Insights/publishing/the-potential-global-economic-impact-of-the-metaverse