

The Potential Economic Impact of the Metaverse



In 2022, Meta commissioned Analysis Group to conduct a study on the potential global economic impact of the metaverse, including regional estimates for Asia Pacific; Canada; Europe; India; Latin America and the Caribbean; the Middle East, North Africa and Turkey; Sub-Saharan Africa; and the United States.

While estimates about the economic impact of the metaverse are already part of the public discourse, the Analysis Group report, *The Potential Global Economic Impact of the Metaverse*, utilizes sophisticated analytical and quantitative methods to further the discussion about how the metaverse can expand economic opportunities.

WHAT IS THE METAVERSE?

The metaverse is a set of digital spaces, including immersive 3D experiences in Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR), that are interconnected so you can easily move between them. Just like the internet, the metaverse exists whether Meta is there or not, and it won't be built overnight. Technology allowed us to write, then talk and now see each other. The metaverse will be the next step—letting us feel like we are sharing a space together. It lets you do things you couldn't do in the physical world with people you can't physically be with.

For access to the full white paper, including the full estimation methodology in Section IV, please visit analysisgroup.com/metaverse.



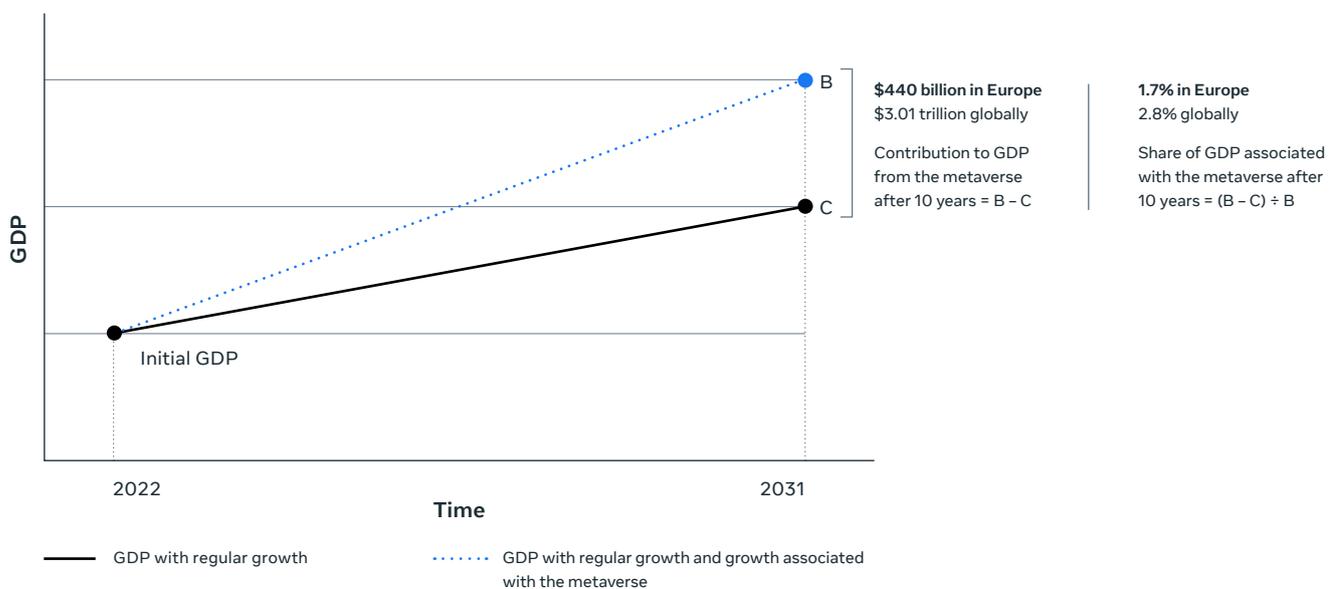
SIZING THE METAVERSE¹

Just as previous technological innovations have boosted economic growth, the metaverse is also expected to expand economic opportunities. The authors of the Analysis Group report estimate that if the metaverse were to be adopted and grow in a similar way as mobile technology in **Europe**, then after 10 years it could be associated with a **1.7%** contribution to regional GDP, or **\$440 billion**, in 2031. Under the same assumptions, they estimate that the metaverse could be associated with a 2.8% contribution to global GDP, or \$3.01 trillion in 2031.



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The Contribution to GDP by the Metaverse (10 Years after Adoption)



1. The analysis can be thought of in 3 steps. First, the authors identify an existing technology for which data is readily available that serves as an analogue to the metaverse: mobile technology. Second, they use a GMM model to identify an association between mobile technology and GDP growth, finding that a 10% increase in mobile technology adoption is associated with a 0.087 percentage point increase in GDP growth. Finally, for each region, they evaluate the difference between 10 years of growth in the region with the impact of the metaverse (assuming the metaverse has the same adoption and impact as mobile) and without this: the potential economic impact of the metaverse.



CASE STUDIES

EARLY ADOPTERS OF METAVERSE TECHNOLOGIES IN EUROPE

In Europe, industrial companies are adopting XR technologies to simplify and streamline prototyping, training, remote guidance and customer relationship processes.

Siemens, a German industrial manufacturing company, offers a VR product for product design and prototyping called Teamcenter VR.² The ability to change the design and characteristics of the prototype in 3D has the potential to bring significant time and cost savings, as iterating in 3D reduces both raw materials and production time.

Professional industrial training also stands to benefit from VR applications—BMW, Peugeot and Audi are among the early adopters of industrial VR training, which has been shown to reduce training budgets without reducing quality.³ Employees are more engaged, while training is safer and more effective, as it is possible to conduct safety drills in VR without compromising on the experience while avoiding potentially dangerous conditions.

2. Siemens, “Go VR for Fully Immersive Design Experience Virtual Reality with PLM,” available at plm.automation.siemens.com/global/en/products/collaboration/virtual-reality.html.

3. VR Owl, “The 22 best examples of how companies use virtual reality for training,” available at vrowl.io/news/the-22-best-examples-of-how-companies-use-virtual-reality-for-training.