

29M

Augmented and Mixed Reality
device shipments by 2023

\$120B USD

total AR market value by 2023

75M

Virtual Reality HMD shipments
by 2023

The Augmented and Virtual Reality (AR/VR) service covers enterprise and consumer applications, services, hardware, and platforms relating to digital visualization. It focuses on technologies and use cases that provide value through data visualization and immersive experiences. It quantifies market opportunities across the value chain for both AR and VR, head-worn and handheld form factors, while identifying enabling technologies within and across markets such as smart industry, edge compute, machine learning, and 5G. The service supports quantitative data with qualitative analysis and insight, and special attention is paid to forward-looking use cases and technologies, realistic value to users, and return on investment for customers.

TOP QUESTIONS WE RECEIVE FROM INDUSTRY INNOVATORS

- What are the basic principles of Augmented and Mixed Reality?
- What are the primary differences between VR HMD device types?
- What are the primary differences between mobile device AR and head-worn AR?
- What is the current state of the AR and VR markets?
- What kind of ROI is associated with AR and VR?
- What impact will AR/MR have on my industry over the next 5 years?
- What does the future AR and VR rollout timeline look like?
- What will the effects be of mobile AR SDKs, like Apple ARKit and Google ARCore?
- How are my competitors integrating AR and VR into their business models?
- What are the potential AR/VR regulations to watch for?
- What does a mobile device to head-worn AR shift look like in terms of time, investment, and usage?
- What security risks are unique to AR/VR?
- What does the competitive landscape look like for specific verticals and use cases?
- How will AR and VR transform enterprise training?
- What are the expectations for tethered, mobile, and standalone VR devices?
- Which companies represent promising acquisition or partnership targets?
- What associated markets should my company be monitoring and investing in?
- How do smart glasses devices differ? What are the strengths/weaknesses?
- What does the end-to-end AR and VR value chain look like?
- How does the connectivity landscape with 5G and LPWA impact the AR/VR market?

COVERAGE AREAS

- Hardware and software value chain development
- Mobile Device AR/MR
- AR monocular versus binocular devices
- Tethered, standalone, and mobile VR Head-mounted displays (HMDs)
- Applications, Use Cases, and Verticals
- Connectivity
- Sensors and processing
- Device shipments by device type, region, and vertical
- Software types, development, and distribution
- Device usage support platforms
- Systems integration
- Return on investment
- Cloud AR/VR
- Edge Streaming

KEYWORDS

- Mixed Reality
- Head-mounted display (HMD)
- Monocular smart glasses
- Binocular smart glasses
- Tethered
- Standalone
- Mobile
- ARKit
- ARCore
- Sensor arrays
- Inside-out tracking
- M2D interaction
- Machine vision
- SLAM processing
- Voice input
- Sensor fusion
- Waveguide displays
- Gaze tracking
- Gesture input
- Six degrees of freedom
- Edge Computing
- ROI
- Field maintenance
- Step-by-step instruction
- Data visualization
- Remote Expertise
- Training
- Scaling implementations