

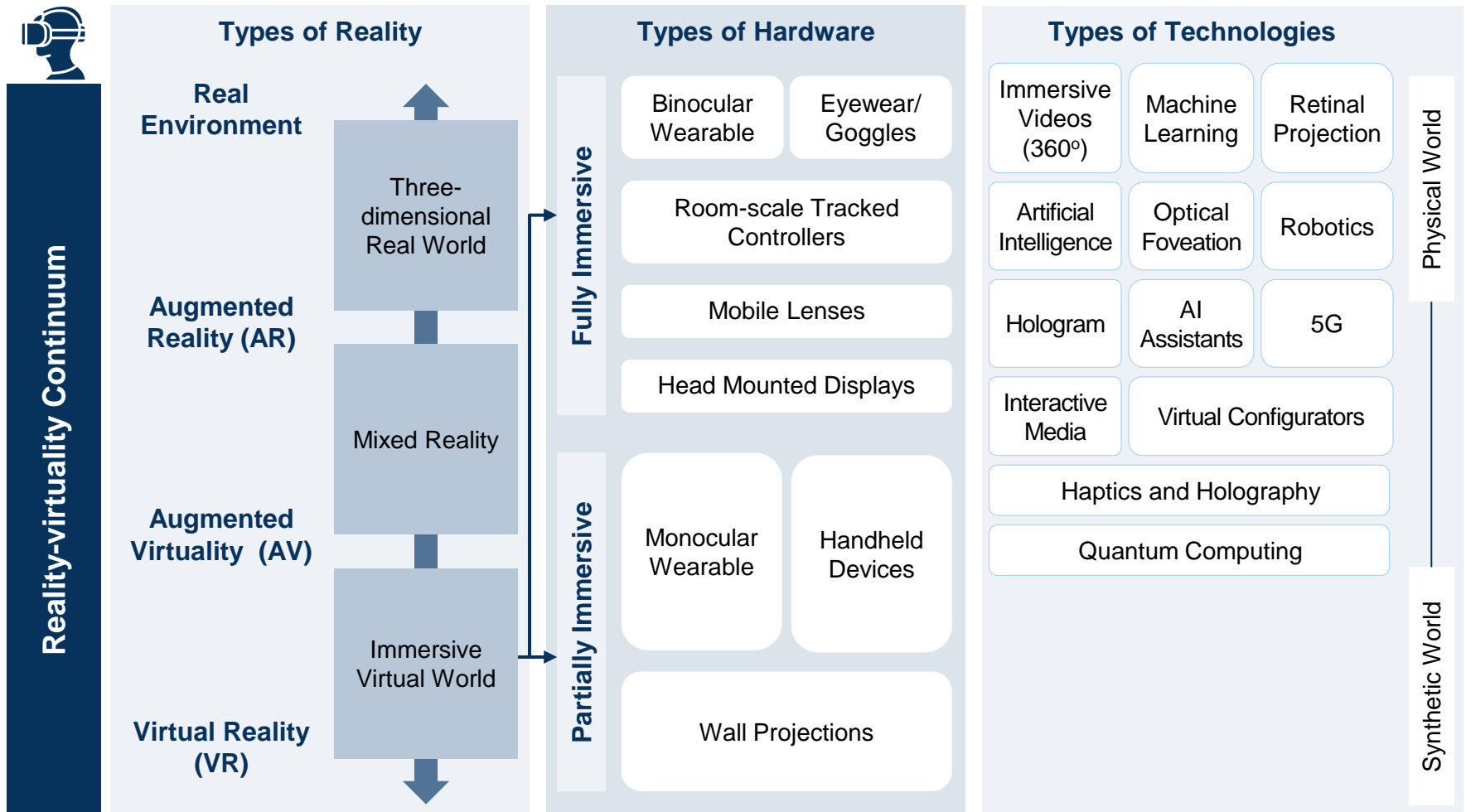


## **Future of Global Digital Reality Market, Forecasted to 2021**

Emerging Applications of Augmented Reality/Virtual Reality will create Market Revenue of \$55.01 billion by 2021




# Virtual Reality and Augmented Reality: Taxonomy Essentials

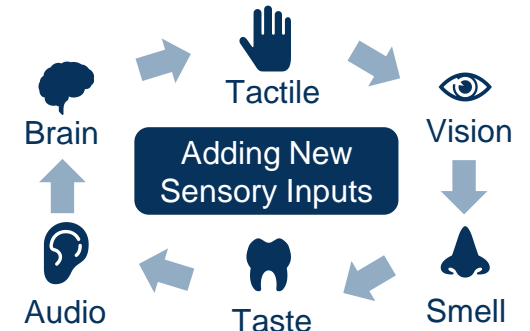
AR/VR Taxonomy, Global, 2017



Source: Frost & Sullivan

# Virtual Reality Versus Augmented Reality: Characteristics and Challenges

 <b>Feature</b>	 <b>Augmented Reality (AR)</b>	 <b>Virtual Reality (VR)</b>
Facets of experience	Synthetic data rendering overlaid transparently; senses enhanced via visualization	Existing world blotted out via opaque experience; senses overridden (full/partial)
Elements of experience	Multiple data sources composited to maximize the enrichment of experience	Multiple senses overridden to maximize immersion and optimize simulation
Key challenges	Connectivity, latency, security, precision rendering	Image/video acquisition, bandwidth, memory, resolution, visual ergonomics
Key technologies	IoT, machine learning	Visual mapping, compression
Next leap forward	Mixed reality	Full-sensory VR



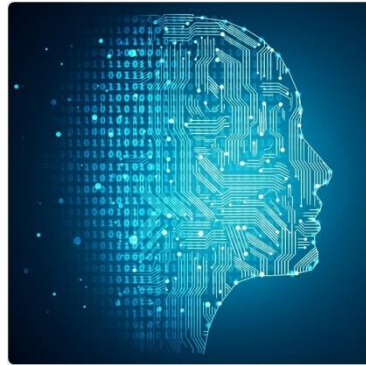
Source: Frost & Sullivan

# Technologies Transforming Augmented and Virtual Reality Experiences

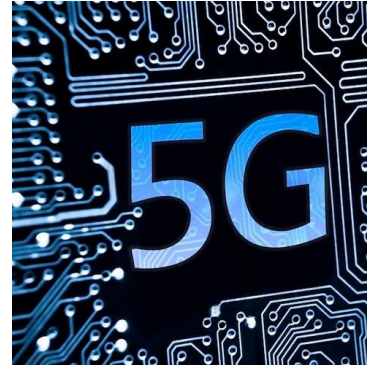
Hologram



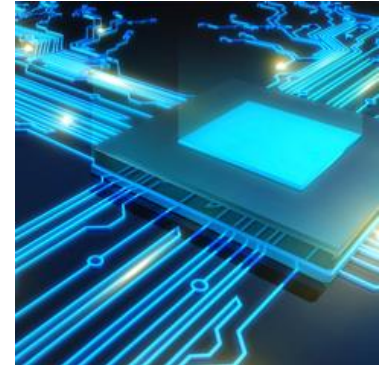
Artificial Intelligence



5G



Edge Computing



Retinal Projection



Optical Foveation



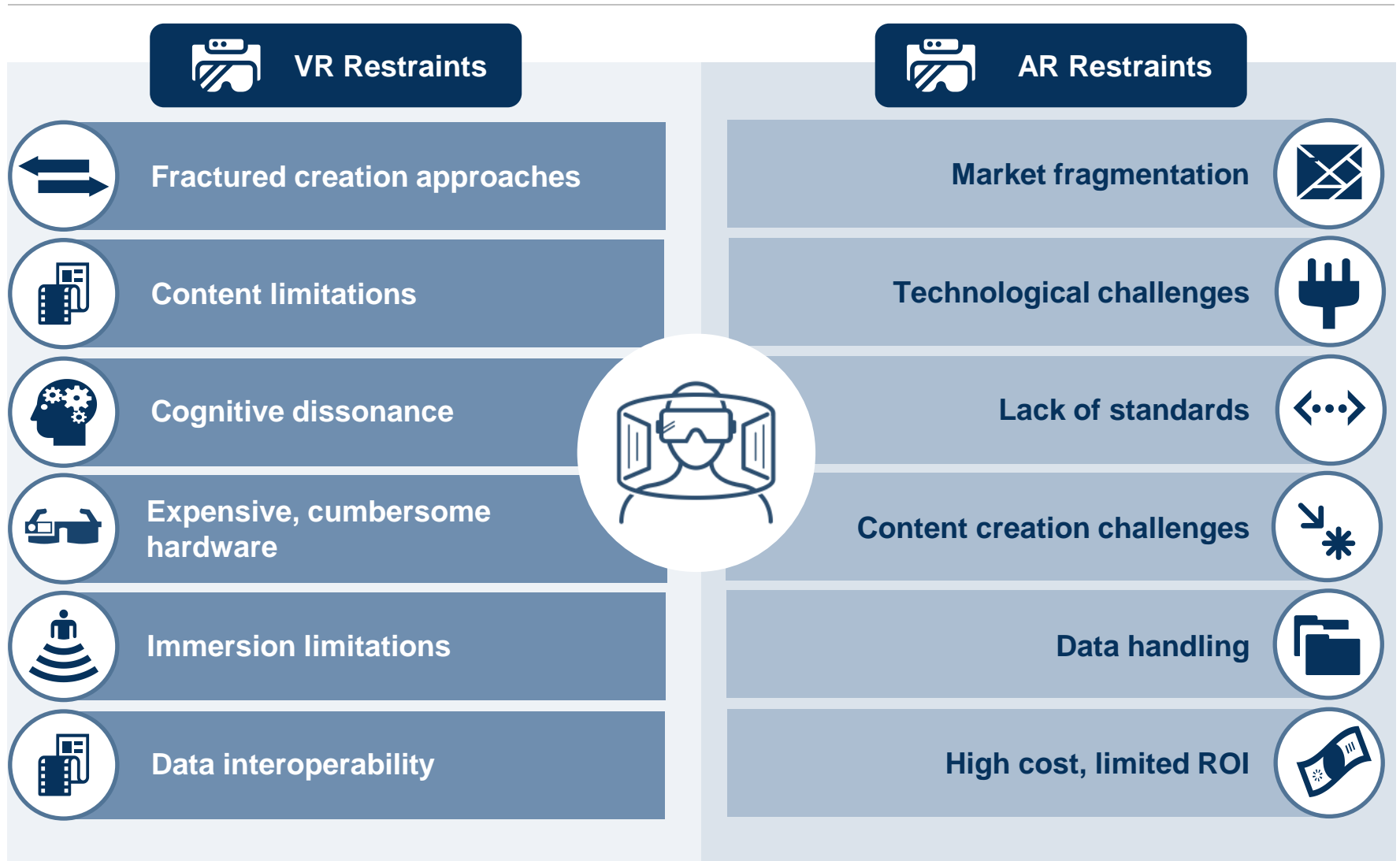
Immersive Videos



Robotics



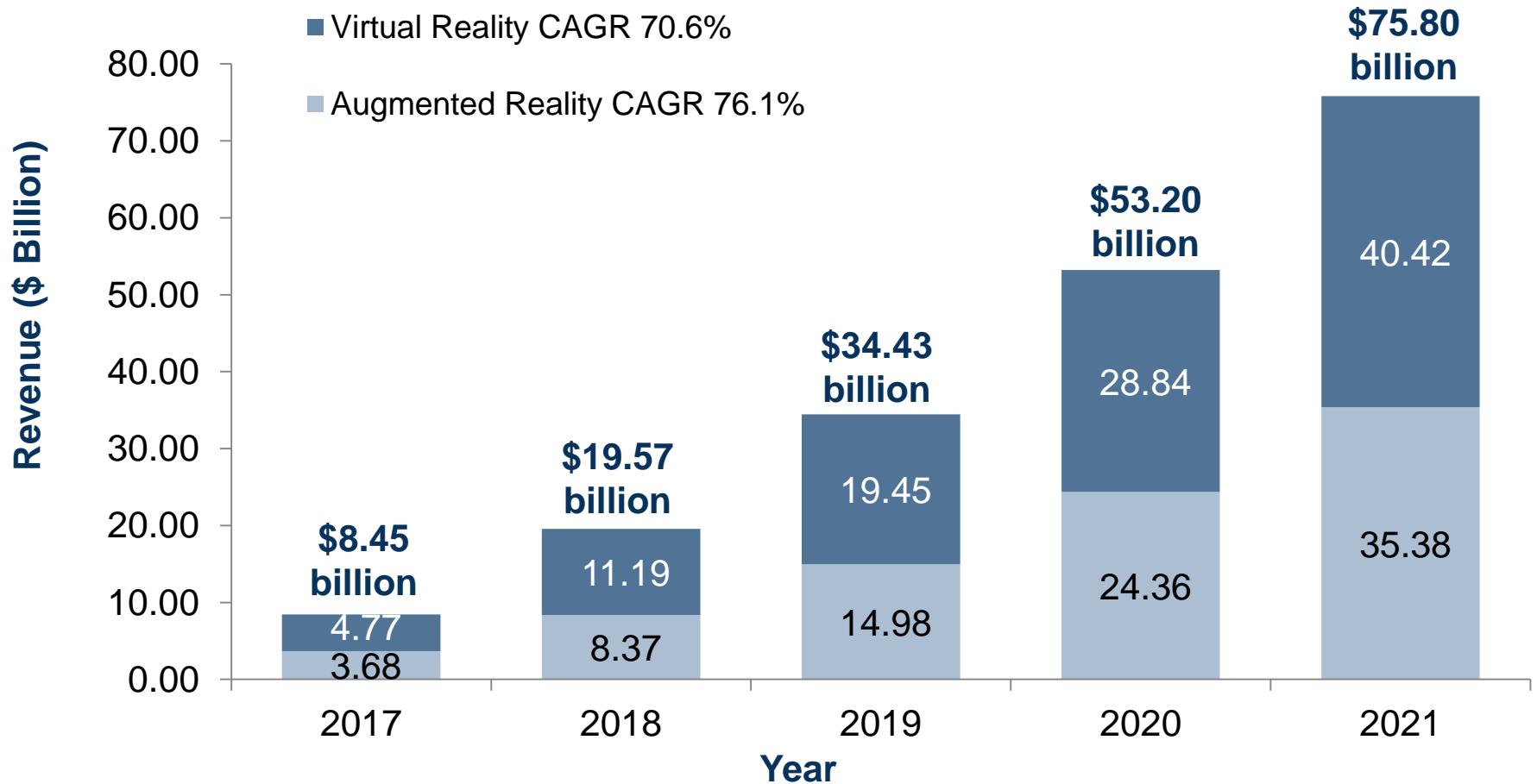
# Virtual Reality Versus Augmented Reality: Key Barriers to Adoption



# Market Revenue—Augmented Reality Versus Virtual Reality Revenue

AR/VR market revenue is expected to reach \$75.80 billion by 2021 from \$8.45 billion in 2017.

AR/VR Market: Revenue Forecast, Global, 2017–2021



Note: All figures are rounded. The base year is 2017

Source: Frost & Sullivan