

ARTILLRY DATA BRIEFS

ENTERPRISE VR TO REACH \$3.8 BILLION BY 2021



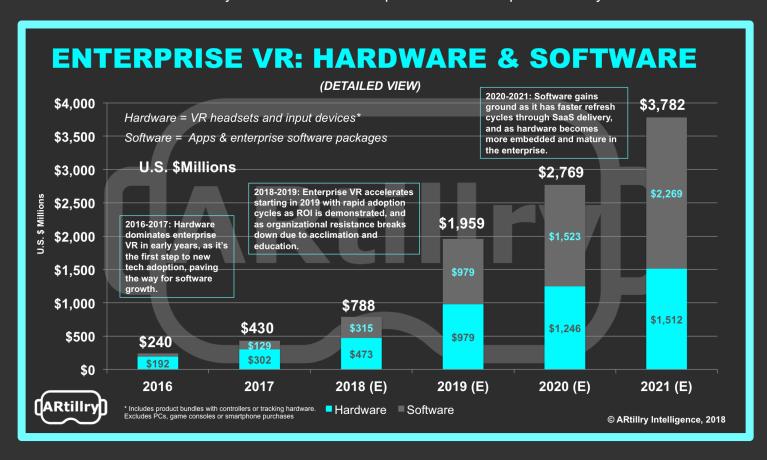
Last week, we released new ARtillry Intelligence projections for enterprise XR hardware and software, growing to \$39 billion by 2021. But how does that break down into AR and VR?

AR will have a majority share of that revenue, as examined recently, growing to \$35 billion by 2021. This dominating revenue share has a lot to do with AR's breadth of applicability across enterprise functions, and pass-through vision that makes it more versatile.

That leaves enterprise VR, which is projected to grow from \$240 million in 2016 to \$3.8 billion in 2021. Though strong (46 percent compound annual growth rate), this clearly falls behind AR. But VR will still be transformative in some enterprise functions like collaboration and training.

"In the B2B setting, an interesting area is corporate training," Comcast Ventures' Michael Yang told ARtillry. "For anyone who's worked at large corporations, you have mandatory training for legal or compliance reasons. VR {can] solve that or make the training less brutal, frankly."

Much like enterprise AR, near-term revenues will be hardware-dominant as it's the first step to tech adoption. That installed base will pave the way for software, which will take over in outer years. Software will also be driven by refresh rates that outpace hardware replacement cycles.





So What does enterprise VR look like? One example is WorldViz. Its flagship Vizible VR software enables interaction with far-flung colleagues, clients or sales targets. Reps for large products like airplane engines can remotely demonstrate their wares through off-the-shelf VR headsets.

"The fact that we could offer to a company like Boeing the software that works with hardware they already have and gives them ability to walk around a one-to-one scale aircraft model, that was a real door opener," WorldViz CEO Andy Beall told ARtillry Intelligence in a recent profile.

But VR collaboration isn't a silver bullet. It will have value to certain verticals and job roles, but doesn't apply to everything, as noted. It will shine best where there's visual nuance to a product's collaboration, maintenance or sales. This includes fields like aerospace and automotive.

"VR in a social setting isn't going to be what lawyers need to do a deposition," Beall said. "That's really well handled by Cisco high-end tele-presence systems and it's all verbal and intellectual information. Vizible works best where the material and the conversation are inherently spatial."



About ARtillry Intelligence

ARtillry is a publication and intelligence firm that examines augmented reality and virtual reality, collectively known as XR. Through writings, data and multimedia, it provides deep and analytical views into the industry's biggest players and opportunities. It's about insights, not cheerleading.

Run by career analyst and journalist Mike Boland, coverage is grounded in a disciplined and journalistic approach. It also maintains a business angle: Though fun and games permeate VR and AR (especially the former) long-term cultural, technological and financial implications are primary.

Learn more at https://artillry.co/about





About the Author

Mike Boland was one of Silicon Valley's first tech reporters of the Internet age, as a staff reporter for *Forbes* (print) starting in 2000. He has been an industry analyst covering mobile and social media since 2005, and is now Chief Analyst of *ARtillry Intelligence*, covering emerging tech.

Mike is a frequent speaker at industry conferences such as VRLA, ad:tech and LeadsCon. He has authored in-depth reports and market-sizing forecasts on the changing tech & media landscape. He contributes regularly to highly read online news sources such as *TechCrunch*, *Business Insider* and the *Huffington Post*.

A trusted source for tech journalists, his comments have appeared in A-list publications, including *The New Yorker*, *The Wall Street Journal* and *The New York Times*.

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