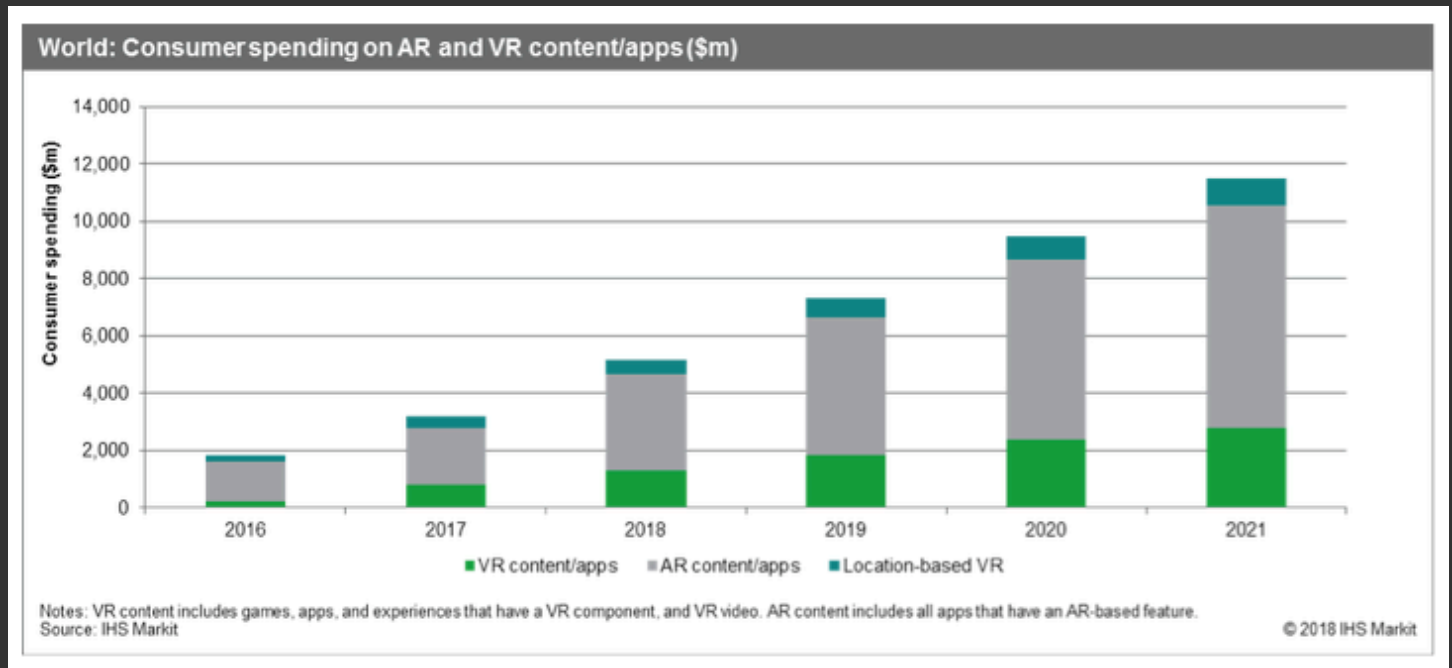


ARTILLY DATA BRIEFS

CONSUMER XR SOFTWARE ON TRACK FOR \$11B BY 2021

5/14/18

Consumer AR and VR content revenues will reach \$11 billion by 2021. This is according to a recent report by IHS Markit. We're talking sales of content, software and apps to consumers, so it excludes hardware (headset purchases). IHS also includes VR Arcade revenues.



Source: IHS Markit

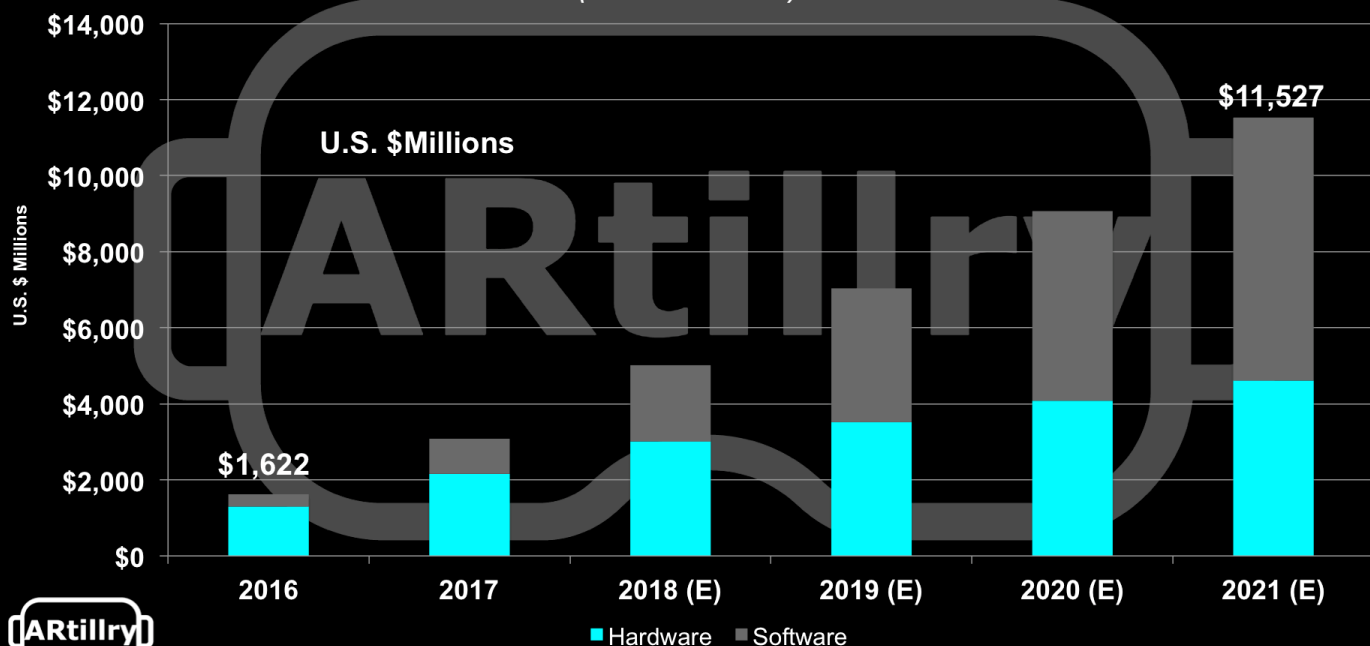
The figures are reasonable: Much like ARtillery Intelligence's market sizing and forecasting (below), AR will outweigh VR in content revenue. ARtillery's total consumer XR software spend is a little bigger than IHS's projections — closer to \$19 billion in 2021, when adding up AR and VR.

The growth curves are similar though, and driven by factors likely recognized by both firms. For example AR and VR content revenue will accelerate as a function of a growing hardware installed base. In other words, hardware comes first and lays the foundation for software revenue.

In VR specifically, revenues in early years are hardware-dominant. But over time, software increases its share (see below). That happens for a few reasons, including software replacement cycles that outpace hardware as the latter penetrates and becomes more mature.

CONSUMER VR: HARDWARE VS. SOFTWARE

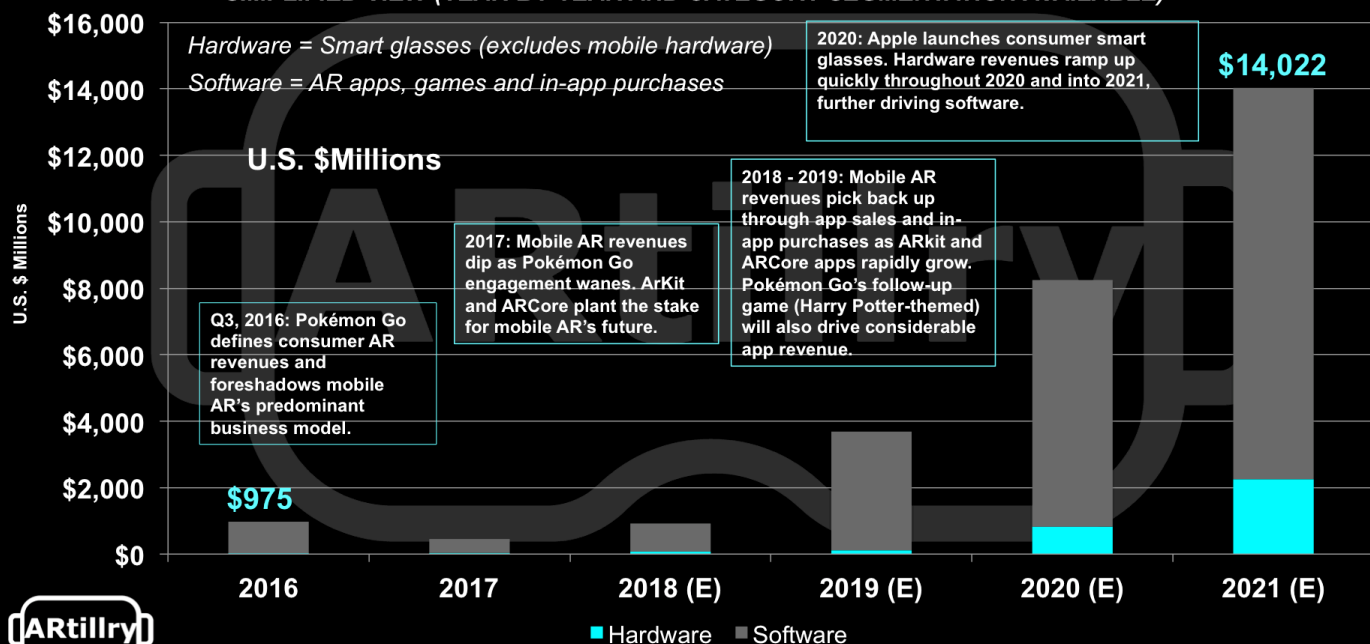
(SIMPLIFIED VIEW)



© ARTillery Intelligence, 2018

CONSUMER AR: HARDWARE VS. SOFTWARE

SIMPLIFIED VIEW (YEAR-BY-YEAR AND CATEGORY SEGMENTATION AVAILABLE)



© ARTillery Intelligence, 2018



And by “replacement cycle,” we mean games, apps and content bought on a more frequent basis than hardware. In the enterprise — not covered in the above figures but similar dynamics — that same thing can happen but through SaaS packaging and pricing for a perennial revenue stream.

Either way, content is king just like everywhere else. There’s a sort of virtuous cycle: Hardware penetration (slow but happening), incentivizes developers to build content. More content further motivates consumer hardware purchases, which in turn drive more apps... and around we go.

As for the above market sizing figures, we’re in the process of a twice-annual forecast refresh and will have updated numbers in a report that will be ready for ARtillery Pro subscribers by the end of the month.

Video Companion: XR Market Forecast

(Click URL to Open)

<https://youtu.be/pLLLZyvFD2k>



About ARtillery Intelligence

ARtillery 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://artillery.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 *ARtillery 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*.

Further background, history and credentials can be found at:

<http://www.mikebo.land/>





Contact

Questions and requests for deeper analysis can be submitted at:

<https://artillery.co/contact/>



Disclosure and Ethics Policy

ARtillery has no financial stake in the companies mentioned in this report, nor was it commissioned to produce it. With respect to market sizing, ARtillery remains independent of players and practitioners in the sectors it covers. It doesn't perform paid services or consulting for such companies, thus mitigating bias — real or perceived — in market sizing and industry revenue projections.

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<https://artillery.co/about/disclosure-and-ethics-policy/>