

ARTILLRY DATA BRIEFS

MOBILE AR: INSTALLED BASE AND REVENUE PROJECTION

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Mobile AR: Installed Base

There are currently 3.5 billion global units. But more relevant for this report, how many are AR-compatible? That figure is 476 million today, growing to 1.3 billion by year-end, and 3.8 billion by 2021 – a meaningful installed base.

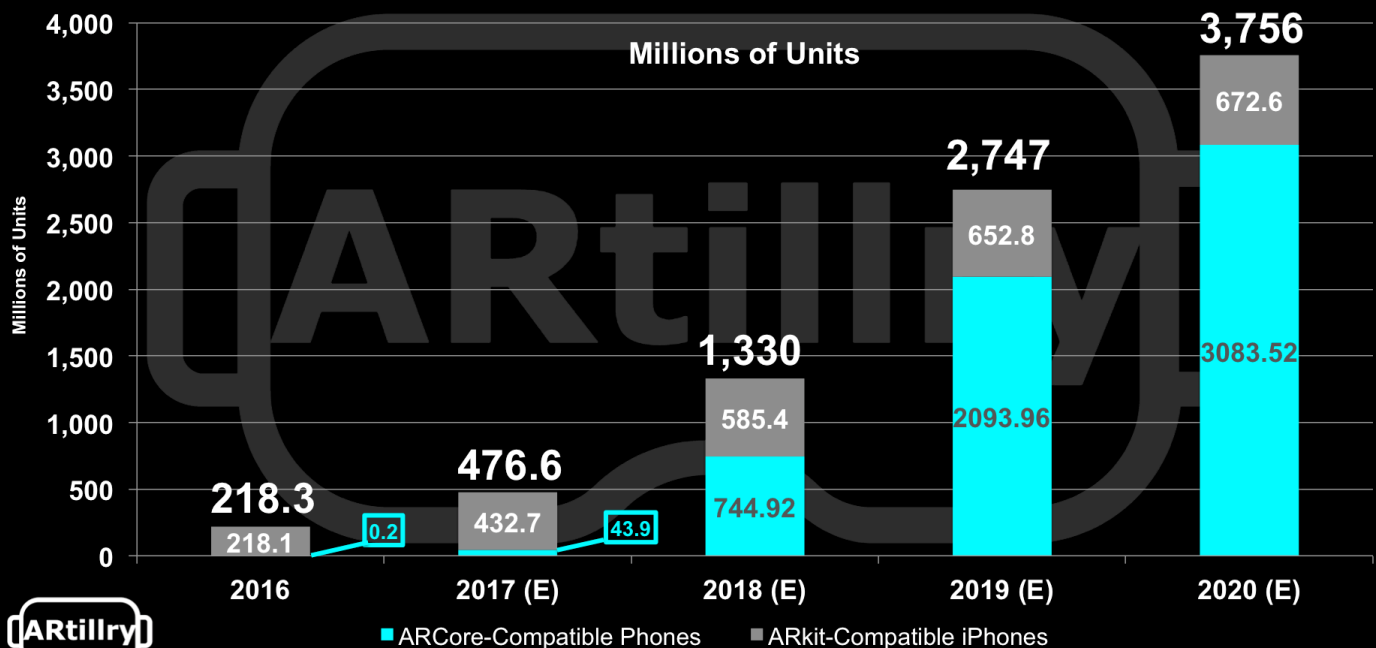
This volume is mostly due to Apple's ARKit and Google's ARCore, which apply software to make AR possible on previously un-compatible hardware (such as standard RGB cameras). Between the two, ARCore has a minority share today but will eclipse ARKit soon, due to Android's larger installed base.

One question that arises from these figures is why are they growing so rapidly. They over-index for growth rates when compared to several growth-phase industries in the forecasting trade. For both ARCore and ARKit, they go from zero to billions over a five-year period, which should raise questions.

One reason is that the metric is unit-compatibility, not dollars. Another reason is average mobile hardware replacement cycles, which follow a set pace (currently 2.5 years). This will cause AR-compatibility – for example, A9 chips or greater in iOS devices – to cycle in rapidly.

INSTALLED BASE OF ARCORE AND ARKIT

Global Handsets Compatible with ARCore or ARKit



Mobile AR: In Dollars

Beyond unit penetration, how does consumer AR stack up in dollars? According to our projections, it will grow from \$975 million in 2016 to \$14.02 billion in 2021. These figures include smart glasses, though it's important to note that mobile dominates near-term revenue, for reasons explored earlier.

Segmenting mobile's share – the focus of this report – It's represented by the software portion of the below projections. This is because smartphone hardware (e.g. iPhone sales) isn't counted in our forecast because it's an already-existing and ubiquitous consumer purchase.

Therefore, the near term opportunity for mobile AR is in software. That broad designation includes several components, including premium app sales, in-app purchases, micro-transactions, and several other things. These are broken down further in the "business models" section of this report.

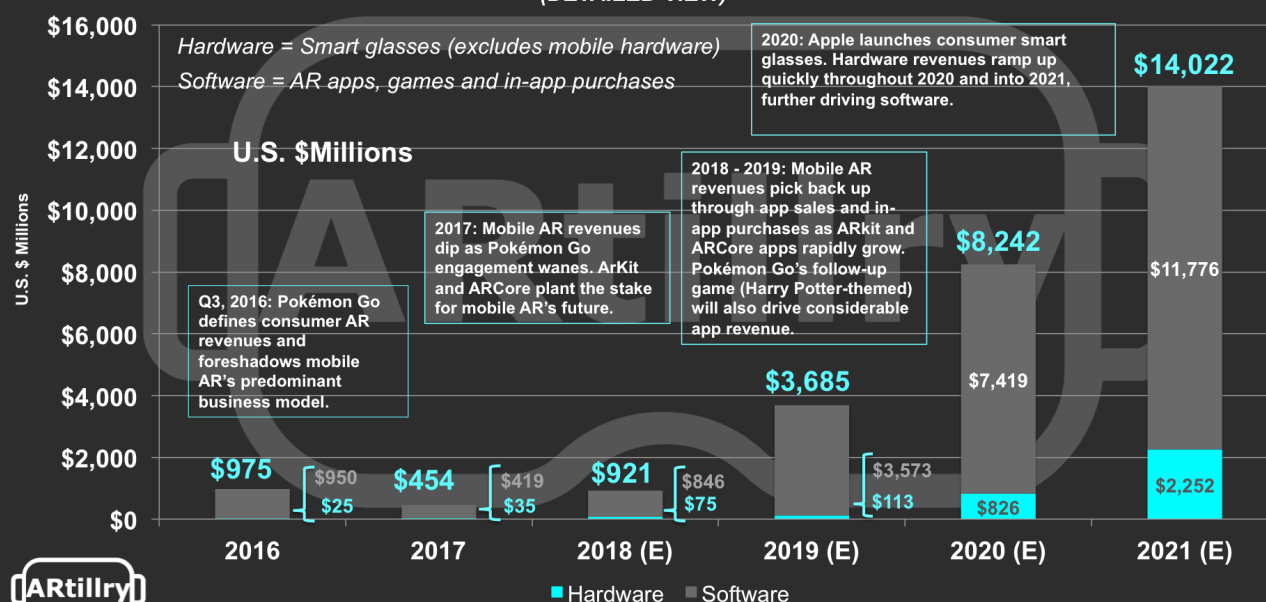
Zeroing in on just that software portion of consumer AR revenues, it will grow from 950 million in 2016 to 11.8 billion in 2021. After 2020, AR hardware will start to grow in share, as smart glasses become more viable for consumer markets including cost, style, battery life and other technical specifications.

This could include Apple's rumored smart glasses in the late 2020 time frame. It will also include AR glasses in niche or enthusiast areas like cycling, skiing and other sporting/recreational areas. Notice that these are areas where glasses or goggles are already worn, forcing less of a behavioral shift.

But until then, the consumer AR sector will be dominated by mobile, with most of the strategy and differentiation happening within software (apps), rather than hardware.

CONSUMER AR: HARDWARE VS. SOFTWARE

(DETAILED VIEW)



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*.

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