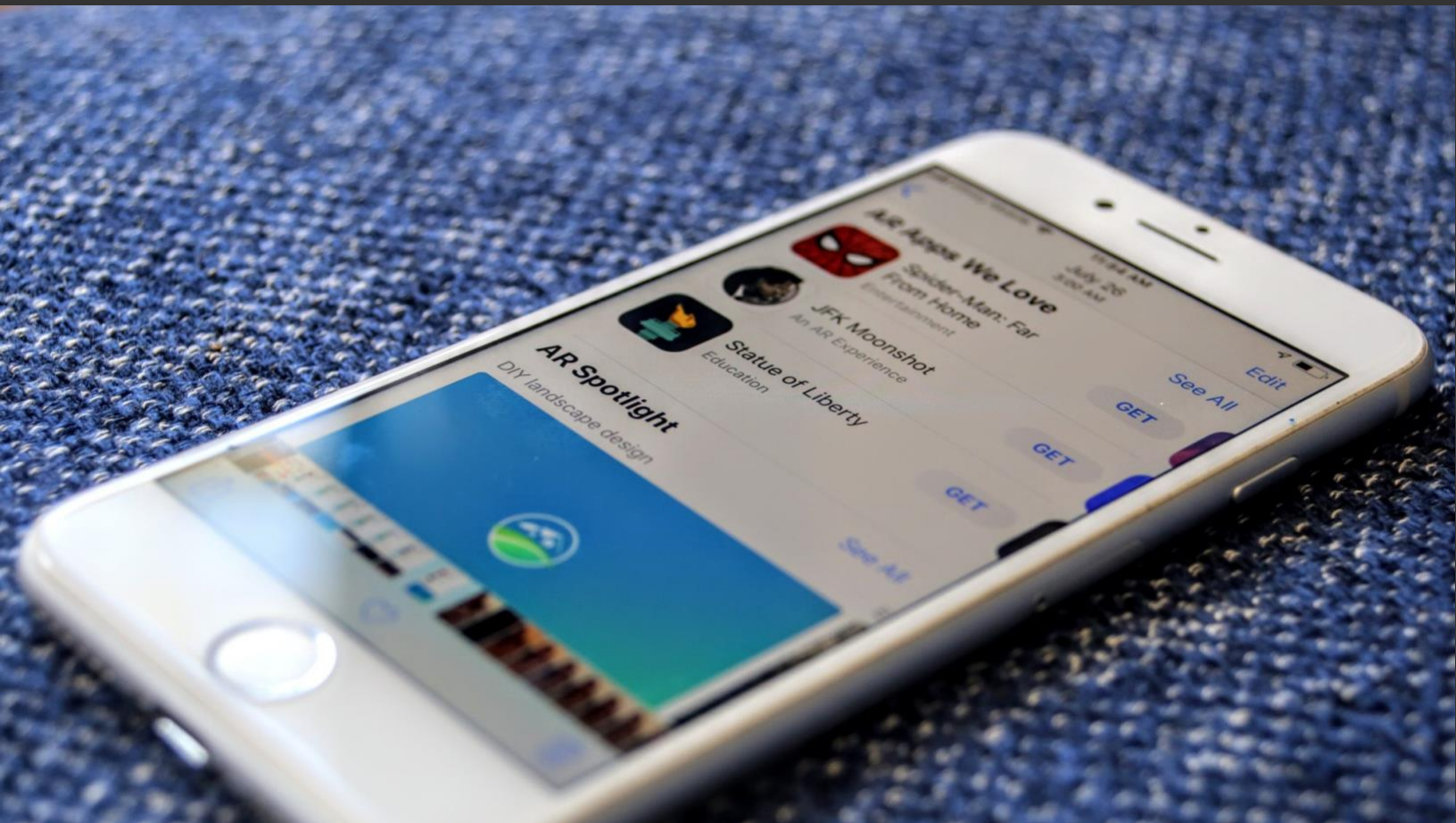


ARtillery Intelligence



ARtillery Data Brief

Macy's Reduces Product Returns to Less Than 2% With VR
10/21/19

One of the continually cited benefits of “try before you buy” AR and VR product visualization is how it can increase conversions and reduce returns. We’ve covered plenty of proof points for conversions, but return rates have always lingered in theoretical and speculative territory.

With our radar perpetually up for AR and VR performance data, this elusive proof point finally blipped on our screen. Macy’s lets in-store shoppers design and furnish virtual room mockups on designated iPad stations. Then they can step into VR to visualize the room in 3D.

MetaVRse’s Alan Smithson reported on the AR Show that Macy’s — a company with which he’s worked directly — reduced product return rates to <2 percent for these VR-assisted furniture purchases. Notably, that’s down from 5-7 percent for non-VR shopping benchmarks.

“They’re seeing on average across 110 stores, a 45 percent increase in purchase size,” Smithson said on the AR Show podcast. The industry average for furniture returns... a really expensive endeavor... is 5 to 7 percent. Macy’s is decreasing that to less than 2 percent”



This is admittedly a sample of one but goes a certain distance to validate our longstanding theory that immersive product visualization can reduce returns. This stems from an assumption that more informed purchases yield greater probability of satisfaction and thus fewer returns.

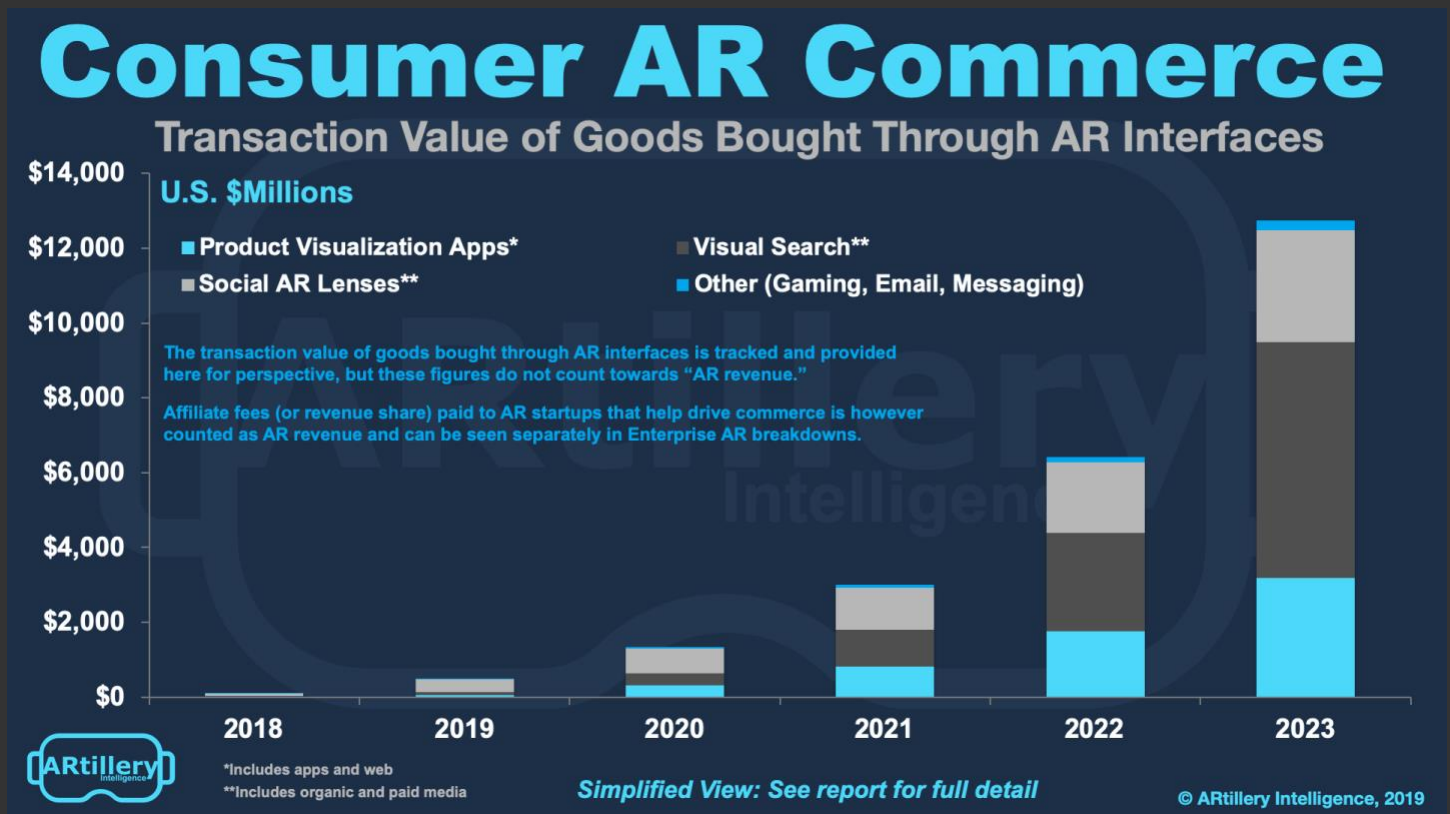
We’ve made this speculation in an AR light, and specifically in the context of Amazon. That’s because reducing return rates is something we know to be a primary objective for the margin-obsessed company. It operates on extremely thin margins, executed at massive scale.

When operating on such a model, product returns can decimate margins that are already thin to begin with. That's especially the case with bulky items like TVs. So any chance to reduce return rates, even by small percentage points, can have outsized impact on those razor-thin margins.

That's where AR visualization is more relevant than VR, as consumers can use their phones from home in an e-commerce scenario. VR is conversely more relevant in a retail environment like Macy's, where they can invest in hardware that gets scaled use in its physical stores.

This begs the question of why shoppers wouldn't just view the actual in-store furniture. They certainly can, but only to the extent of its showroom inventory. VR enables more extensive product models and variants — a utility for shoppers and a streamlining measure for Macy's.

“One more thing that makes this even sweeter: A normal furniture store in Macy's takes up a couple of thousand square feet and cost about half a million dollars to build,” said Smithson on the same AR Show episode. “VR takes up 500 square feet and costs less than \$50,000 to build.”



Back to the unit economics, Macy's margins are greater than Amazon's (volume is lighter), but the ROI impact is still there. And Macy's product catalog has bulkier fare than Amazon, considering home goods and furniture sales. So returns are a necessary but quite costly evil.

The keyword there is ROI. Though XR is having trouble penetrating mainstream consumers en masse, it's finding a home in the enterprise due to measurable ROI. That goes for industrial enterprises as well as the “B2B2C” segment for consumer-facing enterprises like Macy's.

Now, with the taste of this data point in our mouths, we're even hungrier for the corresponding return rate for in-home mobile AR product visualization. Amazon likely has that number from the AR View feature in its flagship app, but hasn't published anything yet. Our radar remains up.

Video Companion

(Click Video to Play)



About ARtillery Intelligence



ARtillery Intelligence chronicles the evolution of spatial computing. Through writings and multimedia, it provides deep and analytical views into the industry's biggest players, opportunities and strategies.

Run by analysts and former journalists, coverage is grounded in a disciplined and journalistic approach. It also maintains a business angle: Though there are lots of fun and games in spatial computing, cultural, technological and financial implications are the primary focus.

Products include the [AR Insider](#) publication and the [ARtillery PRO](#) research subscription, which together engender a circular flow of knowledge. Research includes monthly narrative reports, market-sizing forecasts consumer survey data and multi-media, all housed in a robust intelligence vault.

Learn more [here](#).



About Data Briefs

ARtillery [Data Briefs](#) are research deliverables that are assembled weekly by ARtillery Intelligence analysts to document the market trends and events they're tracking.

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* and Editor-in-Chief of *AR Insider*.

Mike is a frequent speaker at industry conferences such as AWE, VRLA and XRDC. He has authored more than 120 reports and market-sizing forecasts on the tech & media landscape. He contributes regularly to 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 read [here](#).



Methodology

This brief highlights *ARtillery Intelligence* viewpoints, gathered from its daily in-depth coverage of spatial computing. To support narratives, data are cited throughout the report. These include *ARtillery Intelligence* original data, as well as that of third parties. Data sources are attributed in each case.

For market sizing and forecasting, *ARtillery Intelligence* follows disciplined best practices, developed and reinforced through its principles' 15 years in tech-sector research and intelligence. This includes the past 3 years covering AR & VR exclusively, as seen in research reports and daily reporting.

Furthermore, devising these figures involves the “bottom-up” market-sizing methodology, which involves granular revenue dynamics such as unit penetration, pricing and growth patterns. More on *ARtillery Intelligence* market-sizing research and methodologies can be read [here](#).

Disclosure and Ethics Policy

ARtillery Intelligence has no financial stake in the companies mentioned in this report, nor was it commissioned to produce it. With respect to market sizing, *ARtillery Intelligence* remains independent of players and practitioners in the sectors it covers, thus mitigating bias in industry revenue calculations and projections.

ARtillery Intelligence's disclosure and ethics policy can be seen in full [here](#).

Contact

Questions and requests for deeper analysis can be submitted [here](#).

