Getting Down to Business: Consumer AR Revenue Models

MIKE BOLAND

CHIEF ANALYST, ARTILLERY INTELLIGENCE

ABOUT ME

- **ARtillery Intelligence Founder & Chief Analyst**
- **15-year industry analyst**
- **San Francisco Chapter President, VR/AR Association.**
- **XR industry authority and thought leader.**
- **Frequent contributor to *TechCrunch*, *VentureBeat*, *Forbes*, *Huffpo* and other tier-1 publications.**
- **Expert source for reporters. Quoted often in the *New York Times*, *Wall Street Journal* & the *New Yorker*.**
- **Frequent speaker at tier-1 industry events.**

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VR/AR ASSOCIATION

More can be seen at http://www.mikebo.land/
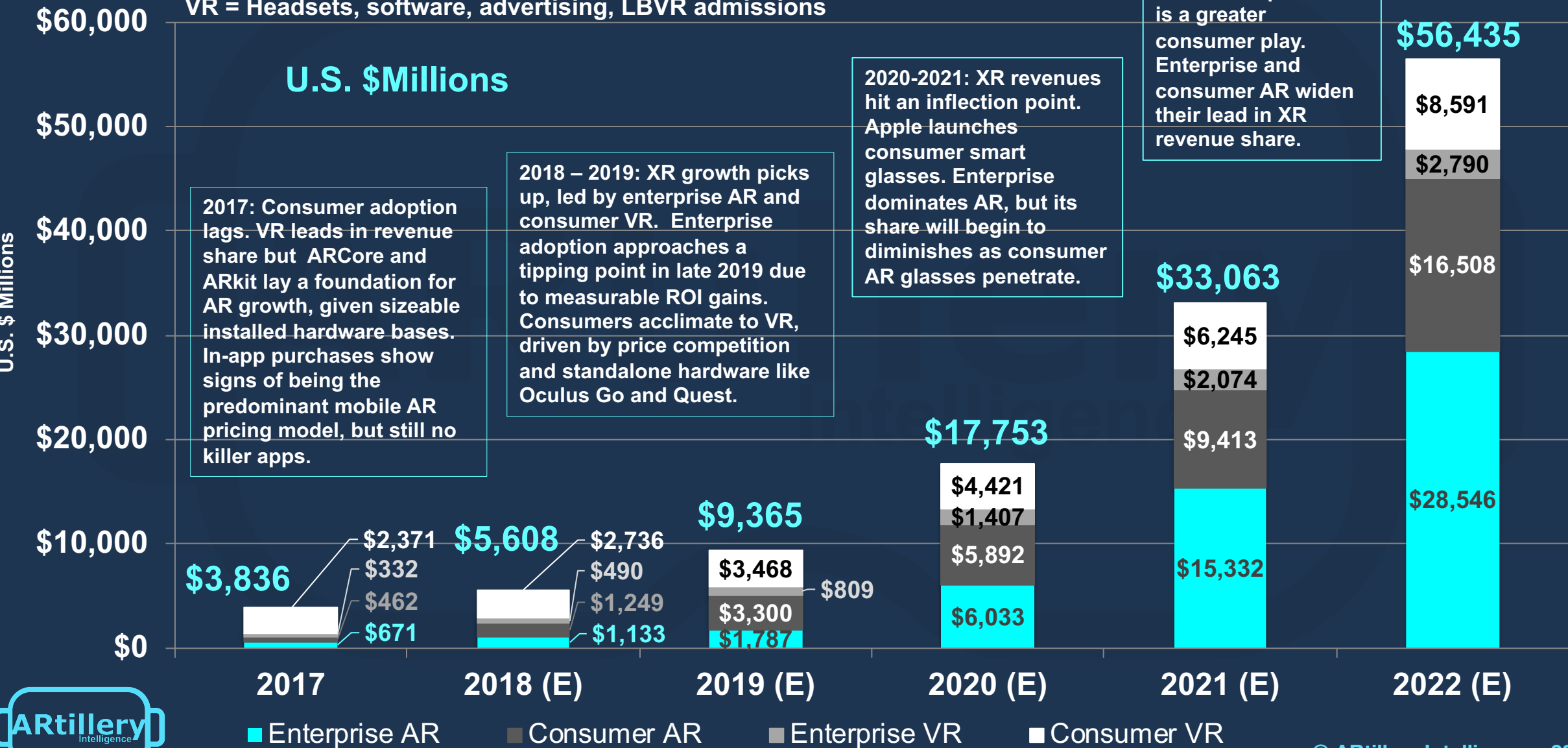
ABOUT ARTILLERY INTELLIGENCE

- FOUNDED 2016

- GROWING TEAM OF ANALYSTS AND RESEARCHERS.

- BUILT ON PRINCIPLES OF BEST PRACTICES IN MARKET ANALYSIS & RESEARCH.

- FOCUSED ON THOUGHT LEADERSHIP AND DEEP STRATEGIC KNOWLEDGE OF AR & VR (XR).

- REPUTATION AS THE 'INSIDER SOURCE' FOR NEWS, DATA & STRATEGIC ANALYSIS.

- FOLLOWED BY TOP INFLUENCERS.

- KNOWLEDGE POSITION IS REINFORCED THROUGH AR INSIDER (DAILY PUBLICATION).
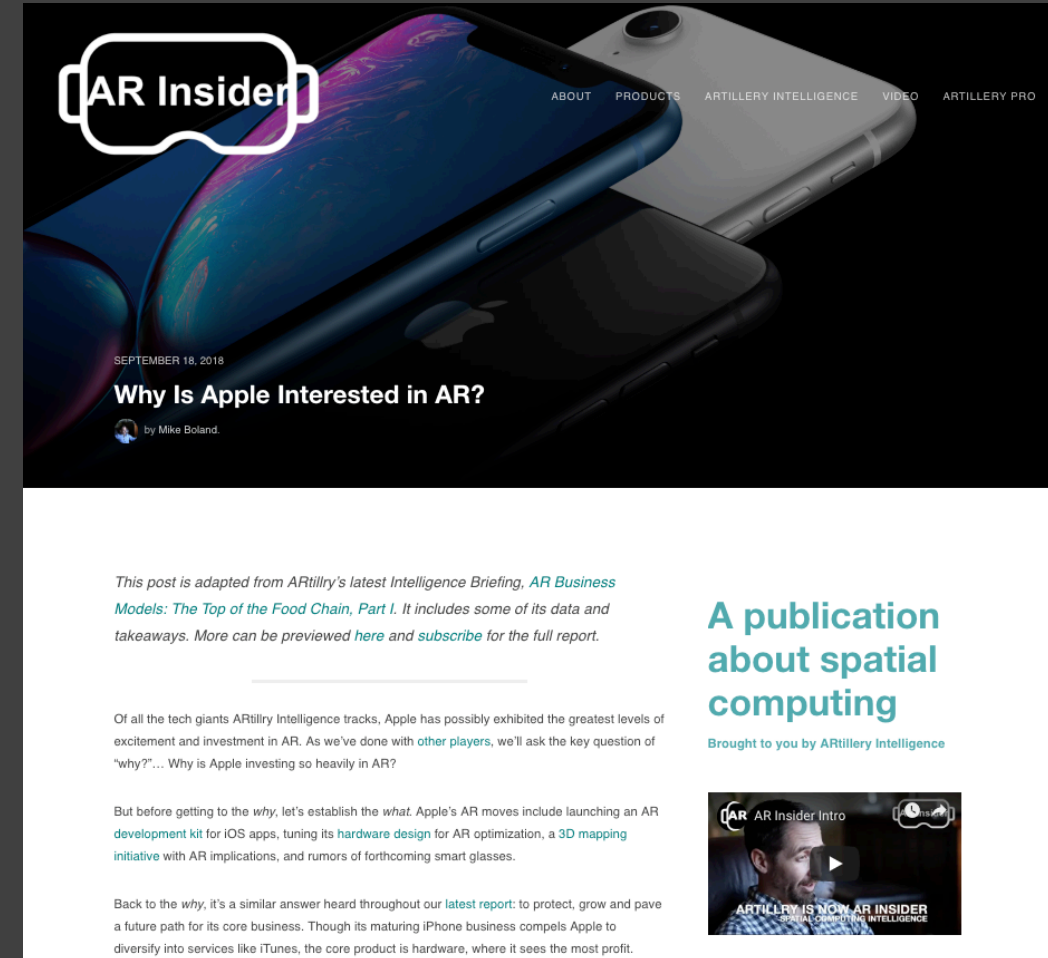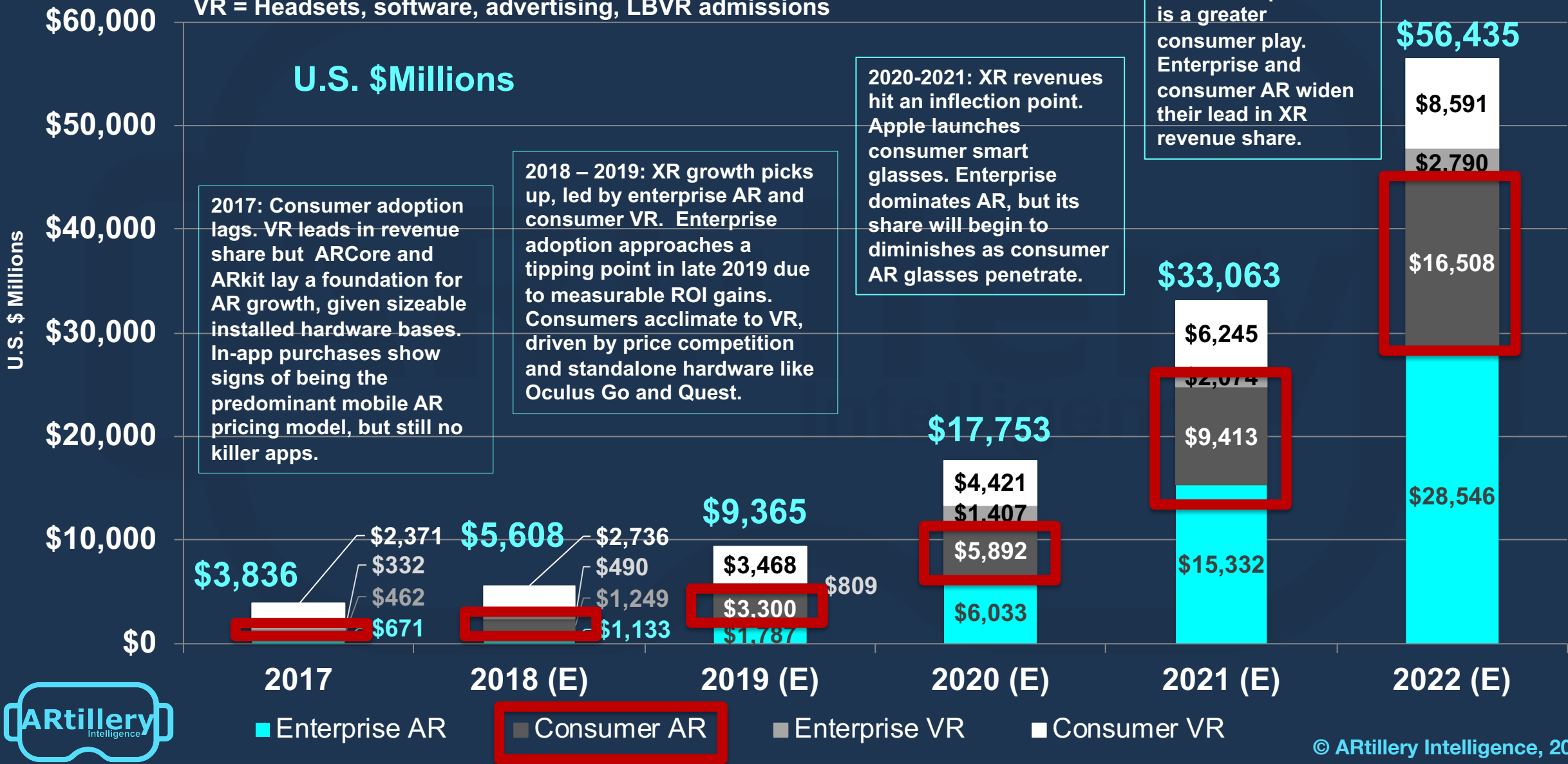
GLOBAL XR REVENUE OVERVIEW

(DETAILED VIEW)

AR = Smart glasses, software (games, apps, etc.), advertising
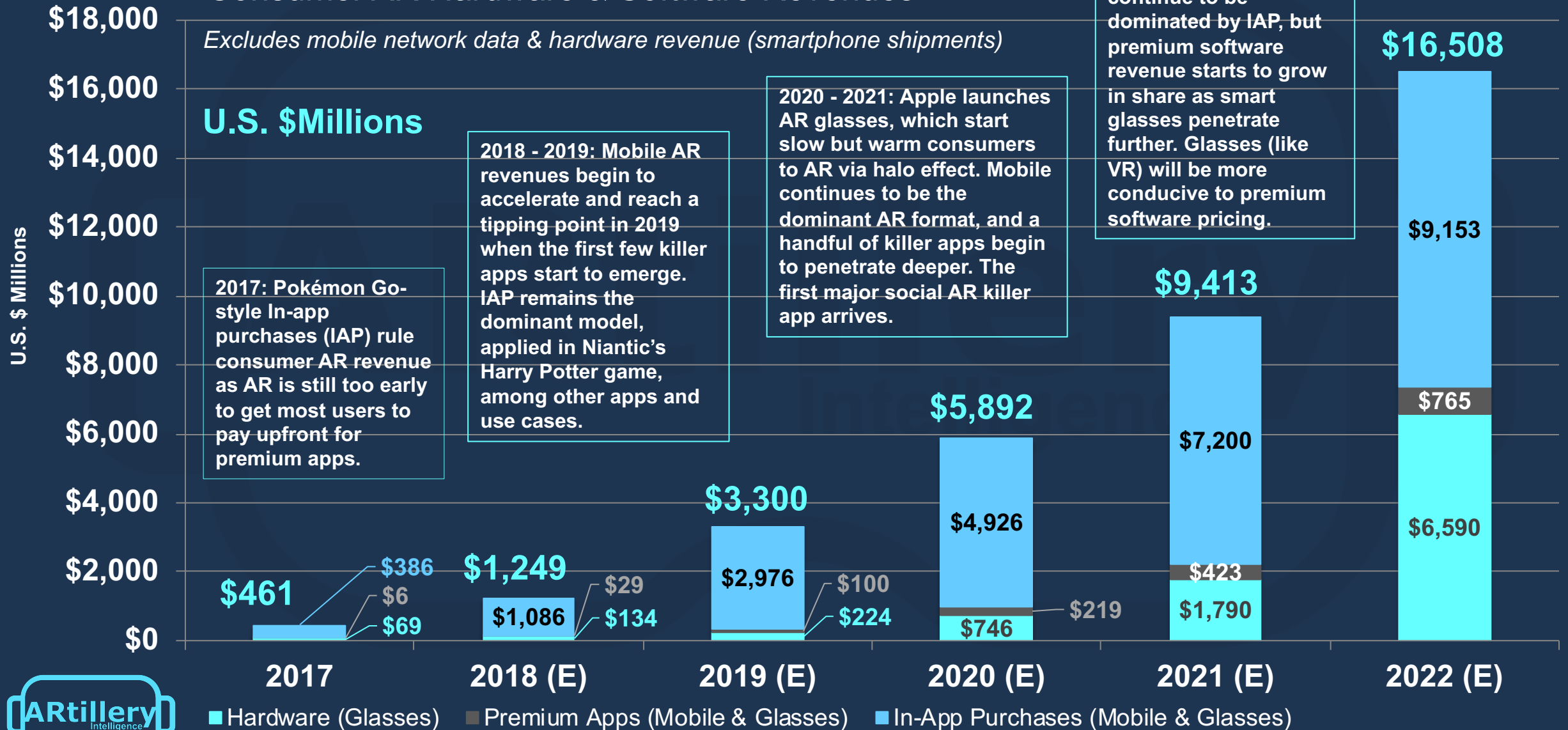VR = Headsets, software, advertising, LBVR admissions

U.S. $Millions

2022: VR has a place in the enterprise but is a greater consumer play. Enterprise and consumer AR widen their lead in XR revenue share.

2020-2021: XR revenues hit an inflection point. Apple launches consumer smart glasses. Enterprise dominates AR, but its share will begin to diminishes as consumer AR glasses penetrate.

2018 – 2019: XR growth picks up, led by enterprise AR and consumer VR. Enterprise adoption approaches a tipping point in late 2019 due to measurable ROI gains. Consumers acclimate to VR, driven by price competition and standalone hardware like Oculus Go and Quest.

2017: Consumer adoption lags. VR leads in revenue share but ARCore and ARkit lay a foundation for AR growth, given sizeable installed hardware bases. In-app purchases show signs of being the predominant mobile AR pricing model, but still no killer apps.

U.S. $ Millions

Year	Enterprise AR	Consumer AR	Enterprise VR	Consumer VR	Total
2017	$671	$462	$332	$2,371	$3,836
2018 (E)	$1,133	$1,249	$490	$2,736	$5,608
2019 (E)	$1,787	$3,300	$809	$3,468	$9,365
2020 (E)	$6,033	$5,892	$1,407	$4,421	$17,753
2021 (E)	$15,332	$9,413	$2,074	$6,245	$33,063
2022 (E)	$28,546	$16,508	$2,790	$8,591	$56,435

■ Enterprise AR   ■ Consumer AR   ■ Enterprise VR   ■ Consumer VR

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U.S. $Millions

U.S. $ Millions (y-axis)

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Legend: ■ Enterprise AR   ■ Consumer AR   ■ Enterprise VR   ■ Consumer VR

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CONSUMER AR DRILL DOWN

Consumer AR Hardware & Software Revenues

Excludes mobile network data & hardware revenue (smartphone shipments)

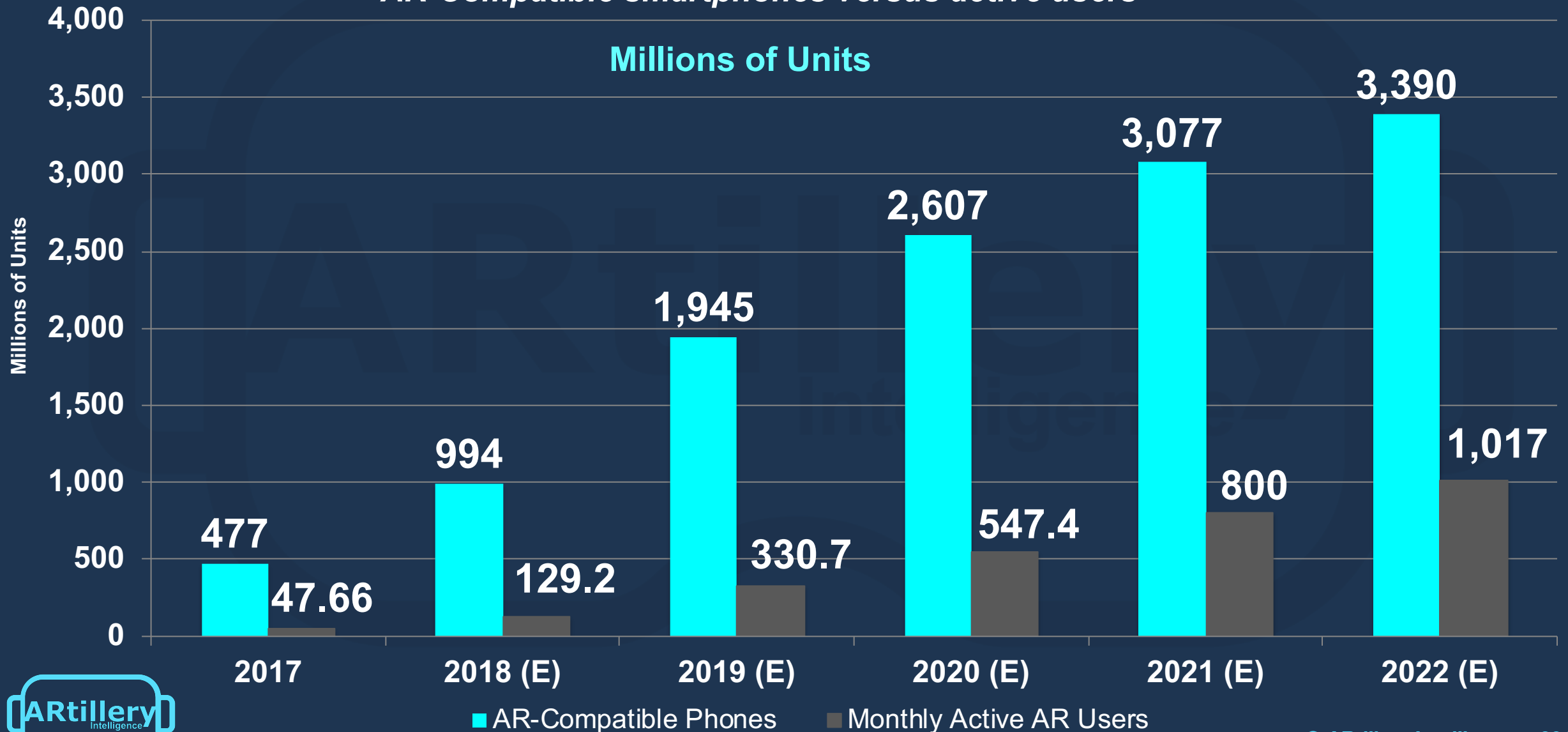**U.S. $Millions**

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2022: Revenues continue to be dominated by IAP, but premium software revenue starts to grow in share as smart glasses penetrate further. Glasses (like VR) will be more conducive to premium software pricing.

Year	Hardware (Glasses)	Premium Apps	In-App Purchases	Total
2017	$69	$6	$386	$461
2018 (E)	$134	$29	$1,086	$1,249
2019 (E)	$224	$100	$2,976	$3,300
2020 (E)	$746	$219	$4,926	$5,892
2021 (E)	$1,790	$423	$7,200	$9,413
2022 (E)	$6,590	$765	$9,153	$16,508

Chart y-axis: $0, $2,000, $4,000, $6,000, $8,000, $10,000, $12,000, $14,000, $16,000, $18,000

Legend:
- ■ Hardware (Glasses)
- ■ Premium Apps (Mobile & Glasses)
- ■ In-App Purchases (Mobile & Glasses)

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$18,000
$16,000
$14,000
$12,000
$10,000
$8,000
$6,000
$4,000
$2,000
$0

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Business Model # 1
Advertising

It's already working

Advertiser	App/Publisher	Campaign Dynamics	Results
Home Depot	Yahoo Mail	AR sequence launched from static email banner ad.	2+ minute average engagement time. 12.5 percent CTR to shopping page.
Kia	Facebook Messenger	Car visualization via AR overlay, launched from Kia's Facebook Messenger Bot.	46 percent boost in dealer inventory searches; 20 percent boost in phone calls.
Nike	Facebook Messenger	Kyrie 4 shoe release available exclusively through Facebook Messenger after users launched AR visualization feature.	Shoe sold out in less than an hour
Asus	Facebook Messenger	Customers "virtually unbox" latest ZenPhone 5 via AR visualization launched from Messenger.	Achieved 10x engagement compared to non-AR campaigns.
Foot Locker	Snapchat	The latest Jordan sneaker visualized through AR animations, launched from Snap Stories.	45-second average play time, 4 million impressions.
N/A	Houzz	In-home furniture visualization of a large portion of Houzz's online catalogue.	11x increase in purchase intent. 2.7x increase in time-in-app.
N/A	Snapchat	Branded Lenses, Shoppable AR and Ad to AR comprise its current range of paid AR offerings.	Overall 15 percent boost in purchase intent and a 9 percent boost in conversions from branded AR lenses.
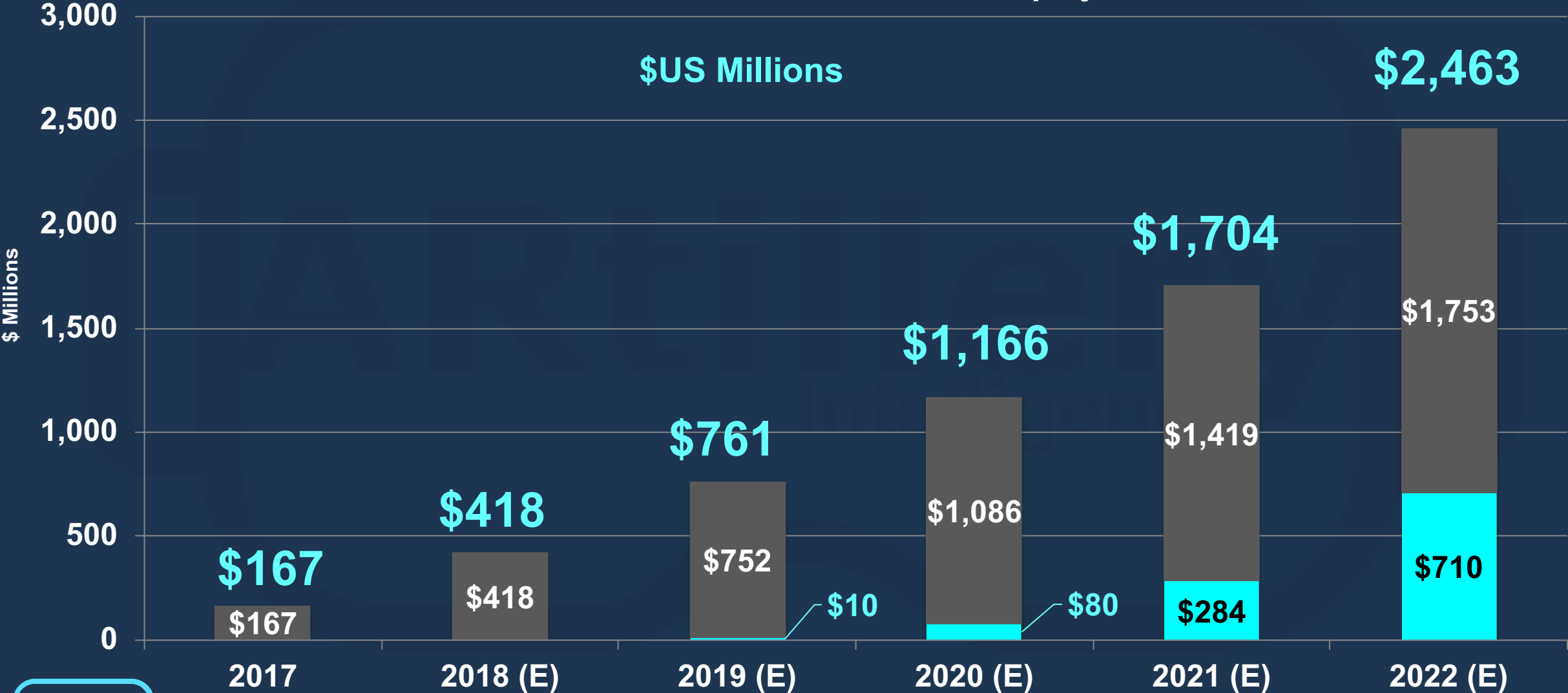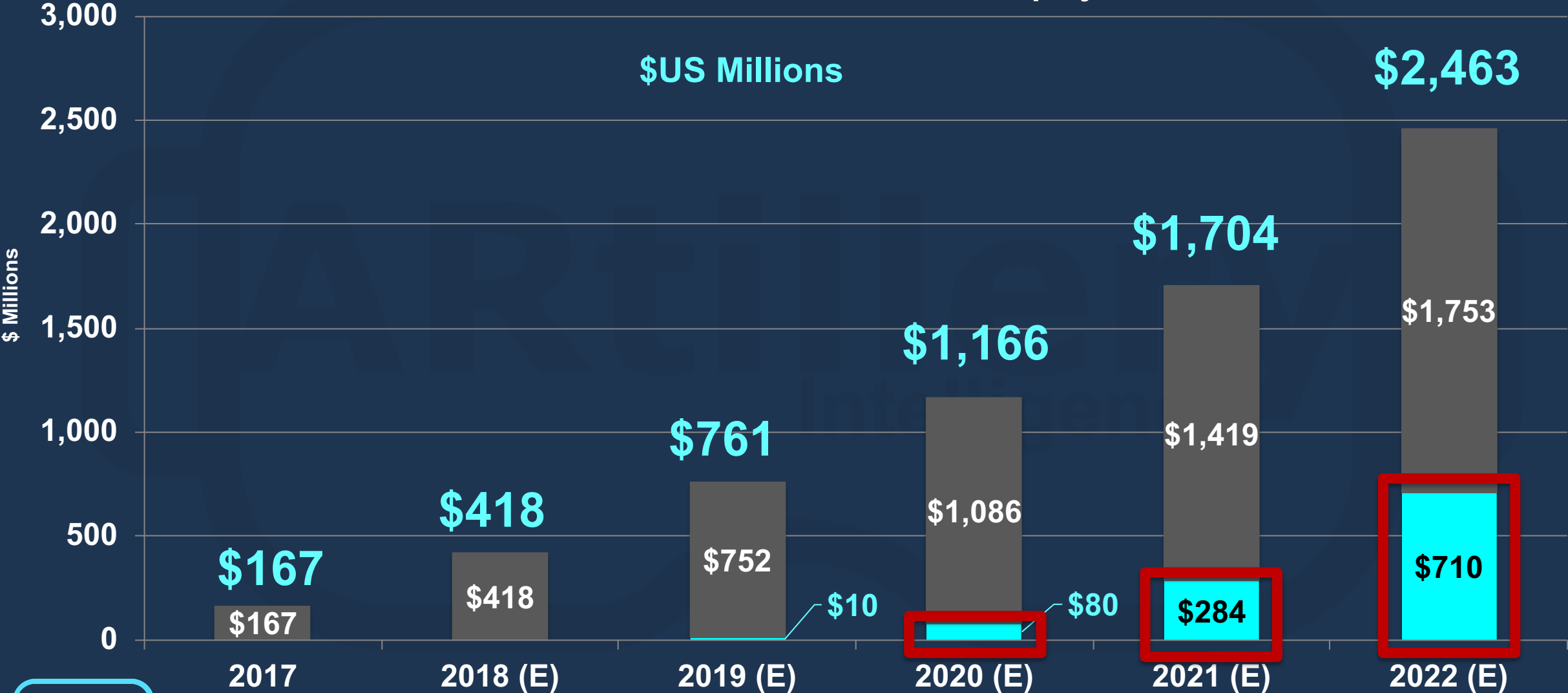
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Visual Search

"The camera is not just answering questions, but putting the answers right where the questions are,"

-- Aparna Chennapragada, VP of Product, VR & AR, Google

Search

Searching..

Search

amazon

Under Armour Men's HOVR Soni...
by Under Armour
$100.00 prime
★★★★☆ 47 reviews

See all results at Amazon
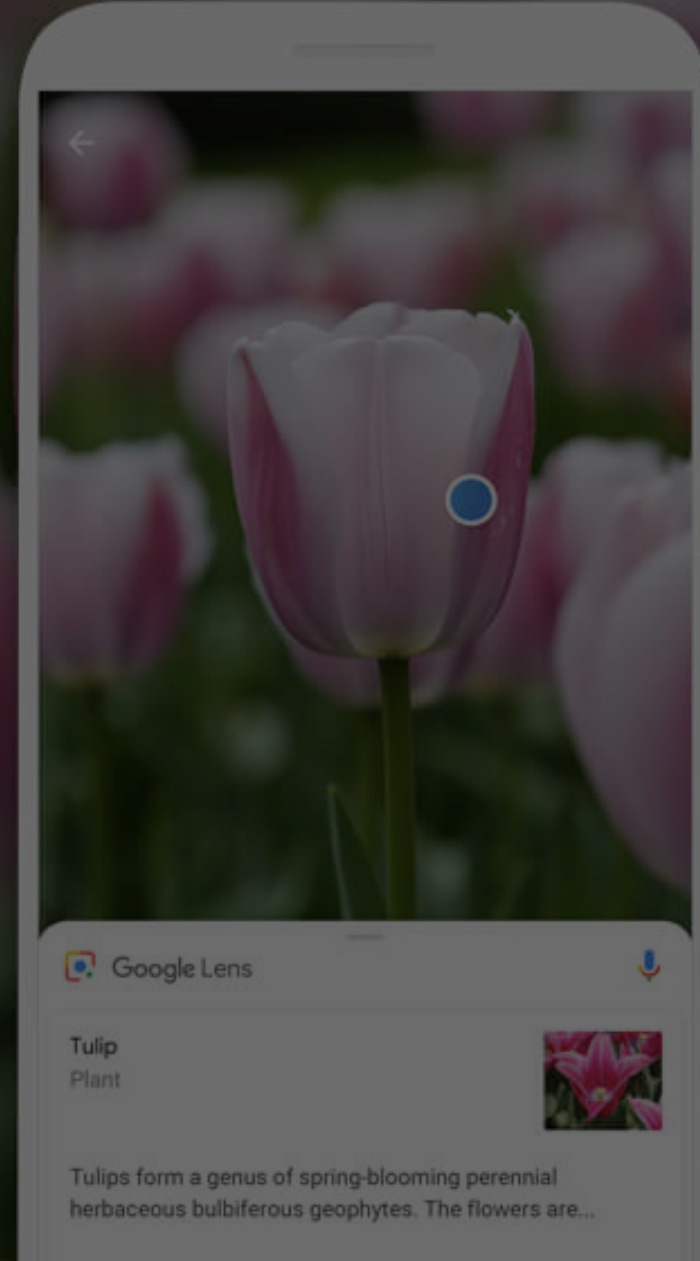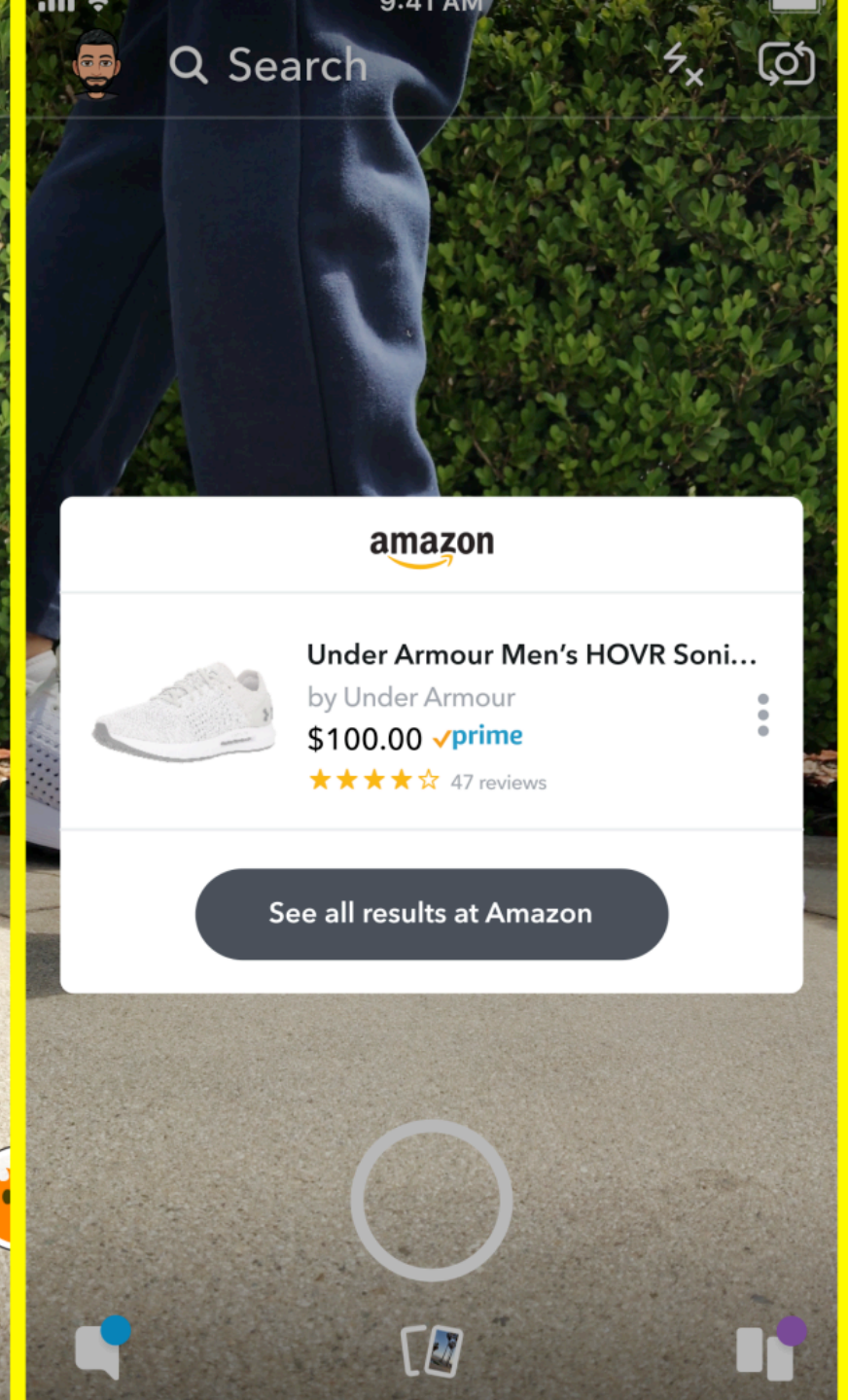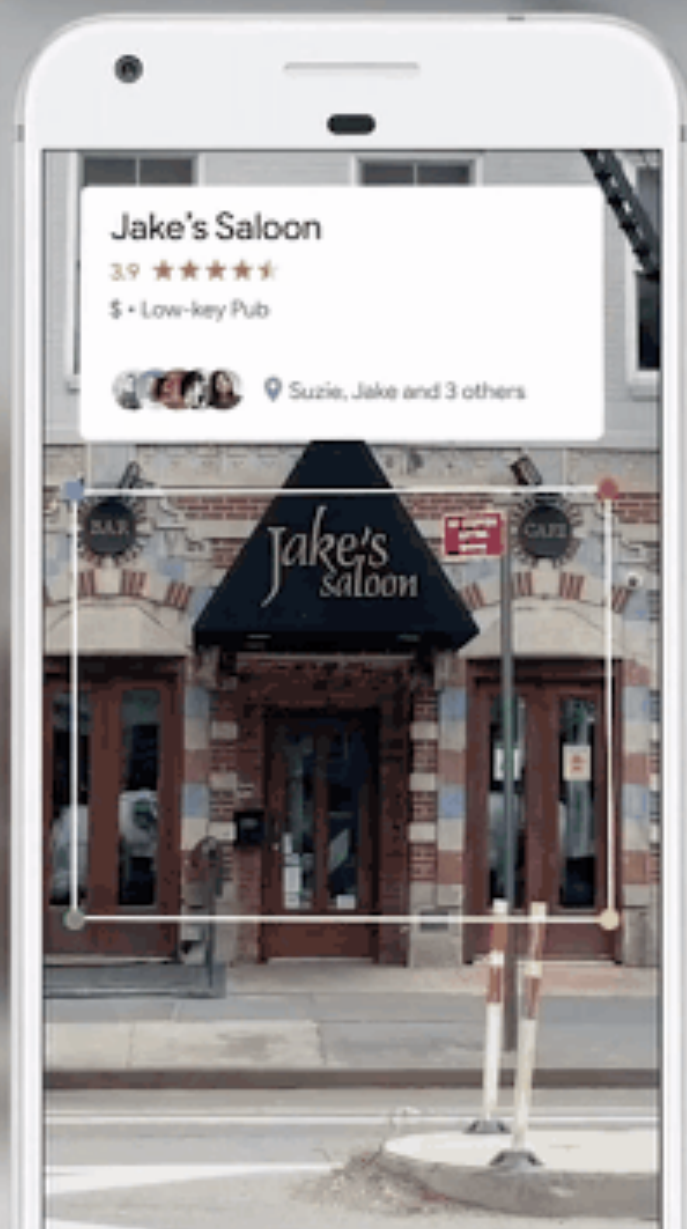
Google Lens

humble potato
a down to earth burger joint

SMALL BITES HAMBURGERS SANDWICHES

Tap capture button to select

Mobile AR Categories
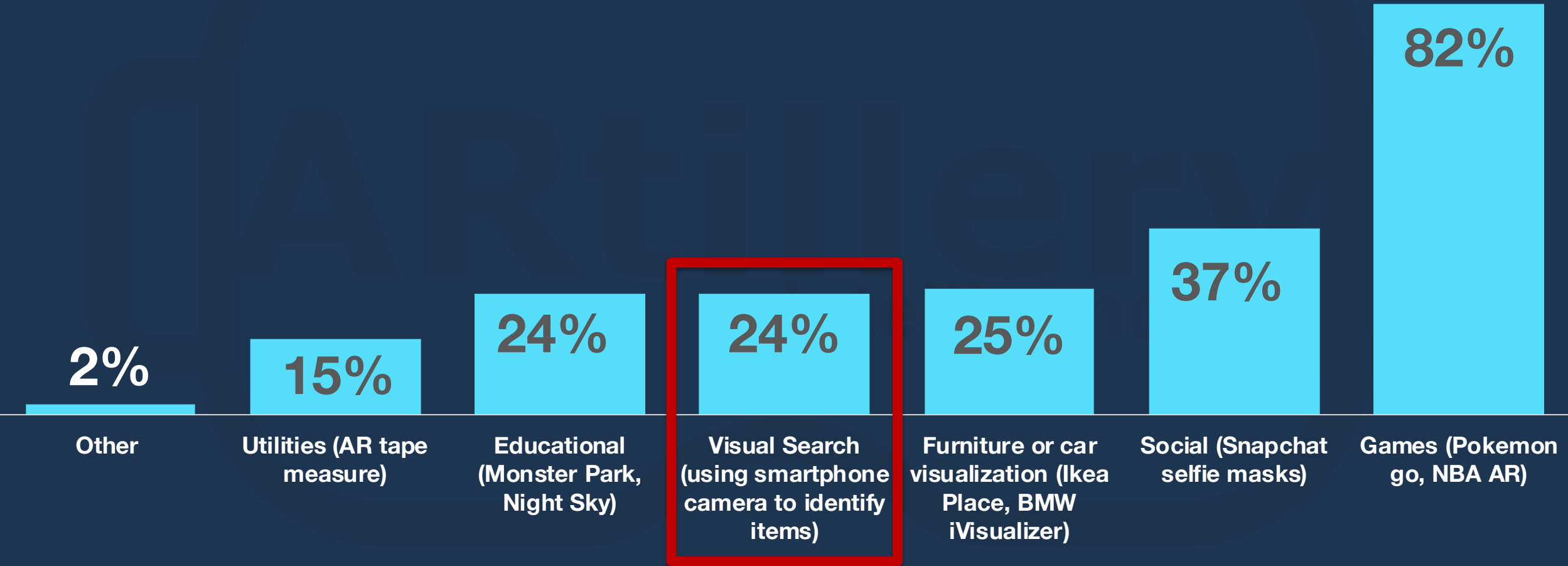
What types of mobile AR experiences have you used?

Category	Percentage
Other	2%
Utilities (AR tape measure)	15%
Educational (Monster Park, Night Sky)	24%
Visual Search (using smartphone camera to identify items)	24%
Furniture or car visualization (Ikea Place, BMW iVisualizer)	25%
Social (Snapchat selfie masks)	37%
Games (Pokemon go, NBA AR)	82%

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Thrive Analytics
smart decisions that drive success

Base = 3,118 US online adults (18+).

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Business Model # 2
In-app Purchases

NOVEMBER 19, 2018

Data Point of the Week: Pokemon Go Has Made $2 Billion to Date

by Mike Boland.

Mobile AR Categories
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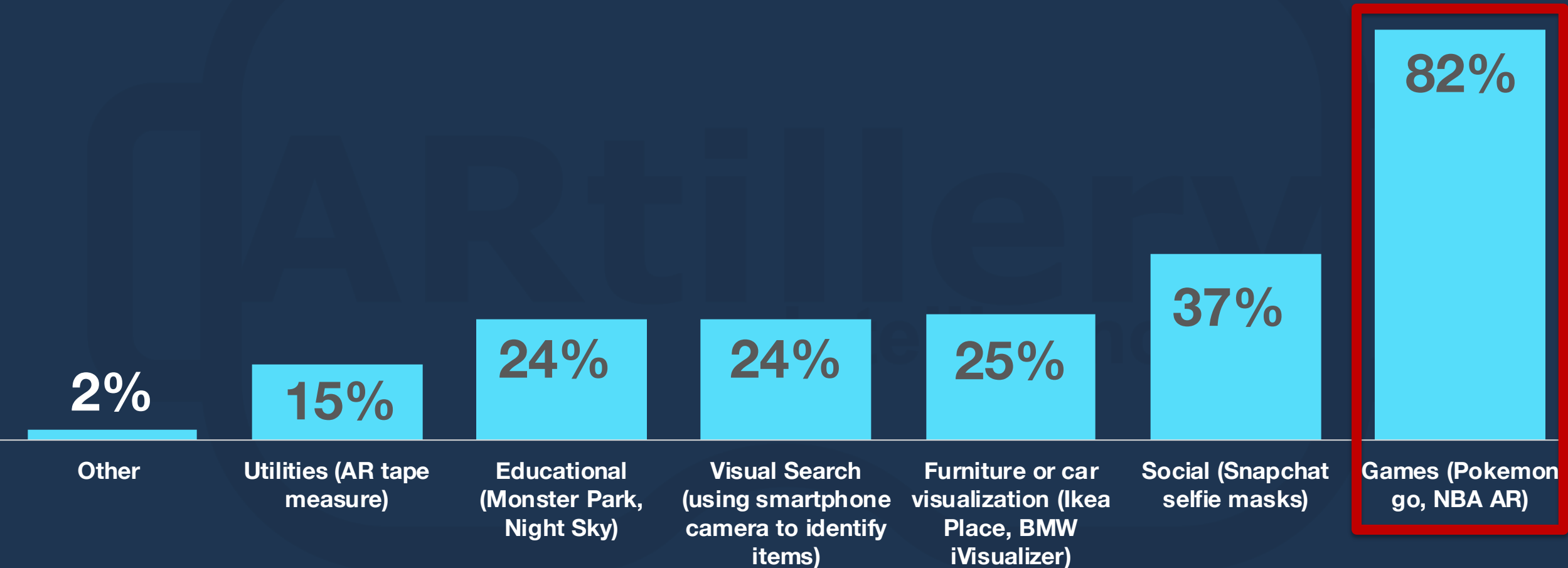
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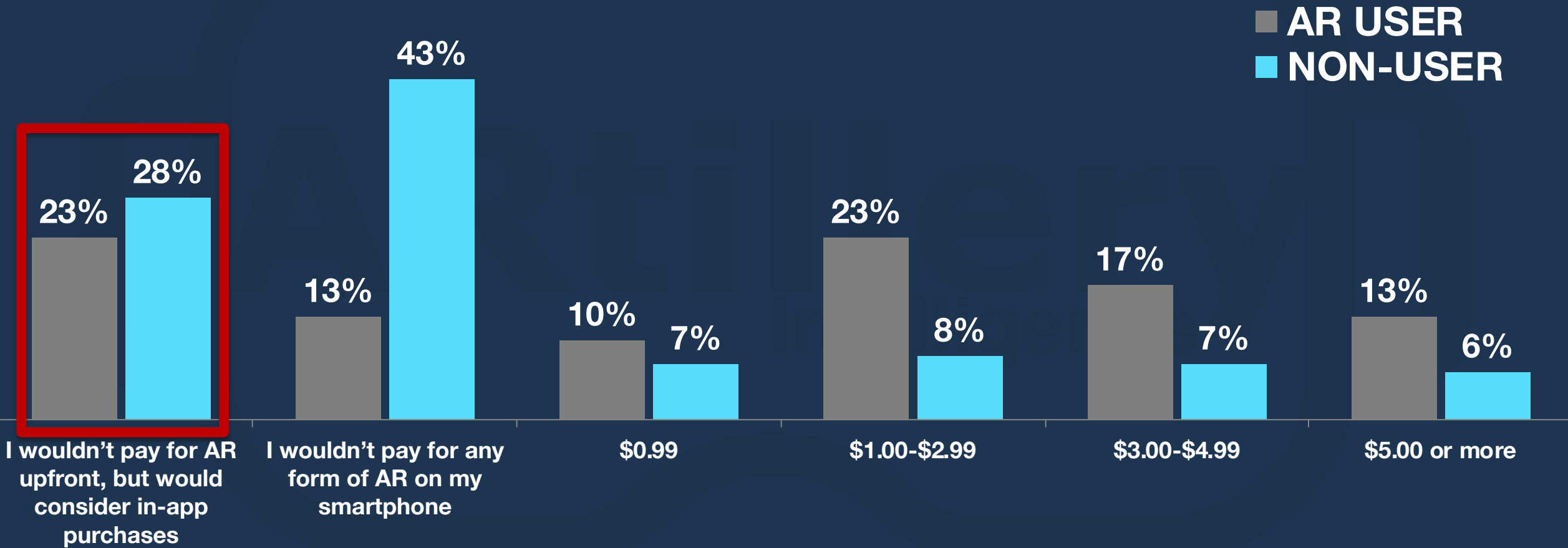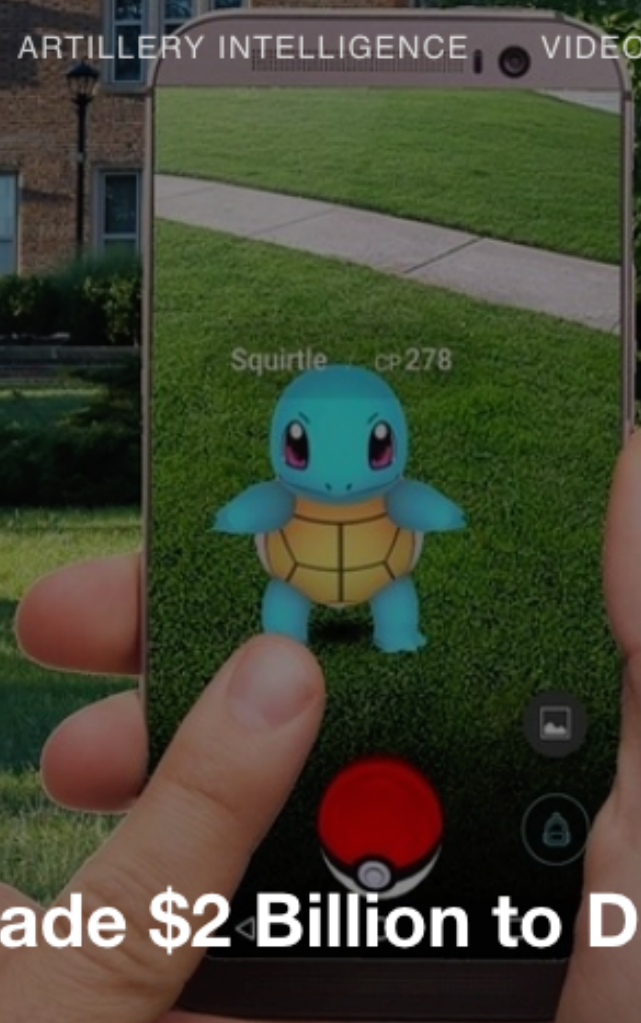
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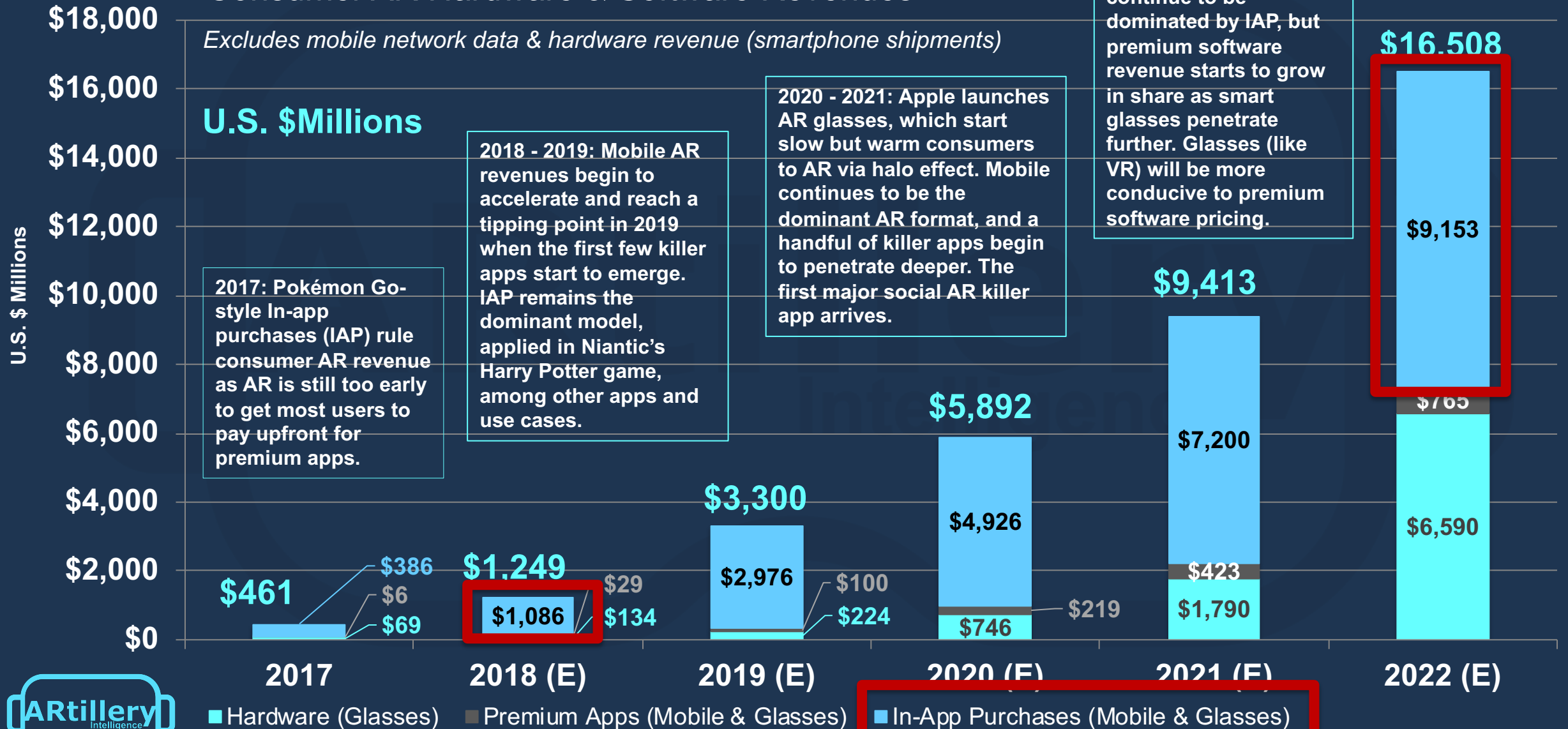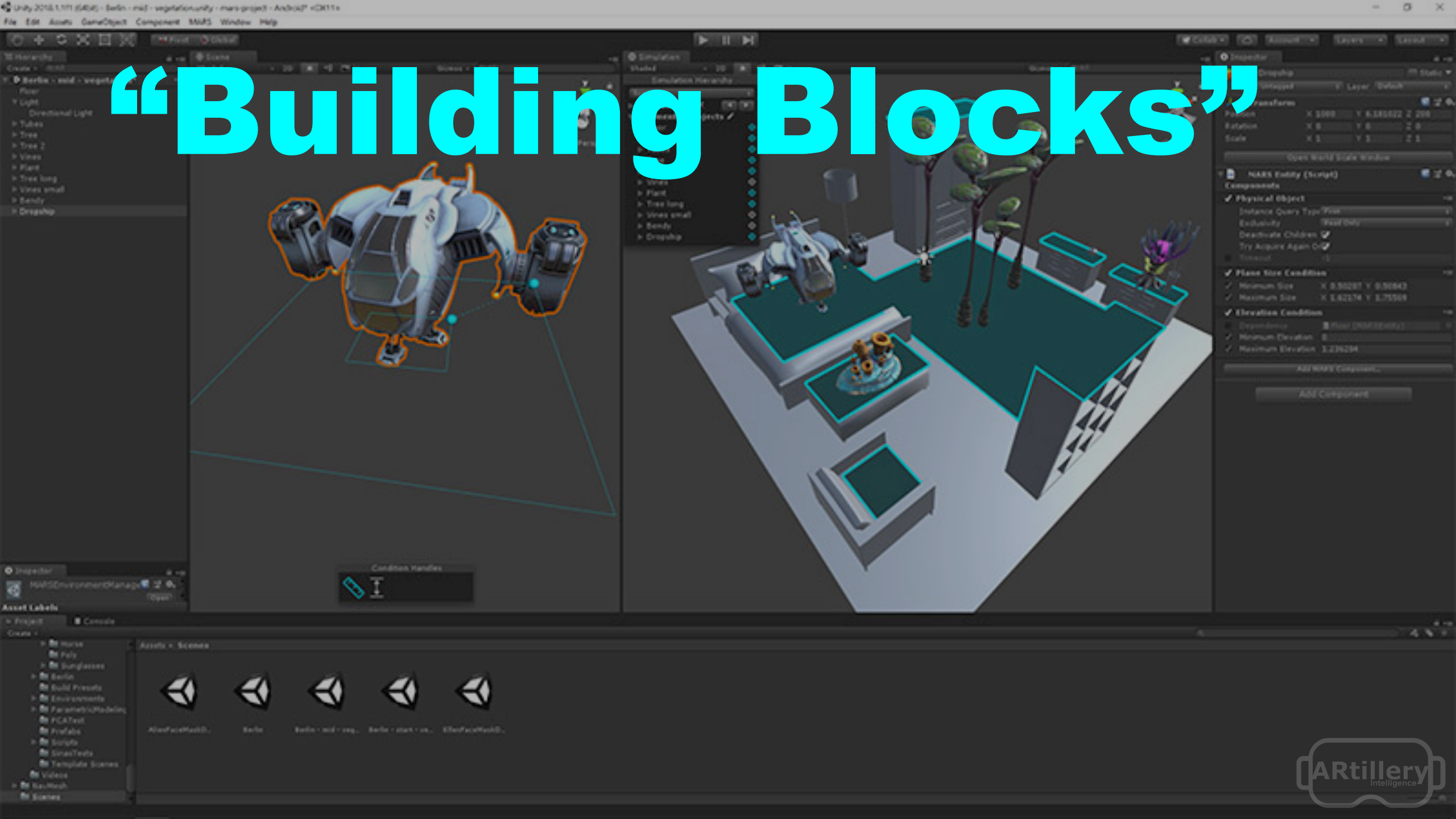**2018 - 2019:** Mobile AR revenues begin to accelerate and reach a tipping point in 2019 when the first few killer apps start to emerge. IAP remains the dominant model, applied in Niantic's Harry Potter game, among other apps and use cases.

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"Building Blocks"

Example:

3D Product Model Scan/Creation Tools

Example: Niantic's Real World Platform

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