



## AUGMENTED REALITY FOR MARKETING

### AN IAB PLAYBOOK

Usage of Augmented Reality (AR) has been steadily rising as an entertainment, gaming and advertising platform over the last several years. The introduction of wearable AR lenses in 2014, followed by the massive success of Pokémon Go in 2016, rocketed AR into the mainstream, opening the door for broader adoption across other areas particularly marketing. With [1 billion expected users by 2020](#), and an expected [\\$2.6 billion in ad spend by 2022](#), consumers are clearly showing an appetite for the unique type of experiences AR offers, creating new opportunities for brands to tell their stories in a fresh, engaging, and creative growing format.

The IAB Augmented Reality for Marketing Playbook provides the advertising ecosystem with a framework for considering and exploring the burgeoning opportunities in AR. It is intended to educate brands and marketers on the value and benefits of this nascent marketing channel, and it includes definitions and key terms, growth drivers, use cases, practical advice on implementation and measurement.

June 2019



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## MISSION AND CONTRIBUTORS

Commercial applications of augmented reality have been growing for some time now. Since at least the late 1990s, when the NFL cast the first yellow line marker overlay on TV, consumer appetite for this type of perceptual enhancement has risen rapidly. The smartphone era opened the door to new and creative uses for AR, and significant investments in both AR-related hardware and software solutions has opened the door for new forms of storytelling, drawing the interest of marketers.

Given that AR for advertising is still very much in its infancy, the **IAB Augmented Reality for Marketing** working group was formed in order to define for marketers and their agencies actionable best practices, guidance, and inspiration on activating this nascent channel.

The working group was led by Julian Soler, Director, Mobile Marketing Center of Excellence at IAB with co-chairs from Snap, Inc., Verizon Media, Meredith Digital and Unity Technologies.



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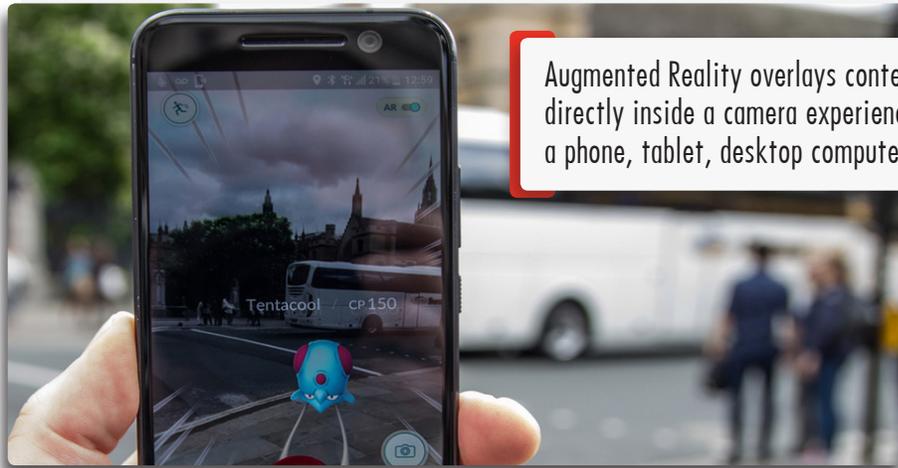
## DEFINITIONS

### WHAT IS AUGMENTED REALITY?

Augmented Reality (AR) is an experience that utilizes a camera to change or enhance the user's view of the real world. This experience can be app-based or web-based, though app-based is more common today. "AR experiences are a new way to create context and add experiences over real physical world objects and attributes like location or recognized image or object."<sup>\*</sup>

<sup>\*</sup> Source: [IAB New Standard Ad Unit Portfolio](#), page 34

### The Difference Between Augmented Reality and Virtual Reality



Augmented Reality overlays content in the real world directly inside a camera experience, typically through a phone, tablet, desktop computer or headset.

Virtual Reality does not interact with the real world. It creates a whole new virtual experience that mimics real experiences, usually via a headset.





## KEY TERMS

IAB published a comprehensive [Augmented and Virtual Reality Glossary](#) in 2018. For the purposes of this Playbook, the following terms are highlighted:

### Back-facing Camera Orientation

An AR experience where the camera is oriented away from a user to showcase and alter the surrounding environment; i.e. environment-based AR, inserting objects on surfaces, etc.

### Front-facing Camera Orientation

An AR experience where the camera is oriented towards the user's face and alters something related to the face; i.e., selfies, face filters, etc.

### WebAR

Enables a consumer to load AR experiences directly from the web onto their browser. WebAR minimizes friction that a consumer may experience when trying to view AR content.

### Head-mounted Display

A device with clear glasses or goggles that attaches to a user's head and shows virtual images projected on, or in, the real world; i.e. Google Glass, Spectacles by Snap.

### Mixed Reality

Mixed reality is a blending of elements of both virtual and augmented reality. It encompasses both VR and AR within a broader spectrum called the "[Reality-Virtuality Continuum](#)," and attempts to combine elements of the real and virtual worlds in to environments where physical and digital objects can live together and interact with each other in real-time.

### First-party AR Ad Delivery

A branded AR experience that is delivered through a brand's proprietary app.

### Third-party AR Ad Delivery

A branded AR ad experience that is delivered by an entity outside of the brand's proprietary app, such as social media platforms, gaming platforms, advertising networks/platforms, and 3D rendering engines/platforms.

### 3D Model

A mathematical model of an object rendered in three dimensions. It can be turned and viewed from many angles. If a jpeg image is like a painting, a 3D model is a sculpture.

### Computer Vision

Term used for the field of science and technology that enables computers to capture, identify and process images the way a human eye does.

Improvements in computer vision are key to the democratization of AR. Smartphones today have the ability to detect surfaces, objects and people with great accuracy. Advancements in phase detection (which allow for better auto-focusing of moving objects), and more and bigger megapixels are



providing sharper, cleaner images making it easier for AR apps to detect items and render them in space.

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## TECHNOLOGIES THAT ENABLE AR

### Markers

A type of AR experience that uses a specific "marker in the real world, such as a QR code or an AI learned concept (recognized object) like a 'dog' to trigger the display of AR content."\*

\* Source: [IAB New Standard Ad Unit Portfolio](#), page 34

It does require a predetermined image, pattern, or physical object that the camera recognizes using image recognition software to launch the AR experience. For example, a consumer could point their device camera at a fast food logo and have one experience, then point their camera in the same app at a retail store logo and experience different AR content. The unique and distinct appearance of each logo is recognized, triggering different experiences.

### Markerless

Markerless AR technology is used to recognize patterns or features in an environment that were not previously provided to the application, enabling, for instance, a consumer to scan a real-world environment like a tabletop or a room in their apartment using their smartphone camera and virtually place a product there to see how it would look.

### ARKit

Apple's augmented reality developer platform for iOS devices. Launched in 2017, ARKit empowers developers to leverage camera and sensor data to map digital objects in 3D space. "ARKit combines device motion tracking, camera scene capture, advanced scene processing, and display conveniences to simplify the task of building an AR experience."\*\*

\*\* Source: [ARKit | Apple Developer Documentation](#)

### ARCore

Google's augmented reality developer SDK. Released in 2018, ARCore enables developers to build Android and iOS apps that can "understand your environment and place objects and information in it."\*\*\* "The key technologies ARCore uses to accomplish this are motion tracking, environmental understanding and light estimation."\*\*\*\*

\*\*\* Source: [Google Blog](#)

\*\*\*\* Source: [Google Developers ARCore Overview](#)

# WHAT IS DRIVING GROWTH AND ADOPTION OF AR?

## RISING CONSUMER AWARENESS

Augmented reality has existed conceptually in popular culture since at least 1901 in L. Frank Baum's novel, "[The Master Key](#)." In it, Baum's protagonist Rob is given the gift of a "Character Marker" by a Demon which is described in chapter 8:

"It consists of this pair of spectacles. While you wear them every one you meet will be marked upon the forehead with a letter indicating his or her character."

Versions of AR have continued to appear in novels, films and television driving increased awareness of AR and sparking the imagination to its possibilities.





Consumer adoption of AR - at least in the sense relevant to this Playbook - really begins soon after the launch of the iPhone in 2007. From a marketing perspective, in particular, the story begins in 2008. [BMW ran a print ad for Mini](#) that rendered a 3D image of the car overlaid on the page when a webcam or phone camera was pointed at it.

That was followed by [Esquire's December 2009 "Augmented Reality" issue](#) which featured Robert Downey, Jr. sitting atop an image that, when scanned using a special app, triggered video of the actor introducing you to the issue and pitching his upcoming movie, Sherlock. Additional supplemental AR-driven content was available throughout the issue. Notably, Lexus featured two AR ads in the issue.



With advances in technology, to be described later, AR in marketing progressed rapidly over the next decade. Until about 2014, it was used primarily for branding "stunts" in public spaces, typically involving cameras shooting people and their surroundings, adding the virtual elements and displaying on a screen. This helped to introduce and drive broader consumer awareness of AR as a marketing channel.



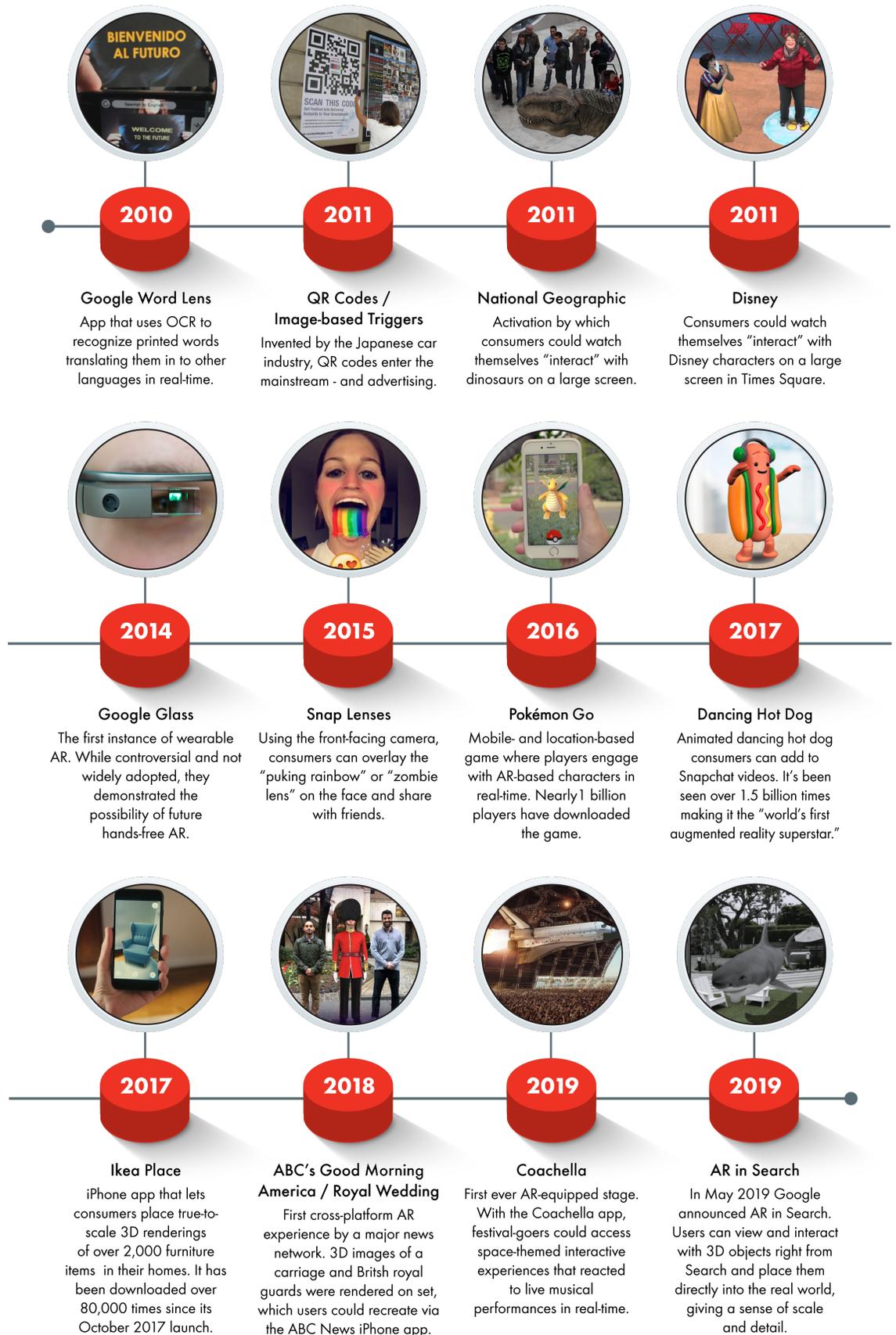
Exposure to AR truly scaled in 2015 with the introduction of [Snap Lenses](#). In its first year alone, [30 million snaps were decorated with Lenses](#) - including by advertisers. For the first time, brands could reliably achieve scale with augmented reality.

For example, in 2016, [Taco Bell's Shell Lens for Cinco de Mayo](#) was shared by millions of Snapchatters and viewed over 224 million times [on the day it launched](#). By 2018, on average, over 70% of Snap users had played with or viewed an augmented reality Lens every day, and over 300,000 Lenses had been created by Snap's community through Lens Studio, and those Lenses were viewed over 35 billion times.\*

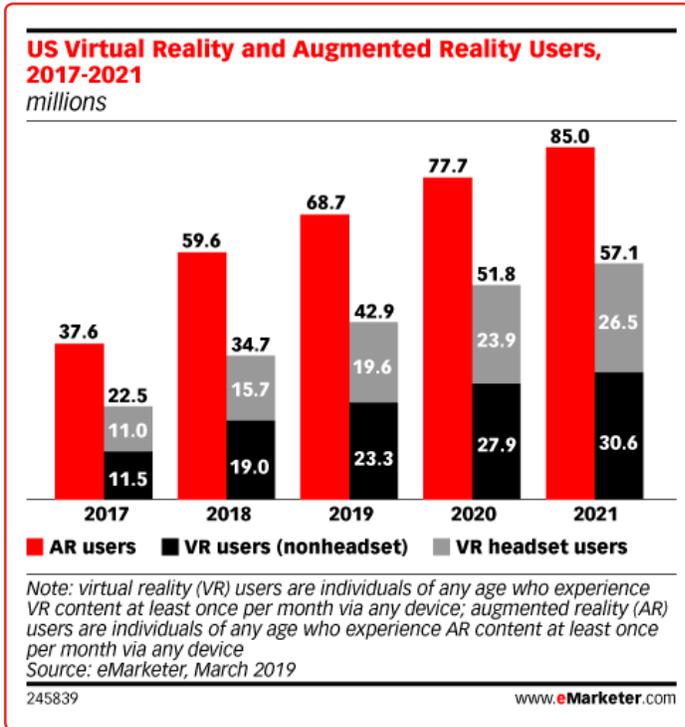
Pokémon Go then entered the scene in 2016. Without question, the most wildly popular AR application of all time, [it has been downloaded nearly 800 million times globally through 2018](#) and has [generated over \\$2 billion in revenue through in-app purchases to-date](#).

\* Source: [Snap Fourth Quarter and Full Year 2018 Financial Results](#)

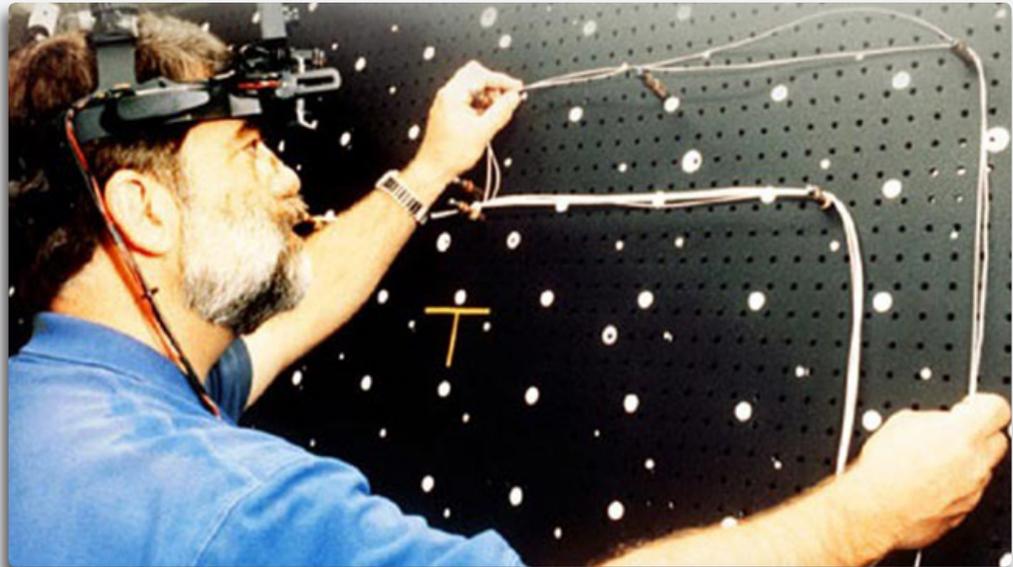
The following chart traces some key milestones over the last decade that have propelled AR awareness and adoption towards today.



It is clear the adoption of augmented reality has grown and will continue in significant ways as the following chart shows:\*



\* Source: eMarketer, Virtual and Augmented Reality Users 2019



"Augmented Reality" was coined 1990 by Tom Caudell and David Mizell, two Boeing researchers who used it to describe industrial uses of AR in the assembly of aircraft parts.\*

\* Source: [Vertebrae Blog](#)

## TECHNOLOGICAL ADVANCEMENTS

Early iterations of head-mounted and wearable computers began appearing around 1968. Television innovated various forms of augmented reality, most notably, weather forecasts in 1981 and the introduction of the yellow line first-down marker in the NFL in 1998.



Increased investment in development platforms by technology companies in the years following has made it easier to rapidly create AR experiences. Early pioneers paved the way for development of AR applications across games, industrial and commercial uses.



EPIC GAMES	UNITY TECHNOLOGIES	VUFORIA	WIKITUDE
<p>Through its Unreal Engine, Epic Games offers a "complete suite of creation tools designed to meet ambitious artistic visions while being flexible enough to ensure success for team of all sizes." In 2017, they launched "Project Raven," an AR/VR/MR solution.</p> <p>Source: <a href="https://www.unrealengine.com/en-US/what-is-unreal-engine-4">https://www.unrealengine.com/en-US/what-is-unreal-engine-4</a></p>	<p>Unity is the creator of the world's most widely used real-time 3D development platform, giving developers around the world the tools to create rich, interactive 2D, 3D, VR &amp; AR experiences. Over 60% of all Augmented Reality/Virtual Reality and over 50% of mobile games are built on Unity's platform.</p>	<p>Founded in 2008, and acquired by PTC in 2015, Vuforia is widely known as the industry leader in industrial augmented reality... With 600K+ registered developers and hundreds of leading global enterprise customers across 30+ verticals.</p> <p>Source: <a href="https://www.ptc.com/en/products/augmented-reality">https://www.ptc.com/en/products/augmented-reality</a></p>	<p>A leader in mobile AR technology, the Wikitude SDK provides cross-platform development tools for over 20,000 apps globally. Wikitude launched the world's first mobile AR App, the Wikitude World Browser App in 2008.</p>

Numerous companies have sprouted up further driving investment into AR, among them Spark, Roar, Glimpse Group, BlippAR, Microsoft HoloLens, Oculus and Magic Leap.

The real game changer has been the launch of AR SDKs by the major technology companies; Apple, Amazon, Snap, Google and Facebook.



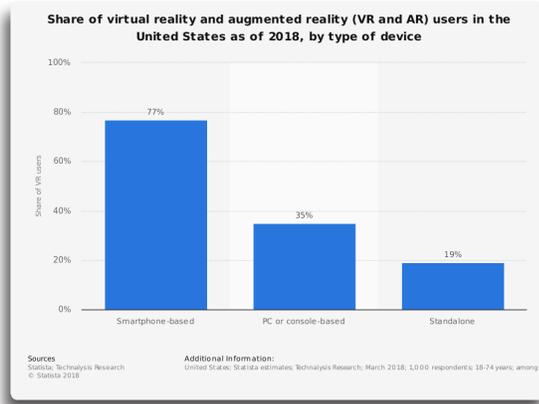
June 2017	November 2017	December 2017	February 2018	October 2018
<p>"ARKit combines device motion tracking, camera scene capture, advanced scene processing, and display conveniences to simplify the task of building an AR experience. You can use these technologies to create many kinds of AR experiences using either the back camera or front camera of an iOS device."</p> <p>Source: <a href="https://developer.apple.com/documentation/arkit">https://developer.apple.com/documentation/arkit</a></p>	<p>Amazon Sumerian is an AWS service that lets you create and run 3D, Augmented Reality (AR) and Virtual Reality (VR) applications. You can build immersive and interactive AR or VR scenes that can be deployed to any device with a browser.</p>	<p>Snap's Lens Studio is made available to the public. It allows users to create their own Snapchat Lenses on Windows and MacOS computers. Import custom art or use templates to bring creations "to life with movements, animations and interactive triggers." Share with anyone on Snap.</p> <p>Source: <a href="https://www.sparkar.com/ar-studio/features">https://www.sparkar.com/ar-studio/features</a></p>	<p>"ARCore is Google's platform for building augmented reality experiences. Using different APIs, ARCore enables your phone to sense its environment, understand the world and interact with information. Some of the APIs are available across Android and iOS to enable sharedAR experiences."</p> <p>Source: <a href="https://developers.google.com/ar/discover/">https://developers.google.com/ar/discover/</a></p>	<p>Originally launched as the Camera Effects Platform in 2017, it was rebranded as AR Spark Studio and extended to Messenger in 2018. Closed Beta for Instagram coming in 2019. Spark AR allows users to create custom or templated AR effects and share them across Facebook, Messenger and Instagram.</p> <p>Sources: The Verge, AdWeek</p>

The introduction of AR SDKs by these companies has springboarded AR adoption by marketers. Within six months of its launch, there were 13 million ARKit-only installs, 47% of which were games. By January 2019, 95% of iPhone users had devices that support AR through Apple's ARKit. Google's ARCore is compatible with over 50 Android devices and iOS. "AR is [now] enabled on more than 500 million devices. The iOS App store offers more than 2,000 AR apps, and Google Play offers more than 200."

## THE USER JOURNEY

### HOW CONSUMERS ACCESS AR

Consumers access AR experiences primarily via cameras on their mobile devices and desktop computers. [Smartphone-based VR/AR accounts for 77% of all usage](#) primarily through an [in-app experience or via Snapchat today](#).



#### Methods that US Augmented Reality Users Have Used to Access AR, Aug 2018

% of respondents

Downloaded an app	77%
Experienced AR on Snapchat	77%
Experienced AR on Facebook	19%
Accessed AR via a QR code	19%
Experienced AR on the web	19%

Note: n=126  
Source: eMarketer.com  
241370

www.eMarketer.com

The mobile device clearly lends itself to a number of different types of AR experiences.



Front-facing camera activations enable a personalized consumer experience.

Source: [Yahoo](#)



Whereas back-facing camera AR activations can show consumers how products look and feel in space, provide a 3D model of a product, get product information or engage with branding experiences.

View the Miller High Life AR experience [HERE](#).

Source: [Mobile AR News](#)

The structure of the experience is generally the same regardless of whether a front-facing or rear-facing camera is used, however, variations in the access points provide different creative possibilities for marketers. Moreover, both types of experiences allow for marketers to include calls-to-action such as tapping to buy, download an app, sharing and more.



Head-mounted displays, such as glasses, lenses and headsets are also used but less commonly today. These support AR by making it an integral part of a consumer's entire field of view.

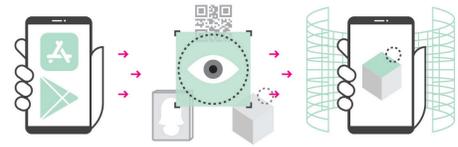
## HOW AR EXPERIENCES ARE ACTIVATED

AR experiences are activated in one of four ways today.



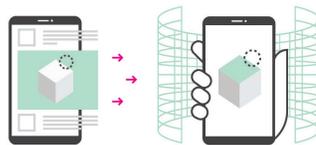
### Camera

- Open camera on mobile device.
- Hover camera over object or QR code printed on a page.
- AR experience launches in AR-enabled app or WebAR.



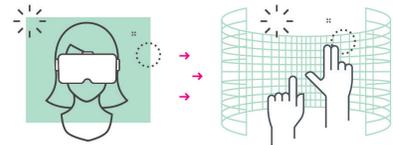
### AR-enabled App

- Open AR-enabled app.
- Activate the AR experience within the app; i.e., Instagram or Snapchat.
- Hover camera over image, trigger or object for recognition.
- AR experience launches in AR-enabled app or WebAR.



### AR In-Feed

- Click in-feed placement or ad.
- AR experience launches in AR-enabled app or WebAR.



### Head-mounted Display

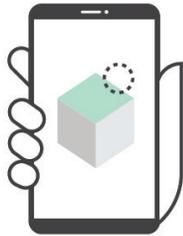
- User puts on head-mounted display; i.e. glasses, headset, etc.
- A manual trigger sends user into an immersive mixed-reality experience.

## HOW OBJECT RECOGNITION IS TRIGGERED

There are two ways in which recognition is made to trigger an AR experience.

### Marker

A device's camera recognizes a marker or real-world object/surrounding which triggers the AR experience. Recognition- (or marker-) based augmented reality uses a camera to identify visual markers or objects to showcase an overlay only when the marker is sensed by the device. When added to advertising creative, marker-based AR prompts a deeper level of engagement with consumers.

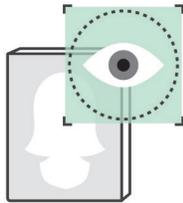


#### Object Recognition

Consumers hover app camera at an object to trigger for recognition.

Puma's LQDCELL Origin AR Men's Training Shoes are skinned with QR codes. When scanned with the LQDCELL app, an AR overlay appears of the sneakers catching fire.

Source: [Mobile Marketer](#)



#### Image Recognition

Hover app over image to trigger recognition.

Warby Parker uses Apple 3D Face Maps and ARKit to allow iPhone users to try on glasses via the Virtual Try-On feature in their app.

Source: [The Verge](#)



#### Smart Code

Hover camera over QR code on printed page or product to trigger for recognition.



### Markerless

Markerless AR experiences are able to render virtual images over real-world objects by understanding the physical world through feature points. Using device GPS and mobile network features, location-based AR apps can guide users about their environment and deliver information in a convenient way.

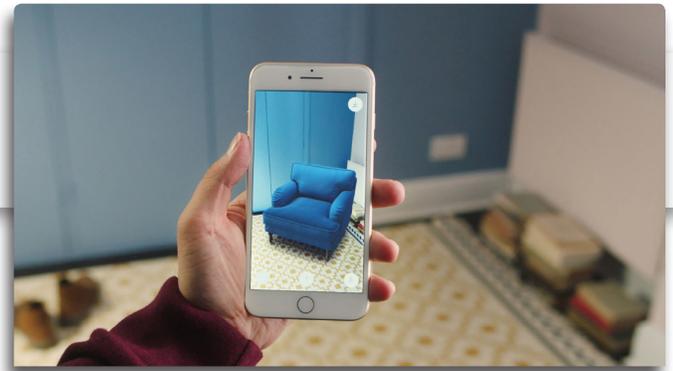
Home Depot's Project Color app allows consumers to sample paint colors on your walls to see how your home looks in different colors.

Source: [Home Depot](#)



The Ikea Place AR app allows consumers to place true-to-scale 3D renderings of furniture into their homes. This allows them to see and feel how they look and fit before purchasing.

Source: [Ikea](#)



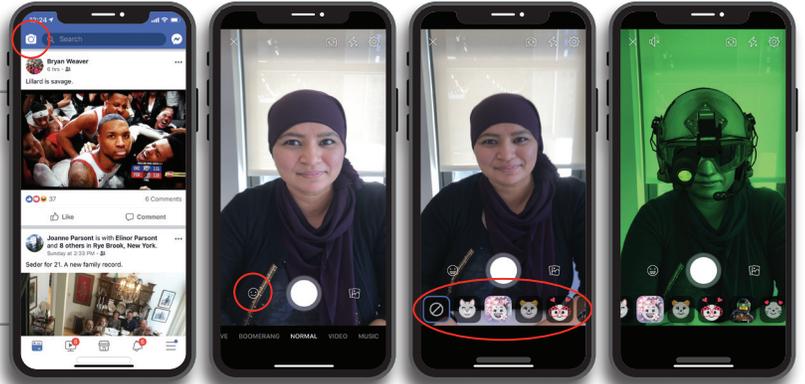
## HOW AR IS USED TODAY/CURRENT APPLICATIONS

### FIRST-PARTY CONSUMER/SOCIAL PLATFORMS

Far and away the most familiar form of AR today, first-party consumer and social networking companies, such as Instagram, Facebook and Snap, Inc., have popularized shareable lenses and filters. This is facilitating marketplace education and consumer adoption.



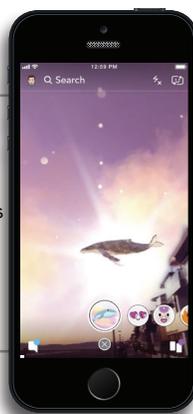
The Facebook app opens to the News Feed. Users tap the camera icon in the upper left corner to launch the camera. From there, users can access an extensive suite of AR experiences by tapping the smiley face icon.



Instagram opens to a feed-like experience, with the camera accessed by tapping the relevant icon. The smiley face icon reveals a carousel of in-house and third-party created AR options. Use can capture photos, record videos and share across Instagram and Facebook.



Snapchat opens directly to the camera and users simply tap anywhere on the camera screen. They see a white mesh which adheres either to their face or the surfaces viewed in the world camera. A carousel of AR experiences appear from which users can select.



View the experience [HERE](#).

## GAMING

There are currently hundreds of AR titles available in the app stores.

Universal teamed up with game publisher Ludia to create "[Jurassic World Alive](#)," where players encounter and collect a variety of dinosaurs while exploring their own neighborhoods and cities and discover rare and awe-inspiring creatures featured in the franchise films.

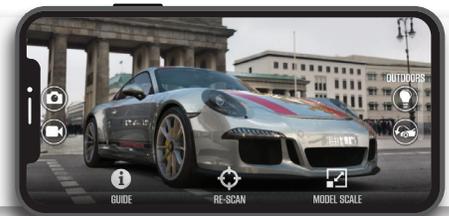


Rovio released "[Angry Birds AR: Isle of Pigs](#)" in March 2019 which provides fans with an up close look into a remote vacation spot for the iconic game's characters. Viewing the 3D levels through an iPhone or iPad, players can walk 360-degrees around levels to find weaknesses and hidden items and, when they are ready, line up the perfect shot with intuitive onscreen controls: walking in close to get precise, or stepping back to gain a better view of the destruction.



Some top game publishers have explored using AR as a feature that enhances the experience, rather than as core gameplay.

Zynga's wildly popular "[CSR Racing 2](#)" mobile game has an AR mode where the player can look through the phone camera and check out their cars from the game, as it would look in the real world. Players can even take a selfie standing next to the car and share it with friends.



Game publisher, My Country, added an AR spectator mode to their "[Guns of Boom](#)" shooter, allowing other players to watch their friends play, eSports-style, via an AR recreation of the game on your tabletop viewed through a phone or tablet.



## SEARCH

In May 2019, [Google announced AR in Search](#). Users can view and interact with 3D objects right from Search and place them directly into the real world, giving a sense of scale and detail. When searching for select animals, like "great white shark" for example, users get an option right in the Google Knowledge Panel to view them in 3D and AR.

NASA, New Balance, Samsung, Target, Visible Body, Volvo, Wayfair, SONOS were the first to work with Google and surface their own 3D content in Search so users could interact with 3D models of products and put them into the real world, right from Search.

View the experience [HERE](#).

View the New Balance AR in Search experience [HERE](#).



## RETAIL

Still largely driven within first-party branded apps, though some retail examples have been demonstrated in ad units. Furniture and home goods are the most prevalent use case today, however, a growing number of apps enable consumers to try on products via AR (e.g., face makeup, glasses) and then make a purchase directly from the app.

Additional verticals remain limited by the mobile AR technologies currently available. For example, highly accurate and detailed 3D body tracking have yet to be developed which would allow people to try on clothes virtually. Progress is being made and further innovation will broaden the opportunities for AR-enabled e-commerce.



[Amazon AR View](#) is an in-app tool that helps consumers view products virtually in their homes before making a purchase. Consumers can use AR View to place objects on any surface, like a countertop or floor, and then move or rotate the object within their environment. This type of preview demonstrates the product's physical size, in addition to the style fit as compared to other objects in the space.



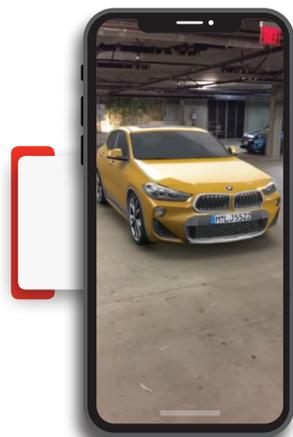
The [Wanna Kicks](#) app allows consumers to virtually try on sneakers, giving them the option to redirect to Amazon to purchase them at any time along the journey.

## AD UNITS

### Sponsored Snapchat Lenses

Zynga partnered with Snapchat on a Lens ad which promoted the launch of the "Made in America" event in CSR Racing 2 through a gamified AR experience. The ad allowed Snapchat users to envision themselves as the driver, embedded with personalized elements, such as the user's name dynamically appearing on the car's license plate. While playing with the Lens, users could immediately tap on the call-to-action button, bringing them to the App Store to install the CSR2 game.

The campaign drove mass reach and engagement with over 2.5 million Snapchatters spending over 20 seconds playing with the Lens. The Lens was shared more than 700 thousand times resulting in 16.8 million views from friends and thousands of users who installed the app after interacting with the ad.



BMW's AR Trial Lens let Snapchatters take out the [X2 for a ride, right from their phones](#). They could also see it in their driveway, in a garage, or on the street and change the car's color. [The Lens saw an average of 54 seconds of playtime](#).

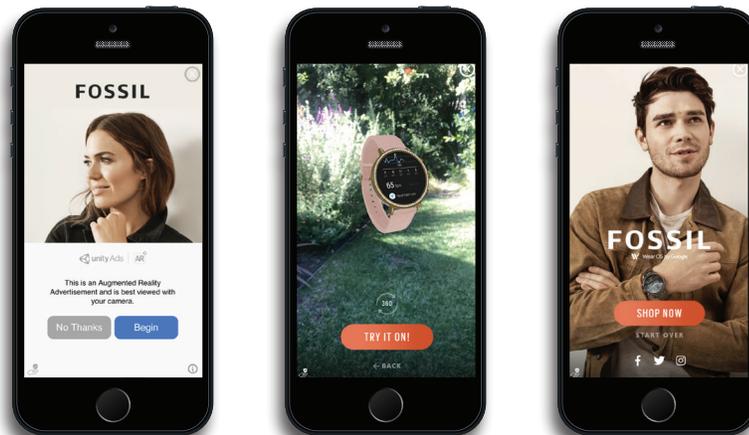
### AR Enhanced Websites

Sony worked with 8th Wall, Trigger, and Amazon Sumerian to launch an AR experience for their film, "[Spider-Man: Into the Spider-Verse](#)," in order to create buzz and PR around the movie, and drive ticket sales. Consumers were able to place an animated, life-size Spider-Man right in their own home and share the experience on social media. The key benefit of this experience was that it was available on mobile web, eliminating the need for users to download a new or separate app.



### In-App/In-Game Ad Units

Unity Technologies powers an in-app advertising platform that delivers video, playable and AR ad units. Ads appear when the game player reaches the end of a game level or at other times during game play and wishes to progress through the game. Once the ad experience is complete, gameplay resumes.



Fossil partnered with Unity and ad agency 360i to create an AR ad campaign that allowed consumers to try on the latest watches in AR before linking out to buy. The ad appeared in various beauty apps and games on the Unity platform. Consumers were able to see the product come to life, change the colors and style, and then virtually try on the product. The experience concludes with an end card and call to action to shop/learn more about the product.



The Home Depot and Pottery Barn both partnered with Verizon Media to create personalized digital ad campaigns using AR. In both campaigns, consumers launched an AR experience directly from a native advertisement allowing shoppers to virtually place 3D items in their homes. The AR experience helped consumers visualize items within their own space, narrow down choices, and then click to purchase from the camera view.

Recipients of the ads spent an average of 2+ minutes interacting with the AR experiences. The Home Depot campaign boasted a 12.5% CTR from the ad to the product landing page, while Pottery Barn also saw an impressive CTR of 8.9%.

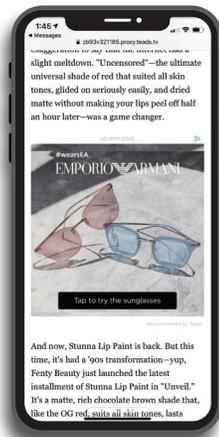
View the Home Depot AR experience [HERE](#).

View the Pottery Barn AR experience [HERE](#).



### In-Feed Ad Units

Conventional in-feed ad units can be delivered that drive consumers to AR experiences on both desktop and mobile devices.



Source: Teads

View the experience [HERE](#).

## SPONSORED CONTENT

Dove and Entertainment Weekly partnered to promote the "[Dove Self-Esteem Project](#)," an educational campaign aimed at "helping young people overcome body image issues and fulfill their potential by building positive body confidence and self-esteem." With the Live VR app, consumers could scan magazine covers and watch short films of women sharing their experiences with self-esteem issues. This experience provided Dove with prolonged exposure to EW readers, providing valuable content in a format their audience craves.



View the experience [HERE](#).

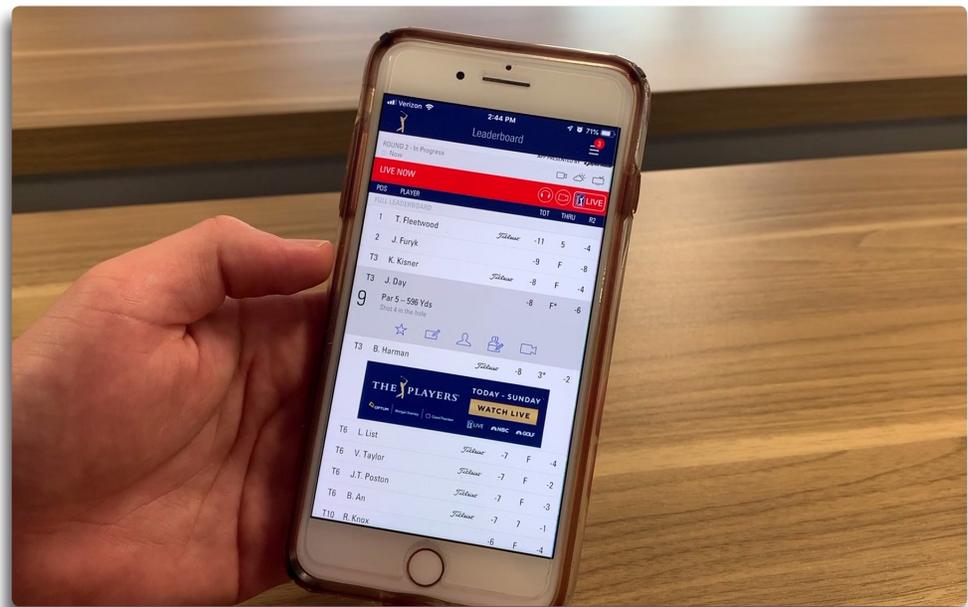
## APP SPONSORSHIP

AR platforms offer traditional and non-traditional placements of sponsorship and branding. Both can be placed in a variety of locations within the AR experience. Brand logos can be featured on the publisher app icon and/or sponsor name can be incorporated into the app or experience title. Brand messaging can be featured on initial app launch page as well.

AR functionality may be integrated within an existing brand app so users can experience AR without having to download a separate app. This allows brands to direct traffic to their primary mobile app. If a brand has a specialized stand-alone app for AR experiences, it can be linked to from within the primary mobile app.

### Brand placement within the AR experience

Brand logos can be placed within different areas of a publisher app. This provides the ability to have multiple sponsors within the same AR experience. Logos can be 2D or 3D and can be interactive providing consumers with the ability to tap out to web pages, launch video, image or text content, and AR-based or traditional ad units.



PGA TOUR iOS app featuring AR functionality

View the experience [HERE](#).

### Brand ads and graphics placed within an app

Traditional looking images such as outdoor boards, banner ads and video players can be displayed within the app or projected onto an environment when an object within the app is tapped. Artwork can be product-based like golf bags, cars and furniture, can be 2D or 3D and can tap out to web pages, video, image or text content, AR-based or traditional ad units and offer interaction with the image; i.e., a car that can be driven when tapped, furniture placement in space, games.



PGA TOUR iOS AR app showing brand sponsorship integration on app splash page

### Brand Sponsorship of Live Data Integration

Brands have the ability to sponsor live event data by displaying scores, player statistics and other game and event content that enhances the user experience and makes them feel like they are experiencing the product as the action is happening.



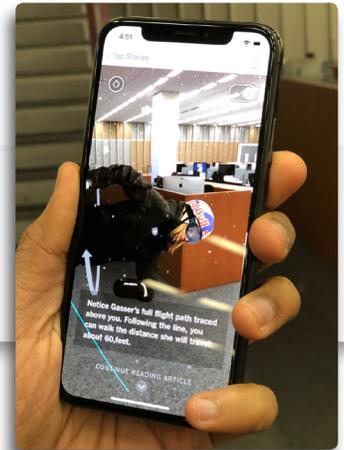
PGA TOUR iOS AR app displaying app features and integration of live data

View the experience [HERE](#).

## EDITORIAL

Augmented reality can enhance the editorial experience by providing more depth into the story being covered. It can be used to offer additional detail, and the opportunity to "touch" the subject or topic.

In conjunction with the 2018 Winter Olympics, The New Times published its [first AR feature](#) in 2018. The article featured four AR moments in advance of the games. Consumers scanning a room while using the New York Times iOS app were able to interact with one of four Olympic athletes, learning more about them.



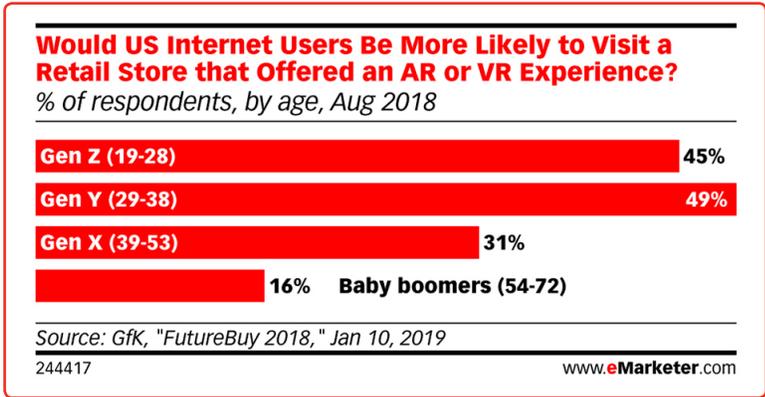
[Time Magazine](#) published an augmented reality feature in a June 2018 issue where consumers scanned the magazine cover in the Life VR app launched a virtual drone.

View the experience [HERE](#).



## WHY AR FOR MARKETING?

Studies show increases in retention and consideration among consumers who are offered an AR experience, as well as an interest among [a significant number of consumers in using AR and VR while shopping](#). Augmented Reality opens up new opportunities for marketers looking to engage consumers in deeply personalized and relevant ways that are not possible in other channels while also meeting key KPIs.



Quality ad inventory will always be in high demand, particularly in mobile where delivery and creative still struggle to be meaningful and impactful. Easily distracted consumers coupled with cluttered interfaces result in poor user experiences. This is driving advertisers to seek out more immersive, highly engaging formats that capture consumers' attention in exciting and brand safe environments.

Augmented Reality lends itself to these marketer demands in the following ways on the right:



### WHY AUGMENTED REALITY FOR MARKETING?

- 

**PERSONALIZED**  
AR is personalized, with content uniquely created and shared by the user.
- 

**MEMORABLE**  
Employing their real world environments for an immediate and sensory experience that makes for an emotional, shareable, interaction. This drives a nearly 4x increase in retention according to an IPG Media Lab and MAGMA study.
- 

**AWARENESS-RAISING**  
Exciting experiences that drive buzz. AR is interactive and highly exciting, therefore grabbing the attention of the user and motivating repetitive interaction.
- 

**LOCALIZED**  
AR uses GPS data gathered from mobile devices, to result in localized content, navigation and offers.



Moreover, AR can support increases in the following:

<b>Brand Recognition</b>	<p>As technology changes the way consumers find, engage with, and purchase products, companies need to find innovative ways to gain brand visibility, establish trust and authenticity. AR provides a unique opportunity to connect with customers in ways that traditional print, radio, and television cannot. Brands can quickly reach a large number of consumers, in brand-safe environments, to connect with prospective buyers, and more easily motivate users to interact with their brands on a repeated basis.</p>
<b>Brand Engagement</b>	<p>AR is unique, noticeable and therefore, social and viral. Augmented Reality enables advertisers to engage with consumers at a far deeper level than ever before. Instead of passively viewing a static ad or watching a video, people can now interact directly with brands. From whimsical face masks (e.g. dump a bucket of Gatorade over your head during the Superbowl) to alien environments (e.g. transport yourself into the Upside Down in Stranger Things), AR provides an entirely new medium for advertising.</p> <ul style="list-style-type: none"><li>• Drive play time and advocacy with customers (portal AR, gamified AR)</li><li>• Educate on products or features</li></ul>
<b>Conversion and Sales</b>	<p>As people increasingly shift away from in-store shopping to eCommerce, there is a growing need to help consumers feel more confident in their purchase. Today, there is no way of knowing whether an image adequately represents the product you ultimate buy. Augmented Reality provides the opportunity to fill that gap and increase purchase confidence.</p> <p>A business can now easily generate AR assets representing their physical goods to enable a virtual product-trial experience. Allowing consumers to digitally try products before purchasing should not only increase sales, but also reduce return rates and overall customer churn/thrash.</p>
<b>Product Information and Try On</b>	<p>AR can be used to allow consumers to get more information on products, pricing, availability and, most interestingly, consumers can virtually try products; e.g., see how glasses look on your face, how a rug looks in your living room with existing furniture, how sneakers look on your feet and more.</p>



## HOW CAN A BRAND GET STARTED WITH AR?

What makes Augmented Reality particularly compelling is the deep immersion and heightened brand awareness and affinity derived from the experience. This type of experience does require a different level of investment than other platforms, though, so it is recommended to take a more systematic approach to activate.

### GOALS

Like with any campaign, starting with goals and objectives is key when considering an AR activation. AR can be used to meet traditional KPIs like time spent, awareness, engagement and sales lift, but it also offers new and distinct metrics. See [page 31](#) for how AR fits within both current measurement methods and offers new metrics.

### DISTRIBUTION

Where you choose to distribute the AR experience will inform activation scale, targeting, and the ability to convert or take action within the experience. This will also help determine whether you should focus on social platforms, your first-party app, and/or experiential activations.

Given the lack of consistent standards and formatting today, AR assets are generally not repurposable across channels and platforms. That will likely change in the future as AR matures and scales, however, it is essential today to thoroughly explore all options and choose that which will best meet your goals.

### BUDGET

Once you have established your distribution model, you will have a foundation upon which to develop budget for creative and media costs. Key considerations here are whether to engage your creative agency or leverage existing assets in a self-serve platform, and what investments will be made in driving awareness of the activation.

### CREATIVE

Create your AR experience based on your goal and where you will be distributing: work with external creative agencies, learn the tools in-house with publicly available tools, work with platforms directly to create experiences.

### ASSESSMENT

Set out clear KPIs and goals ahead of the launch that will indicate how the activation met your goal. Assess performance based on that.



## MEASUREMENT

With the help of augmented reality, brands are experimenting in new immersive activations to bring digital experiences and products to life in physical spaces. As platforms and technology continue to evolve and consumers become more accustomed to interacting with brands in new ways, we are already starting to see how these experiences might impact the marketing mix of the future.

Once goals are clearly established, content creators and advertisers need to prepare themselves to properly measure these experiences within existing measurement methods and should also prepare to track metrics or context that might be helpful in gauging performance in this new immersive medium. Below are a few measurement tips to consider as you start investing in augmented reality:

### ALIGN TO EXISTING DIGITAL METRICS

Most metrics common to more traditional digital executions can be tracked in AR which makes the transition to adding these features easy. Buyers and sellers alike are experimenting with various cost models and tracking metrics that may or may not be directly correlated to performance against your goals.

### COST MODEL

A cost model is not a type of measurement, rather a transaction mechanism to align cost to a certain behavior. Experience types range in AR and there are a few different cost models being tested today. They may range from Cost-per-Million Impressions (CPM) to Cost-per-Engagement (CPE), to Cost-per-Conversion (CPC) or even Cost-per-View (CPV) which is more common for video experiences, but is being tested as a similar metric for viewing 3D models or lenses within your camera screen.

Buyers cannot expect that all platforms will transact in all ways, so important to be flexible to test different models today. That said, different cost models may serve different goals. For instance, if you have a specific sales goal, it may be effective to utilize CPC to map toward an action or sale itself. If you are focused on mass scale, CPM may be quite effective. If you are aiming to change brand perceptions, CPE or CPV may be most effective.

### ENGAGEMENT

The simplest form of engagement in digital is an "interaction" such as a click or swipe that indicate a specific action was taken. Similar to rich media advertising, augmented reality may employ similar options to click or swipe within the camera screen to take an action on page or click-through to another page.

Another metric that often helps advertisers understand user intent is Time Spent, often traditionally associated with rich media or video advertising to understand how long users chose to engage with the brand. Similar metrics can be tracked during engagement with AR with a few additional advantages that will be discussed later.

### BRAND IMPACT

With AR, just like other content and advertising channels, it is important to prepare your campaigns to be measured against the ultimate brand impact you are trying to influence. Measuring changes to Brand or Ad Awareness or Perception as a result of this immersive experience can show the impact AR might have on a consumer over traditional means.

Additionally, measuring the impact of sales from an AR experience that allows consumers to test digital replicas of products in their physical spaces will be extremely important to track how this influences products flying off the shelves.

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## **NEW METRICS TO CONSIDER IN THE FUTURE!**

AR is the first medium that utilizes the camera to provide new dimensions of interactivity in the context of a user's real-world space. This opens up some new metrics that may help us understand how consumers are interacting with brands and ultimately helping marketers achieve their goals.

### **ENGAGEMENT EVOLVED**

Although clicks and swipes may still be important in many experiences, there are ways to interact in AR that are different. For example, some AR experiences may require a user to simply "look" at the screen with a front-facing camera or change their expression which is an action that doesn't require a finger. This dwell time can be measured against an average dwell time, or an expected dwell time, to assess performance.

For back-facing camera experiences, consumers may move objects around a room to change the context in their physical space which could help advertisers further understand how important context may have been. Lastly, the time a user spends in AR is spent very differently than traditional media. Unlike traditional ads, Time Spent in the camera view is opt-in and full-screen while consumers interact directly with the brand within their physical spaces. Time that is arguably much more impactful than the passive time spent in video, for instance.

### **REDEFINING BRAND IMPACT**

Brands may still be looking to change perceptions or drive more sales as they employ immersive experiences into their advertising mix. The context AR provides could help fuel a Brand's association with being innovative and may reduce the amount of returns or product dissatisfaction.

Brands investing in this space now are giving consumers more control than they have had before to interact with them, an offering that has the potential to largely shift perception and intent. Additionally, if users are able to "test out" digital replicas of physical products, brands may have an opportunity to increase product satisfaction and reduce returns. Brands must make sure, however, that their 3D digital replicas are up to snuff in quality!

### **A NEW ERA OF EARNED IMPACT**

Social media introduced a new mechanism in measuring brand value around the "earned" impact of specific piece content. The elevated interaction of AR accelerates the shareable nature of these branded experiences and ads, making the earned impact of investments in this space something that is important for advertisers to track. How many additional impressions or transactions will brands experience as they scale these new immersive experiences?



## CONCLUSION

Usage of augmented reality is on the rise. As described in this Playbook, the deeply immersive experience of AR offers myriad opportunities to deliver brand messaging, establish meaningful relationships and drive commerce opportunities with delighted and engaged consumers.

As awareness and adoption of this exciting channel continues to grow, it is vital for marketers to understand their goals and the technical requirements in order to successfully add AR to their media mix. Given the range of available options and new production methods required to create AR, it is incumbent upon marketers to take the time to plan and develop the execution for this new format.

We hope that this Playbook inspires you to explore the creative options in augmented reality for marketing and offers a roadmap for getting started.



## ABOUT THE IAB

The [Interactive Advertising Bureau \(IAB\)](#) empowers the media and marketing industries to thrive in the digital economy. Its membership is comprised of more than 650 leading media and technology companies that are responsible for selling, delivering, and optimizing digital advertising or marketing campaigns. The trade group fields critical research on interactive advertising, while also educating brands, agencies, and the wider business community on the importance of digital marketing. In affiliation with the IAB Tech Lab, it develops technical standards and best practices.

IAB and the IAB Education Foundation are committed to professional development and elevating the knowledge, skills, expertise, and diversity of the workforce across the industry. Through the work of its public policy office in Washington, D.C., IAB advocates for its members and promotes the value of the interactive advertising industry to legislators and policymakers.

There are 43 IABs licensed to operate in nations around the world and one regional IAB in Europe. Founded in 1996, IAB is headquartered in New York City and has a San Francisco office.

### **About the IAB Mobile Marketing Center of Excellence**

The [IAB Mobile Marketing Center of Excellence](#), an independently funded and staffed unit inside the IAB, is charged with empowering the media and marketing industries to thrive in a "mobile-always" world and in an increasingly "direct brand economy," where user experience and consumer relationships are at the heart of modern-day marketing and a significant driver of publisher transformation

Since its launch in 2010, the Mobile Center has helped accelerate the growth of the mobile ecosystem through standard setting, best practices, consumer research and public advocacy. IAB Mobile Center focuses on the intersection of creativity/innovation and technology, both of which enhance the consumer's mobile experience and journey, whether that be on a phone/tablet, in a car, in a store or on the street. With significant growth still to come for mobile ad spend, from IAB standard display to content marketing, AI, Voice, VR and AR to podcasts, game advertising and more, IAB Mobile Center strives to help the industry – both buy- and sell-sides – make sense of advancements with education, standards and guidelines as applicable.