# New Media Experiences

Developers and publishers have created new engaging digital media experiences using mobile devices, augmented reality, and immersive virtual reality hardware. New media experiences' ad specifications address these new experiences where users are already spending considerable time or that are growing in popularity among users.

## Emoji and Sticker Content

An emoji or sticker content is typically used in social communication and messaging environments. Selecting an icon that represents the brand may initiate a branding message, call to action, or special offer.

| Ad Type | Ad Unit | Aspect Ratio | Recommended Dimensions (dp)** | Max File Weight (kB) | Notes |
|---|---|---|---|---|---|
| **Emoji**<br>Branded emoji used in social communication and messaging environments that may offer a function such as order a cab or watch a video. | **1x1** | 1:1 | 20x20 | 10 | 200dp x 200dp "stickers" of 50 kB max k-weight also allowed.<br>Emoji ads should differentiate from regular content emojis. An example is to use very light pulsating outline for the ad emoji. It must not be rapid moving or high contrast colors to avoid disrupting the user's attention |

****Density-independent pixels (dp)** where 320 dp is approximately 2 inches wide. dp = (width in pixels * 160) / screen density

## Vertical Video Ads

As more phones are used in a vertical position to record video and check social feeds and other sites or apps, videos in vertical orientation becomes more relevant.
Full screen portrait aspect ads run in IAB Full Page ad units in the vertical (portrait) format. They may also run as a component of an augmented reality ad or virtual reality ad.

| Ad Type | Ad Unit | Min. Frames per Second (fps) | Duration | Static Image Size | Notes |
|---|---|---|---|---|---|
| **Vertical Video**<br>Video-formatted display ads that play in a vertical (portrait) orientation rather than the typical horizontal (landscape) orientation. | **IAB Full Page Ad Units**<br>**9x16**<br>**10x16**<br>**4x3**<br>**2x3** | 24 | 8-12 seconds recommended, allowed up to 30 seconds | See IAB Full Page Ad units | Brand engagement increases dramatically when text overlays communicate the message without audio. Ads should default to play muted (without audio) using text overlays to communicate the brand message.<br>This format is RECOMMENDED for full screen videos on mobile devices.<br>Ad expansion is discouraged. |

## 360-Degree Images and Videos

The 360-degree image and video formats are gaining popularity as a medium, allowing consumers to share their experiences. These create immersive and vivid content that can increase user engagement with the advertisement. We are still in the early stages for the content and these are initial specifications of required assets and maximum initial weights as well as recommended interactions.

| Ad Type | Ad Unit | Max Initial K-weight (kB) | Max Subload (kB) | Static Image (kB) | Notes |
|---|---|---|---|---|---|
| **360-Degree Image**<br>These ads use vivid and immersive content from 360-degree images. The ads are image based and 360-degree | Full Page Ad Units | 200 | 400 | 150 | 360-degree image ads require full 360 degree captured images. Advertisers should submit the assets to their creative technology provider with a |
| | 2x1 | 200 | 400 | 150 | |

| Ad Type | Ad Unit | Max Initial K-weight (kB) | Max Subload (kB) | Static Image (kB) | Notes |
|---|---|---|---|---|---|
| viewing can be initiated by user action. Clicking + dragging in mouse based user interface control OR swiping or shaking the phone/device in touch and accelerometer based user interface controls. They can be served in display ad units in non-VR experiences or as interstitials in VR experiences | 4x1 Large | 150 | 400 | 150 | range of 1280x640 dp minimum and up to 2048x1024 dp max.<br>The file weights required to deliver 360-degree images are heavy. If the file weights required to deliver the ad are higher than the maximum allowed initial load limits, advertisers should consider 360-degree images on user initiated action, e.g. in the expanded part of the rich media ad after the user expands the ad or downloaded / initiated on touch or other discrete gesture like tap, shaking / moving device using accelerometer to capture the user initiation.<br>Allowed File Types: .jpg, .png, .gif |

| Ad Type | Ad Unit | Duration | Max File Weight(MB) | Min. Frames per Second (fps) | Notes |
|---|---|---|---|---|---|
| **360-Degree Video**<br>These ads use vivid and immersive content from 360-degree videos. The ad content is a 360-degree video and the 360-degree viewing can be initiated by user action. Click and drag in mouse based user interface control OR swiping or shaking the phone / device in touch and accelerometer based user interface controls. They can be served in display ad units in non-VR experiences | **360-degree Video** | **8 seconds** | 2 | 30 | High Quality Equirectangular or Cube Map Video File of 720p or higher quality MUST be provided<br>Video MUST be user initiated<br>Video MUST provide user controls to pause, play, stop, and mute audio<br>See General Notes for other video instructions to be followed for adaptive bitrate streaming, codec, and format<br>360-degree video can be delivered in 16x9 landscape or 9x16 vertical video format. See full page flex 9x16 definition for size of the ad |
| | | **30-90 seconds** | 10 | 30 | |

# Virtual Reality (VR)

Virtual reality or VR content is a fast-growing medium that ranges from basic stereoscopic apps that let users watch content in 360-degree view and motion to sophisticated headsets that let users immerse in full virtual reality (VR) experience with controllers and sophisticated eye gaze controls. Virtual reality ads are ads that display in a virtual space just as they might display in the real world – both two-dimensional and three-dimensional ad formats can be used in VR experiences. For example, a Full Flex display with a 16:9 aspect ratio could display in a roadside billboard of a highway scene in a video game. A video ad might display in a television of a virtual living room. Many of the display ads developed for traditional display may already work in a virtual setting.

Virtual reality ads also offer innovative new formats for digital advertising. For example, a restaurant might sponsor the menu design for a virtual restaurant in a game, or a key object used to embellish a virtual scene may be focused on to draw up a tray in the app that the user can then interact with to learn more. A brand may be able to sponsor a virtual room experience or a brand may sponsor to supplement or complement an object in VR scene with a similar size brand object, e.g. replace a soda can with branded soda can or place a branded potato chips package to go along with a soda drink.

| Ad Type | Ad Unit | Content | File Type /Size /Quality | Notes |
|---|---|---|---|---|
| **Virtual Reality Ads**<br>Ads that display in a 3D or virtual reality environment, either in a designated ad space (such as a street side billboard), as a video (that might play in a virtual home TV or virtual movie theater), or as an object (such as a branded bag of potato chips on the table). Fully branded 3D scenes can also be created as 'Virtual Rooms' | **2D Images** | Any display ad format appropriate for the scene<br>MUST NOT be overlay banner, MUST be part of the experience, e.g. a billboard in the scene with ad banner or a picture or wall hanging in a scene that is filled in with a banner ad of the right aspect ratio and size. | Image (jpg, png, gif, etc.) | Ad image should be in the VR scene and within the camera projection or field of view |
| | **2D Video** | Use guidelines for linear ads provided in IAB Digital Video Ad Format Guidelines (https://iabtechlab.com/specifications-guidelines/iab-digital-video-in-stream-ad-format-guidelines/) as a baseline and discuss further details as required by the publisher.<br>Video MUST NOT be an overlay or pop up video.<br>Video should not break immersion in the VR environment or require the user to remove headsets in order to properly view the ad. | Video (mp4, mov, etc.) | Ad video should be in the VR scene and within the camera projection or field of view |

| Ad Type | Ad Unit | Content | File Type /Size /Quality | Notes |
|---|---|---|---|---|
| | | User can be offered to opt-in to an action that may require the user to remove the headset. | | |
| | **3D 360-Degree Video** | 360-degree video placed as an interstitial ad between different VR scenes. 360-degree video MUST completely fill the VR scene with video ad.<br>Video should not break immersion in the VR environment or require the user to remove headsets in order to properly view the ad.<br>User can be offered to opt-in to an action that may require the user to remove the headset. | 15-120 seconds duration<br>30 - 60 fps,<br>Up to 200 MB max file size | • High Quality Equirectangular or Cube Map Video File of 720p or higher quality MUST be provided<br>• Video MUST be user initiated<br>• Video must provide a skip functionality to allow the user to return to the core experience |
| | **Interactive Object** | Irregular three-dimensional shape made by joining a number of digital polygons together, typically of something that represents an everyday object like a shoe, soda can, couch, car, etc.<br><br>Publishers/Developers define the minimum and maximum polygon count for each 3D branded object along with the number of 3D objects for each brand category. This prerequisite ensures that the object blends appropriately with the environment without overloading the system. Lower polygon count objects look out of place and object with a higher polygon count slow down load time. | object | Viewability depends on scale of the interactive object. A soda can may not need to fill as much of the screen to be viewable as a vehicle would need. |

| Ad Type | Ad Unit | Content | File Type /Size /Quality | Notes |
|---|---|---|---|---|
| | **Virtual Room** | Virtual Room is a VR scene that is accessed from the publisher/developer content experience which is devoted solely to the display of sponsored advertising content. Virtual Rooms contain the following elements:<br><br>**Entry Point:** An object, spatial UI or other means the user interacts with to enter into the Virtual Room<br><br>**Close Scene/Exit:** Virtual Rooms MUST have a "close button" to allow users to easily exit back to content. Users should be returned to the story/game at the exact place they left off<br><br>**Scene Environment:** The 360° world the users see in the room<br><br>**Ad Objects:** Interactive 3D, 2D and 360 video ads, audio tracks, or combinations thereof represented in the room<br><br>**Interactions:** The method(s) and results of user interactions with the ad objects. An interaction may produce a transition to another part of the scene or introduce new visual or interactive element in the scene.<br>Users can interact with ad objects multiple ways depending on the hardware being used and methods allowed by the scene developer. E.g. **Gaze Event:** users look at object within the camera view for a specified amount of time to activate<br><br>**Tap Event:** Users look at an object within the camera view and tap the HDM (High Definition Media) or game controller to activate<br><br>**Voice Control:** Users voice commands that are translated into activations<br><br>**Physical Interaction/Gestures:** Users move their hands or body to activate | | |

# Augmented Reality (AR)

Augmented reality or 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.

| Ad Type | Components | Options | Description |
|---|---|---|---|
| **Augmented Reality**<br>There are two ways to present AR ads:<br>1. Ads that use a marker in the real world, such as a QR code or an AI-learned concept like a "dog," to trigger the display of brand content.<br>2.The ad can also place a brand object in the immediate real-world environment using the device camera.<br><br>Displayed brand content may be dynamically generated based on data available in the given environment (time, location, etc.) and may move with the scanned or recognized object (tracked to object). Displayed brand content may also be | **Ad Initiation or 'Trigger'** | Marker from database | An image, often printed, that a scanning system is programmed to recognize. Examples of traditional markers are QR (Quick Response) codes or bar codes, but a clearly defined image, such as a specific outline of a dinosaur, may also be used. A marker can also be context like location. |
| | | Artificial intelligence-driven recognition | A generalized concept that an artificial intelligence (AI) system has been "taught" to recognize. For example, a brand may choose to associate a product or service with dogs. When the AI system on a device "sees" a dog using the device lens, the AI system can associate the familiar concept with the previously known concept of a "dog." The unknown visual of a dog that the AI system scans may be either an image of a dog or the three-dimensional animal. Once recognized, the system can trigger the display of brand content. |
| | **Display** | Not tracked to object | Once triggered, the ad content that displays remains static on the screen regardless of what happens to the scanned marker or recognized object. |
| | | Tracked to object | Once triggered, the ad content that displays moves on the screen along with the object that triggered the ad for as long as the object remains in view. |
| | **Content** | Static | Any IAB Full Page display ad unit that, once triggered, offers content that doesn't change regardless of what data is available in the given environment. |
| | | Dynamic | Any IAB Full Page display ad unit that, once triggered, offers content that may change based on data that is available in the given environment. For example, time, location, weather, user data, or other data may be used to offer content that is unique to the given environment. |

| Ad Type | Components | Options | Description |
|---|---|---|---|
| uniquely generated based on the environment scanned (immersive). | | Immersive | A custom ad experience of any combination of display ad formats, including animation or video, that generates content specific to the object or environment that triggered the brand content. Once triggered, the generated immersive brand content may be static (content that doesn't change) or dynamic (content that changes based on available data or real objects around the user).<br>The ad content may also place a brand image or video in the immediate environment of the user by using the device camera |