

smaato[®]

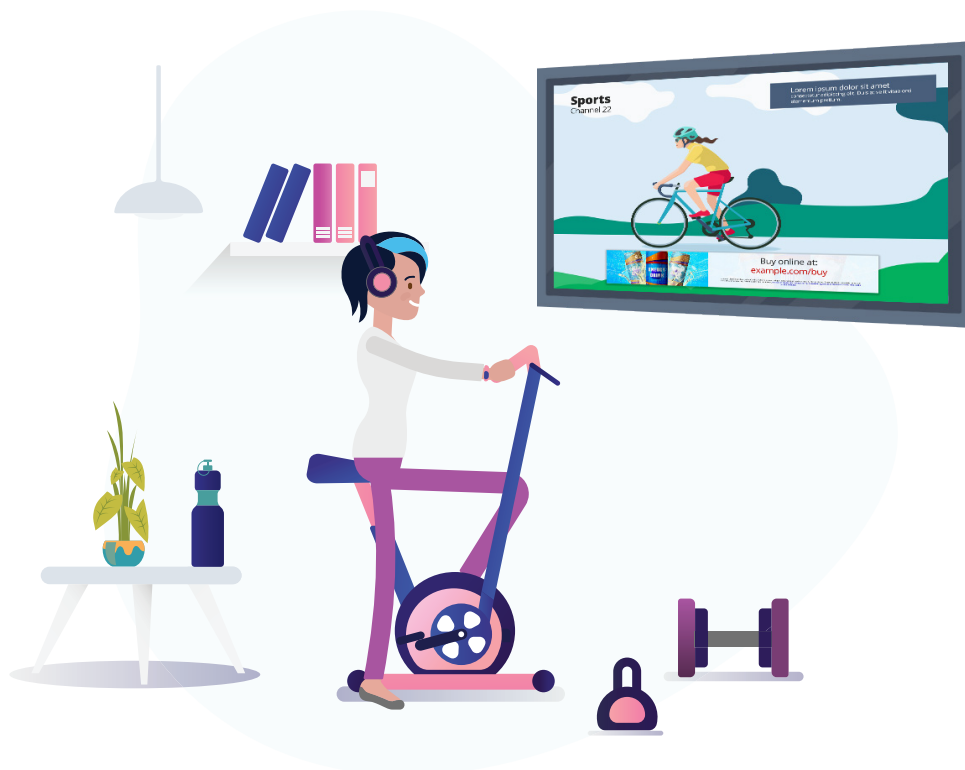


OTT/CTV Advertising eBook

All eyes are on OTT. Learn how to execute your OTT strategy and deliver relevant, engaging experiences to viewers worldwide.

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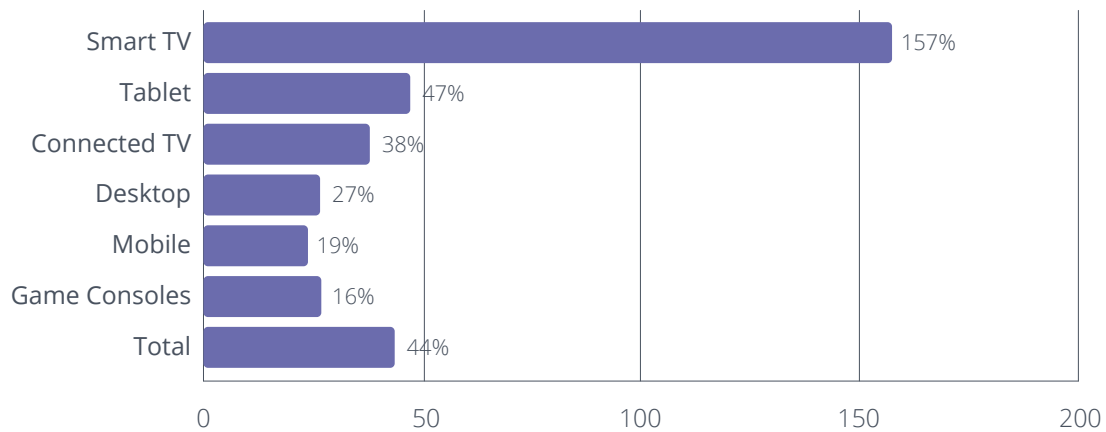


Introduction: What is OTT?

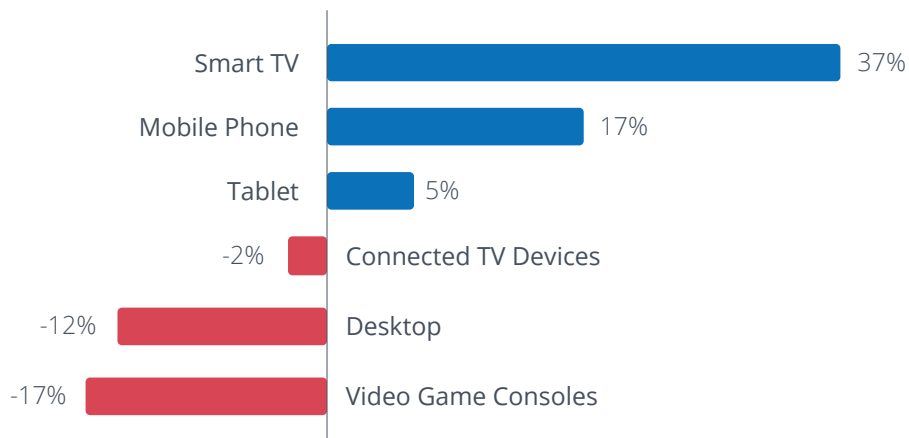
OTT, or “over-the-top advertising,” is proving to be the darling of the ad tech industry. All eyes are on OTT, and for good reason.

■ **Over-the-top (OTT)** is defined as video streaming via the internet, on any kind of device.

Time spent engaging with OTT streaming devices continues to increase as the world adjusts post 2020



Source: Conviva, “State of Streaming Q4 2020”, January 2021



Source: Conviva report “State of Streaming Q4 2021”, November 2021.

OTT is an incredibly accessible option. From smartphones to tablets, connected TVs (CTV), and more, OTT reaches highly engaged audiences, and is making a huge splash in the ad tech world.

Source: App Annie, April 2019

OTT vs. CTV

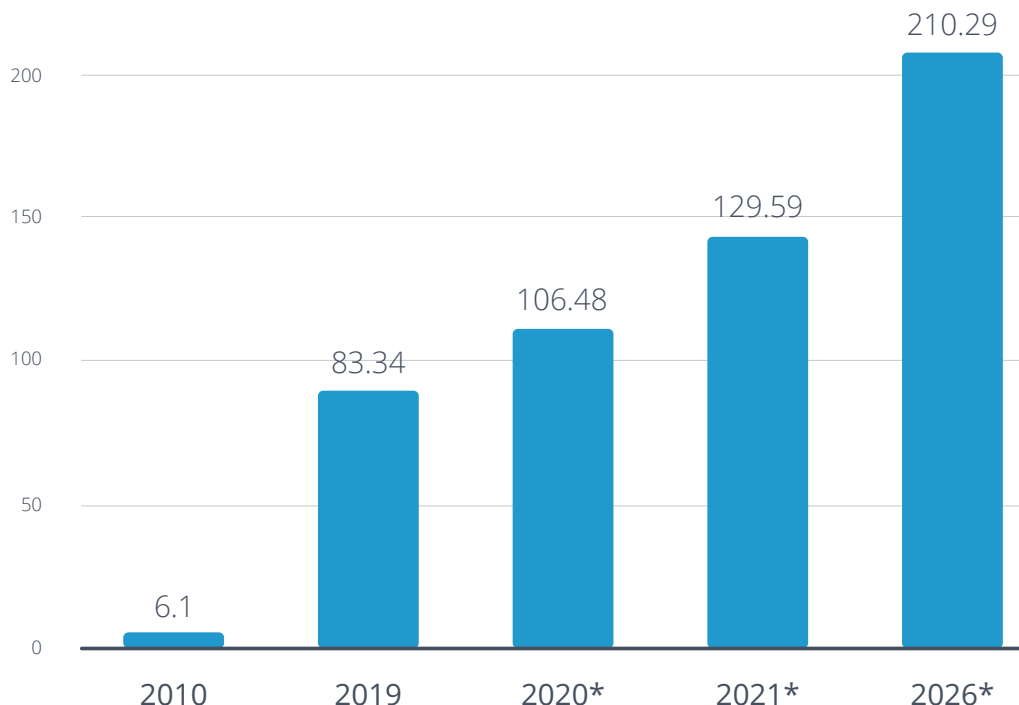
While these terms are often used interchangeably, they are not one and the same. OTT (over the top) is an umbrella term that includes CTV (connected TVs). But much like how a square is a rectangle (but not all rectangles are squares), CTV can't cover all of OTT. Why?



CTV just means connected TV devices, like Smart TV. Any TV that is connected to the internet counts, including streaming sticks and gaming consoles.

OTT can certainly include CTV, but since OTT simply means video streaming via the internet, it is available across all devices, including mobile, desktop, car streaming (like Tesla audio and video, Apple CarPlay, and Android Auto), and CTV.

Worldwide OTT Revenue
US Dollars, 2010-2026 (Billions)



*Forecast

Source: Digital TV Research, May 2021

Worldwide, OTT is expected to generate \$210 billion USD in 2026 – almost double what it generated in 2020.

“Fierce competition and the explosion in consumer engagement opportunities have made CTV the epicenter of ad sales. Next year, we’ll see major brands radically alter their ad spend from the TV upfront in favor of more flexibility and greater investment in streaming and CTV.”

Ivan Markman
Chief Business Officer at Verizon Media²

Cord Cutters and Cord Nevers

By 2025, OTT TV & Video Subscriptions will reach

2 Billion
globally,

driven from traditional TV subscriptions. That’s nearly 25% of the world’s population.³

So what’s driving this trend? Viewers (like you). Audience behavior is driving the shift: as cord-cutters and cord-nevers lead the way from traditional TV subscriptions, advertising is evolving to reach viewers elsewhere.

Audiences are also open and receptive to ad-supported video on demand (AVOD). In fact, in the US, AVOD viewers will make up nearly **60% of all digital 2023**⁴. This trend is in line with current behavior. By May of 2021, time spent watching AVOD had **increased 200%**

from May of the previous year. While time spent with AVOD is still just behind subscription-based time spent, **63% of respondents**⁵ to a recent PwC survey said they’d be willing to sit through more advertisements if it helped lower subscription prices.



TV Subscribers

Viewers who still have a traditional cable or satellite TV subscription



Cord Cutters

Viewers who are dropping cable or satellite, and moving over to OTT



Cord Nevers

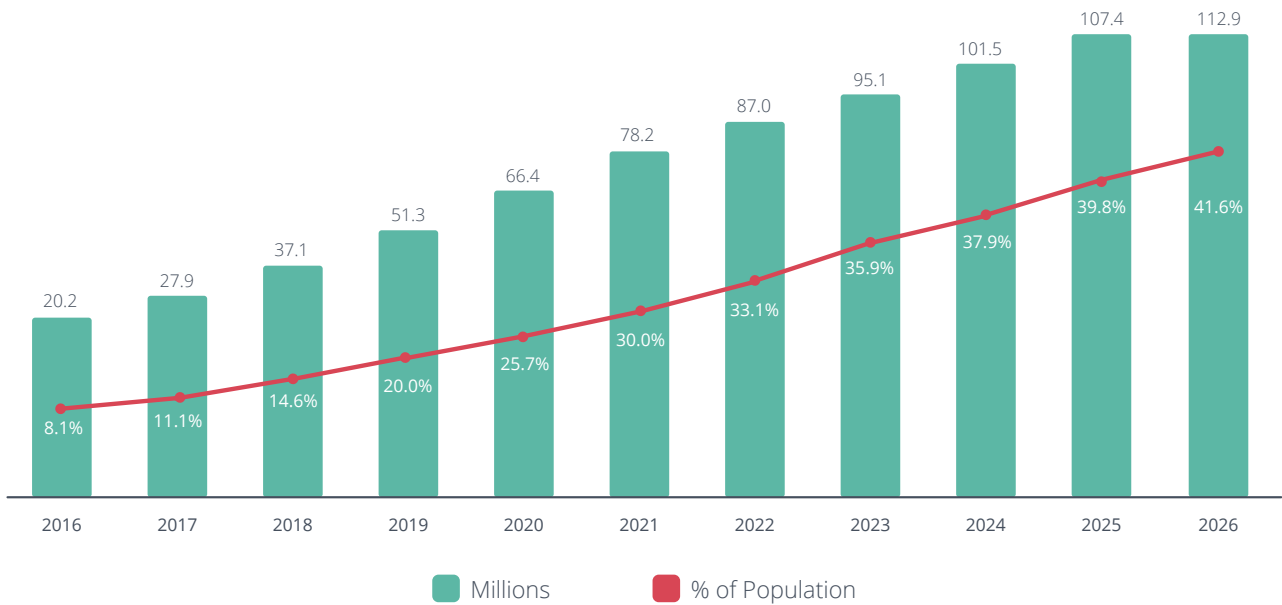
Viewers who have always watched TV via OTT, with no cable or satellite subscriptions

With an increase in streaming platforms and subscriptions, the demand for ad-supported video on demand is on the rise. In fact, in the US, **time spent watching AVOD surged 200% YOY** from May 2020 to May 2021.⁶

Source: ²“Will CTV/OTT Overshadow Linear In 2021?” by Karlene Lukovitz, December 2020, ³Juniper Research, January 2021, ⁴eMarketer, February 2022, ⁵PwC, “After a boom year in video streaming, what comes next?” 2021, ⁶TVision, June 2021

Cord-Cutters

US, 2016-2025



Source: eMarketer, February 2022

In the US, for example, cord-cutting continues to gain traction. By 2026, eMarketer predicts that 12.9 million US households will have cut the cord – that’s more than 41.6%.

The COVID-19 pandemic played a significant role in accelerating the shift from traditional TV subscriptions to OTT in **2020**.

With more strain on consumer spending, canceled sporting events, and of course, time to consume content with stay-at-home orders in place, many viewers took the opportunity to sever ties with costly cable and satellite subscriptions.

As major telecommunications giants begin to cut ties with satellite providers and shift investments towards subscription video services, the cord cutting trend is expected to gain even more speed.

For Example:

OTT viewership was up

12%

during COVID 19 in Indonesia

and expected to increase in APAC.⁷

Average shift of budget from Linear TV to CTV in 2021

21%

among Digital Video Buyers.⁸

Source: ⁷eMarketer, August 2020, ⁸iAB, December 2020



A Brief History: The Evolution of Television

While the experimentation of television transmission dates back to the late 1800s, television and radio first became accessible and available in the 1920s.

Initially, television and radio were broadcast via radio waves to TV sets and radios. Through the airwaves, it was called “over the air” (OTA) or “broadcast TV/radio.” For the most part, local broadcast networks and radio stations handled content delivery. The world’s first broadcast television station launched in 1928 out of Schenectady, NY.

The 1940s brought major innovation for quality: physical, Coaxial cables to transmit the radio waves. Unsurprisingly, this was called “cable TV and Radio,” and greatly improved signal strength and picture quality for TV. Patented in the 1930s, cable television became more widely available by the 1950s.

Global innovations, quality, color, and availability continued to improve. By the late 60s, almost all broadcasts were in color, and by the 1980s and 90s, satellite transmission helped expand TV’s reach to more rural areas while also greatly increasing the number of available channels. Small satellite dishes began cropping up on household rooftops.

Source: ⁹ThoughtCo, December 2020

By 1996, more than one billion homes worldwide had a television set.

The transition to digital television began in earnest in the early 2000s. Content delivery continues to evolve, and no longer limited to television screens and radios. It's now available across all devices – smartphones, tablets, TV sets, computers, even cars.

Since adoption of online streaming flew over its traditional counterpart (broadcast, cable, and satellite), it earned the name “over-the-top” or OTT. Platforms we know and love like Roku, Amazon FireTV, Android TV, and AppleTV deliver this content across a variety of well-known apps like Netflix, Hulu, and Disney+. With its ease of access, adoption has soared – especially during the COVID-19 pandemic. In fact, OTT is expected to become a \$194.20 billion market by 2025.¹⁰

Of course, wherever content exists, advertising follows.

“Since we started using Smaato’s OTT Platform our content monetization has improved significantly, the fill is high (~85-97%)! They give us the ability to control content experiences and demand sources on both the commercial break and individual commercial level, as well as allow us to sell our inventory as commercials or as pods. Smaato’s solution is perfect for any type of OTT publisher, developer, broadcaster, or network!”

**Tony Kandah
FlixHouse**

Source: ¹⁰BusinessWire, November 2020

The Smaato Advantage

The OTT advertising market is highly fragmented. Available platforms may offer bits and pieces of OTT advertising. They may specialize in ad podding or server-side ad insertion, or exclusively on campaign data. They may only support video, not audio.

At Smaato, we see value in a holistic advertising approach. We support all solutions on a single, omnichannel platform. With centralized monetization tools, we offer our customers an opportunity to manage their cross-platform strategy all in one place.

With personally identifiable information (PII) and privacy at the forefront, publishers will be able to enrich their OTT ad strategy with Smaato's Customer Data Platform (CDP) for a better personalized experience while protecting user privacy. In parallel, marketers can better evaluate the performance of their campaigns with more powerful data by reaching viewers based on what they're watching versus who they are.

Regardless of device, screen, platform, and ad size, publishers can customize the user experience, while advertisers can optimize their campaigns. And, because everything flows through one platform, our reporting is unparalleled.

Stay tuned as we dive into the value of:



Dynamic Ad Insertion (DAI)
& Programmatic Fill for
Live TV



Ad Podding



Ad Pod Construction



Ad Pod Exposure and
Bidding



A Programmatic-Ready
Video Ad Server



Advanced Reporting



Key Features of Smaato's OTT Solution Include:

- VOD and Live App and Channel Management
- In-House Dynamic Ad Insertion/Server-Side Ad Insertion
- Ad Playlists
- Custom Ad Playlists for Channels, Assets, or Asset Genres
- Dynamic Ad Breaks with SCTE-25 handling
- Manual Podding
- Dynamic Podding
- Ability to control whether your ads and ad breaks have required complete fill, fallback ads, companion ads, or skippability
- Timestamp, percent completion, or interval controls for setting ad breaks for VOD content
- Direct and House ad slots for your trailer campaigns
- Ad Pod Bidding and Pod Bidding Type controls
- Pod Auction Type controls
- First-Party Content Growth Attribution
- Linear and Non-Linear Ads
- Reporting on app, channel/stream, playlist, ad break, ad pod, and ad slot levels

Dynamic Ad Insertion (DAI)

The Advantage of Pre-Stitching Ads Into Video Streaming Content

Dynamic Ad Insertion (sometimes called Server-Side Ad Insertion or SSAI) is a process that involves stitching ads into video streaming content on the server, before a user even begins watching.



There are some major advantages to pre-stitching ads into content. As the name suggests, this dynamic fill comes with a host of customizable targeting opportunities. Instead of serving ads on the device while the viewer is streaming content, the DAI process preloads ads into specific video content. This provides a huge opportunity to contextually target viewers with hyper-relevant ad creative.

For example, during a RomCom, there may be an opportunity to include ads for dating apps, romantic getaways/travel, fragrance, and cosmetics. DAI can take it a step further, too. An ad for an energy drink, athleisure wear, or exercise equipment can be inserted following a scene of the protagonist at the gym.



Another advantage of DAI is that this ad stitching is not just for Video on Demand (VOD) content. In fact, we're able to dynamically stitch in ad pods based on SCTE marker restrictions, making DAI highly effective for Live content. Plus, for content streamed after the fact, the dynamic fill means outdated ads can be swapped out for up-to-date, relevant creative.

With dynamically inserted ads, publishers can deliver a customized experience depending on who is watching, and advertisers get to deliver more relevant ads, which drives better conversion.

At Smaato, our DAI ensures that you give viewers a personalized advertising experience that is best suited for the:

- User
- Content
- Time of day
- User's location
- User's viewing behavior
- ...and more.

With our **Customer Data Platform (CDP)**, publishers can bring any first party data, which can then be used to deliver the most optimal, tailored viewing experience.



Additionally, because the ads are pre-stitched into the video stream, the quality of the ad will match the quality of the video. This eliminates both frustrating ad buffering and the jarring experience of having an ad's quality greatly exceed that of the stream (or the other way around). Delivering this smoother viewer experience helps build brand equity for publishers, and gives marketers a more responsive audience.

Clearly, DAI/SSAI comes with some major advantages. So what are the cons?

The Risk of Third Party DAI/SSAI

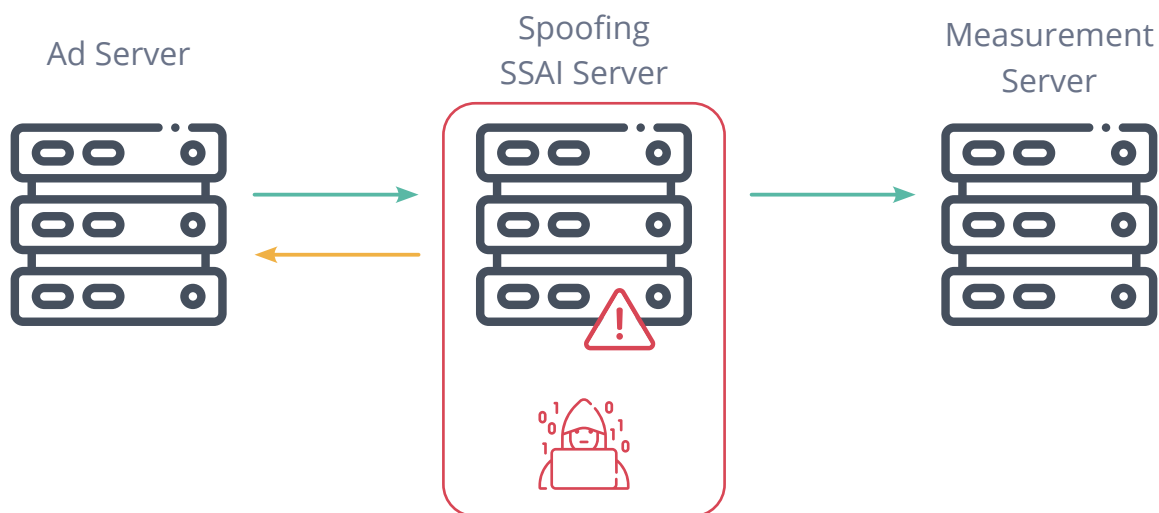
DAI, in and of itself, is highly effective for delivering positive viewer experiences and ad engagement. There really isn't a con here.

The trouble comes in when publishers outsource DAI functionality. Many farm out their DAI to a third party, opening the door to fraud and malicious activity.

At Smaato, our DAI is all completed in house and with far less latency. By eliminating the middleman, we eliminate the high risk of DAI fraud.

When server side ad insertion is handled by an external third party, how do you ensure you're actually working with a reputable service?

The thing is, hackers can pose as server-side ad insertion entities. They reach out to ad servers, pretending to stitch ads on behalf of reputable, real publishers. When they send out an ad request, they confirm that they will stitch ads into the content. Of course, they never stitch the ad in. But they do send measurement events, like impressions, back to the ad server. (In more sophisticated schemes, these fraudsters may even inject their own beacons into real ads, to generate a bigger payout for themselves with each impression event.) It looks a little something like this:



The server can be tricked into delivering ads to the bad actor, and the bad actor confirms that the ads were viewed. In reality, they never were and never will be. They then pocket the money and no one is the wiser. The marketers and advertisers get badly ripped off to the tune of millions.

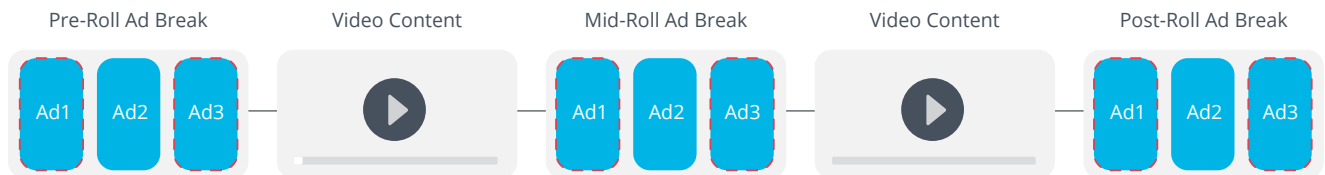
Using a third party SSAI/DAI service that sits between the publisher and the ad server creates this fertile ground for fraud.

Luckily, at Smaato, we eliminate this risk. **We do all of our ad stitching in house.** This brings peace of mind to our publishers and marketers alike. In-house ad insertion protects advertiser integrity, and delivers a brand-safe viewer experience for your audience. Plus, eliminating a third party eliminates the third party fee.

Along with eliminating DAI fraud by completing DAI in house, we are hyper vigilant when it comes to protecting our partners. Our fraud-busting technologies work around the clock in tandem with the human touch of our dedicated Market Quality team. Bolstered by machine learning and manual analysis, we work tirelessly to stop fraudsters in their tracks.

Ad Podding

VAST video ads are served as a group of sequential ads played back-to-back (just like a commercial break on TV), rather than as an individual ad.



Each ad in a pod is referred to as an “ad slot.” Like DAI, this provides contextual data that can help ensure more relevant ads.

This creates unprecedented control for publishers. All placements are not created equal, and publishers can now set a premium on certain placements within the ad pod.

With ad podding, publishers have an opportunity to double or triple the value of their commercial breaks with now double or triple the number of ads, while marketers gain more opportunities to get in front of relevant audiences.

Publishers can also control exactly where ad breaks fall for VOD content, whether through percent completion, time stamp, or custom intervals.

Marketers get more control, too – including greater visibility, better contextual alignment, and more opportunities to make it into an ad break.

At Smaato, we offer both creative deduplication and competitor separation. The result? Viewers enjoy a less redundant ad experience, which makes them more receptive to the message. And of course, marketers can rest assured that their ads won't run back to back with a competitor's spot.

Did you know?

Creative Deduplication:

No identical ads will run in the same pod.

Competitor Separation:

No two ads from the same IAB category will run in the same pod.



Ad Pod Construction

We built our platform to give publishers maximum control over their inventory and monetization strategy. We believe publishers should be able to choose exactly how they monetize their ad placements. With the Smaato platform, we make that easy. Publishers get to choose ad slot duration for VOD content, and, for example, can pick whether they want to run two :30 spots, one :60, or four :15s, or some combination thereof. VOD publishers get complete control over how they define their ad breaks. Broadcasters get to define ad breaks for live content, and ensure consistency across platforms and streaming services.

For VOD content, Ad Pods can be constructed manually or dynamically. Live content is filled dynamically, with user context top of mind.

VOD Manual Construction

For Manual Construction, Publishers can choose the duration of the ad break and set time requirements for each ad slot. They get to define the experience for the viewer within the content.

To keep it simple, when a publisher creates a VOD channel, Smaato creates a default playlist. Publishers can edit this at any time.

VOD Automated Construction

For Automated Construction, publishers need only select the length of the ad break, and we'll fill it accordingly. We create the perfect-length ad pod for publishers based on viewer behavior, available bids, content information, and publisher specifications, so that the optimal ad pod is served to viewers downstream.

Automated Fill for Live Content

For Live Content, broadcasters set the ad breaks, which define where ad placements will run regardless of platform or streaming service. This gives viewers a consistent experience no matter where they tune in. We fill and serve perfectly-sized dynamic pods into SCTE-35 markers.

Our dynamic fill capabilities for live TV match ad content to the viewer's context. The result? A more personalized experience for the viewer, to help keep them tuned in.

When a publisher creates a live channel on the **Smaato platform**, default ad breaks are created. Publishers can edit these at any time.

Scale with Ease

We offer a unique opportunity for Live TV. Unforeseen boosts in audience volume won't catch you off guard.

Because our ads are **filled programmatically**, publishers have a chance to fill all slots, regardless of how many viewers tune in.



Ad Pod Exposure and Bidding

Ad Pod Exposure

Publishers bring first party data into advertising strategy without reliance on PII so marketers make more impactful campaigns.

There are two ways to present ad pods for bidding: by pod or by slot.

With per pod, marketers are exposed to the entire ad pod and the slots within it. They can bid on more than one slot in an ad pod (though with creative deduplication in place, no more than one will run in the same pod). This creates an opportunity for marketers to bid on specific placement within a pod.

With per slot, on the other hand, marketers see each slot as a separate request, which means they can bid on any or all of them.

Publishers who work with Smaato get to choose how they want to expose their inventory, whether per slot or per pod. When exposing a full pod, publishers get to set individual floor prices for each slot within the pod. They also get to choose how the inventory is auctioned.

Ad Pod Auctions

With data centers and demand around the world, **Smaato provides** global reach with the lowest possible latency.

Our publishers are not limited to an open auction nor manual direct deals.



Whether through private exchange RTB, or programmatic direct deals like preferred or guaranteed, publishers pick how to fill their inventory. Publishers also have the freedom to choose who has access to their inventory.

Open Auction RTB

All marketers on the exchange/SSP/ad network have an opportunity to bid on all available publisher inventory. This is the most traditional form of programmatic auctions. With real-time bidding, publishers can set the floor price for an ad, but the marketer demand still determines the final price, and the highest bid wins. Inventory is not guaranteed.

Private Exchange

A private exchange is another form of real-time bidding, but instead of being open to all marketers and all publishers, a single publisher invites a mere handful of marketers to participate. To access the auction, these hand-selected marketers will need a time-sensitive deal ID. Publishers set a floor price, and the bidding starts there. As in the open auction, the highest bid wins. Inventory is not guaranteed.

To learn more about programmatic deals, [check out our complimentary guide.](#)

Preferred Deals

A Preferred Deal is a private, 1:1 relationship between a publisher and a marketer, offering “first dibs” on premium ad space. The publisher offers premium inventory to the marketer at a pre-negotiated fixed eCPM price. When an ad request comes through, a marketer with a preferred deal has an opportunity to bid at the pre-negotiated fixed eCPM price in real time, before the inventory heads to open auction. Inventory is not guaranteed.

Guaranteed Deals

With a guaranteed buy, a publisher offers specific, reserved inventory to a marketer at a fixed price. Publishers and marketers negotiate a price for a guaranteed volume of impressions, or flight date. This is similar to a direct sale/buy, but programmatic automation replaces the manual IO process, improving efficiency and reducing error.

We are proud of our huge array of marketer partners. We work with 95% of the 100 top ad age brands globally, as well as 250+ DSPs, and multiple SSP partners, which publishers can plug in via Prebid (OpenRTB coming soon).

We make it simple for marketers, too. We’ve replaced the complex ad-buying process with simple controls and automation to help marketers extend their reach. Prebid also offers marketers a transparent way to access additional supply and inventory across the OTT landscape.

Ad-Pod Header Bidding

All of the functionality we offer for ad pod bidding is available for header bidding, as well. An auction occurs via our Prebid Server Video Adapter + Prebid AdPod Module before the auction with Smaato's demand. Publishers can further increase their availability to buyers and empower their monetization with access to multiple bidders. This can help boost fill, increase eCPMs, and drive revenue.

Targeting and Real Time Bidding (RTB) Rules

In addition to flexibility when it comes to auctioning your inventory, make sure you select a platform that allows you to set specific targeting parameters. This helps to appropriately price your inventory, and to boost eCPMs, configure deals, A/B test, set who sees ads, and ensure the right advertising content and length for separate audiences.

Look for solutions that allow you to specify:

- **Traffic Allocation:** Publishers should be able to configure their share of voice. Choose to what percent of traffic these rules apply.
- **Date Targeting:** Select a date or date range (for example, December 1-31).
- **Day Targeting:** Opt in to specific days or day ranges (such as every Tuesday and Thursday, or Weekdays only, or Sunday, Monday, and Tuesday, and so on).
- **Time Targeting:** Pick a time slot or a range (like, daily at noon, or 7:00 - 9:00 AM).
- **Floor Price (for targeted eCPM):** Set a minimum floor price you want demand sources to bid above, or an average eCPM you want bid prices to average out to for an increased amount of valid bids.
- **Inventory Targeting:** Choose parameters like by pod or slot position.

The result? You can end up with intense granularity, such as the second slot of every other pod on Thursday mornings, 7:00 - 9:00 AM in December, with a targeted eCPM of \$12.

These controls enable publishers to better price their inventory, and to set up auction rules for each of these targeting cases.

At Smaato, we offer all levels of targeting and RTB rules to give our publishers complete control over their OTT/CTV monetization strategy. These rules and targeting parameters can be applied to all line items (including on Smaato Exchange/Open Market, for Preferred Deals, Direct/House deals, Third Party VAST tags/Network Line Items, and for Header Bidding Solutions like Prebid and Unified Bidding).



“We are probably the fastest growing OTT in the market today with over 500 channels from all over the world. It is not easy to keep up with us and our needs and we know it, but Smaato understands exactly how to help us scale. With hard work and excellent customer service, they anticipate all our needs.”

Ramon Gonzalez
VIVA Entertainment Group, Inc.

Smaato's Programmatic-Ready Video Ad Server

When we say that we're an omnichannel platform that can serve all ad formats, we actually mean it. We can serve display, native, non-instream video, instream OTT/CTV, and audio, and ads for all types of publishers. Whether you are a gaming or non-gaming app developer, broadcaster, Smart TV manufacturer, vMVPD, streaming platform (both AVOD or live), or SVOD hybrid streaming platform, our platform can serve ads so you can monetize your inventory. And if you are a marketer, your campaign can run on any device, and in any environment, including mobile in-app, mobile web, desktop, in-app CTV, and OTT, to name a few.

These ads can be served in a variety of ways, depending on ad format:

VAST

VAST (Video Ad Serving Template) is the IAB-created standard for how all video ads are served. VAST determines what is being served, and it describes the video ad content.

VAST can consist of just a single video ad (Instream or Outstream). For OTT, VAST ads are instream only. With instream, VAST can also consist of a group of sequenced video ads that play back-to-back, like a commercial break on TV. If you serve VAST ads, you can serve one or more standard, non-interactive ads.

VPAID

VPAID (Video Player-Ad Interface Definition) is the IAB-created standard for how all interactive video ads are served.

Essentially, it's VAST with interactive capabilities. For example, shoppable video ads or video surveys. VPAID determines the "what" behind the interactive elements of a VAST, for both Instream and Outstream. VPAID can even be podded, creating a back-to-back, immersive experience for viewers. Note: because VPAID ads are hyper-interactive, these ads won't work in a dynamic ad insertion environment for neither VOD nor live. If you serve VPAID ads, you can serve one or more interactive ads.

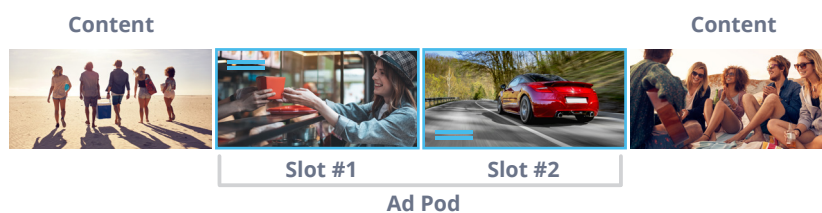
Did you know?

Instream refers to ads that play inside of video content – or “stream.” These ads are usually served as ad breaks, since they resemble traditional TV commercials.

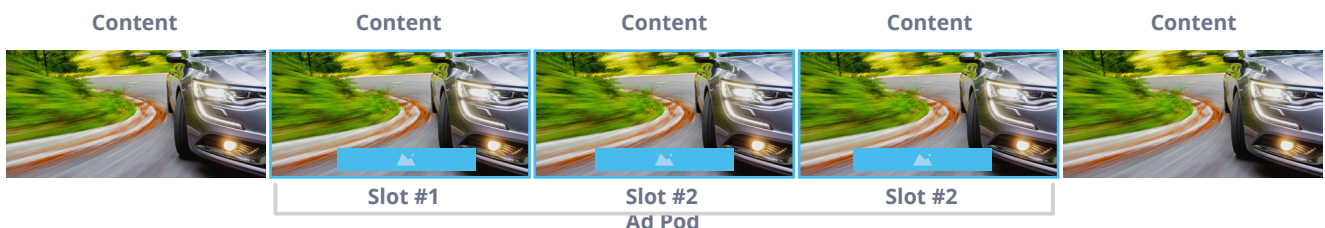
Outstream refers to ads that play outside of the video content stream. These are usually served as video ad placements, since they are placed in feeds or in between paragraphs within an article.

Smaato supports both linear and non-linear instream ad pods, so publishers can choose to serve ads as a commercial (linear) or as an overlay on top of video content (non-linear).

Linear (Commercial)



Non-Linear (Overlay)



VMAP

VMAP (Video Multiple Ad Playlist) is the IAB-created standard for *when* all video ads are served within a piece of video content (Instream only).

VMAP determines the when and where video ads are served. Inside of a VMAP, publishers define an ad break, which can be before the video (pre-roll, limited to one), during the video (mid-roll, can be multiple), or after the video (post-roll, limited to one). We also empower publishers to choose when the ad breaks should occur, whether as set intervals throughout, by timestamp, or by percentage completion.

VMAP is all about defining when the ad break occurs, regardless of whether or not the ad content is interactive.

Stream

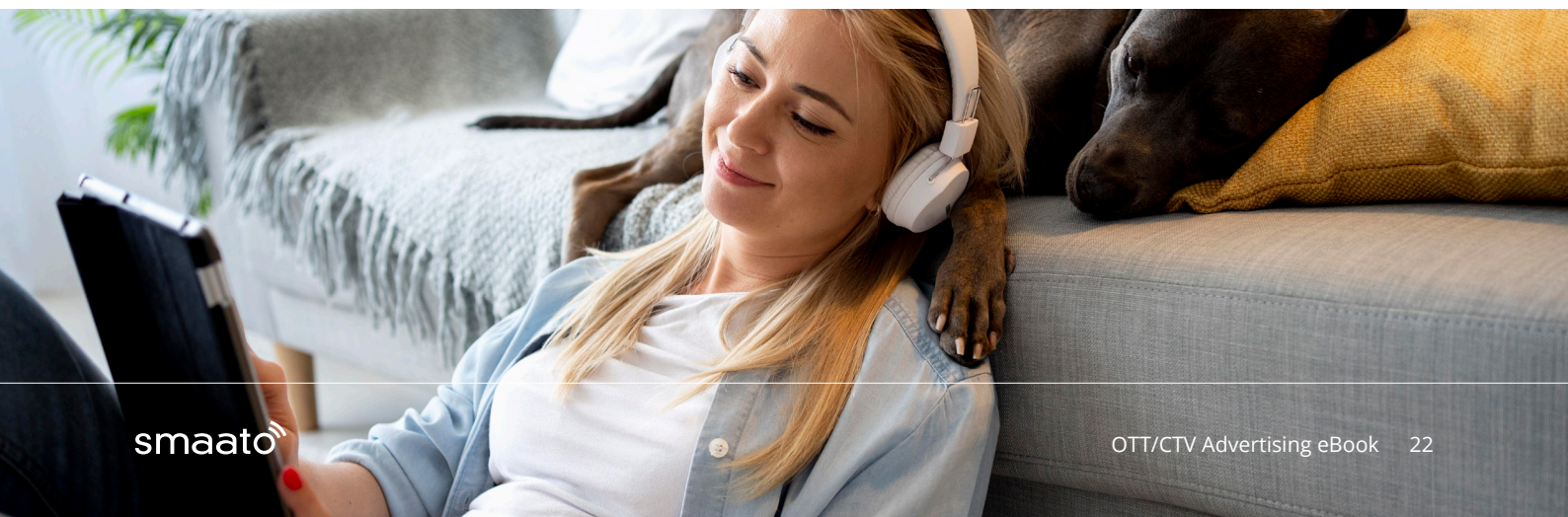
Stream refers to ads that have been stitched into existing content (using DAI and SSAI, covered on page 13). These ads are now a part of the stream itself.

The two most common streaming protocols today are HTTP Live Streaming (HLS) or Dynamic Adaptive Streaming over HTTP (DASH). While they differ in file format, they are alike in that they both contain various versions in different resolutions so that media players can play a quality of ad content that matches the strength of the user's internet connection. This helps match ad quality with video quality for a smoother viewing experience.

OTT Audio Ads at Smaato

Like OTT video, OTT audio simply refers to audio (including podcasts) that streams via the internet. This can be for live content, like AM/FM radio streaming websites, or on demand, with apps like Spotify or Pandora, or podcasts.

All of the features available for video on the Smaato OTT platform are available for audio, too.



Just as radio monetized the airwaves with commercial breaks, OTT offers a major opportunity to help monetize internet-streaming audio, outside of simply using companion banners on streaming websites or charging listeners for costly monthly subscriptions. Ad-supported audio continues to gain major popularity.

Everything that is available for video on the Smaato OTT platform is available for audio, too, including ad podding and server-side ad insertion (SSAI)/dynamic ad insertion (DAI).

According to eMarketer, podcast ad spending in the US will surpass **\$1 Billion** in 2021, and **\$2.5 Billion** in 2025.

SSAI for Audio Ads: Just like with video, pre-stitching ad pods into audio content allows for a smoother, more seamless listening experience, and provides an opportunity for hyper-relevant content placements based on audio context. Much like a commercial break on the radio, SSAI helps ensure that there is no buffering, and that longer auditory experiences aren't interrupted by jarring audio quality during an ad break. There are very few platforms that are able to handle in-house audio ad insertion; we are proud to be one of them.

Audio Ad Podding: Audio ad podding is a simple and profitable way for publishers to monetize their ad breaks. This is especially useful for publishers who have long-form audio content, high-definition audio experiences, and instream audio. Simply put, Audio Ad Podding allows for more ads in a given ad break. This gives marketers an opportunity to reach more listeners, while letting publishers double or even quadruple the valuation of their ad breaks.

Ad Pod/Slot Bidding: Publishers who work with Smaato get to choose how they want to expose their inventory, whether per slot or per pod. Sound familiar? This is the same as for video inventory placements. Publishers can set individual floor prices for each audio ad slot within a pod, and can also select how to auction the audio ad pod from a variety of programmatic options.

As major players like Amazon continue to expand their digital audio footprint, we expect the audio trend to continue to soar. We've built our OTT platform to support audio monetization, and to help marketers reach listeners around the world.

Reporting

Smaato delivers reporting granularity that drills deeper than what OTT video has seen so far – from the video content source all the way down to the impression.

Our platform has advanced reporting features on channels, video assets, ad playlists, ad pods, and ad slots, giving you the information you need to make smarter decisions more quickly, and optimize your inventory.

Plus, you'll get insights into the KPIs that matter to you.

Publishers get granular reporting on KPIs like revenue, requests, fill rate, impressions, eCPMs, and clicks, across all of their applications, channels (both VOD and live), and VOD assets created within the OTT platform.

To measure reach, complete rate, CTR, frequency, and much more, publishers and marketers have access to Smaato's advanced business intelligence and data visualization platform, called **Smaato Intelligence**. This is available to **publishers as RTB Insights**, and to **marketers as SDX Reporting**.



Marketers enjoy granular insights into KPIs like viewability, spend allocation, reach, frequency, and attribution. Plus, we include allocative reporting for cross-channel buys, so you can see campaign performance across devices.

We provide the robust audience insights advertisers deserve to help optimize their campaigns. From device, operating system, streaming platform, asset, asset genre, and more, we offer deep reporting capabilities for our partners.

With our SDK, publishers and marketers also gain additional measurement capability: we offer Open Measurement right out of the box.

A Note on Protecting User Privacy

We are passionate about protecting user privacy while delivering a positive, personalized viewer experience. Through our platform, publishers will be able to enrich their OTT ad strategy with **Smaato's Customer Data Platform (CDP)** for a better personalized experience while protecting user privacy. Marketers can better optimize campaign performance by reaching viewers based on what they're watching versus who they are.

Built with TCF v2 in mind, our CDP puts control back into the hands of publishers when it comes to managing first and third party data.

Publishers can bring their own first party data and can manage first party data within the platform. This means they can move away from Big Tech walled gardens, and create their own using authenticated user data. Publishers can then also choose which first and third party data to include in the bid request, giving marketers greater transparency when it comes to impressions.

By creating their own walled gardens within the Smaato Platform, publishers can manage all user data in one place, and gain invaluable insights from marketers, as well. This data management also helps create audience segments for privacy-compliant targeting opportunities.

These capabilities allow both publishers and marketers to focus on getting the right ad, at the right time, and to the right audience to deliver positive experiences.

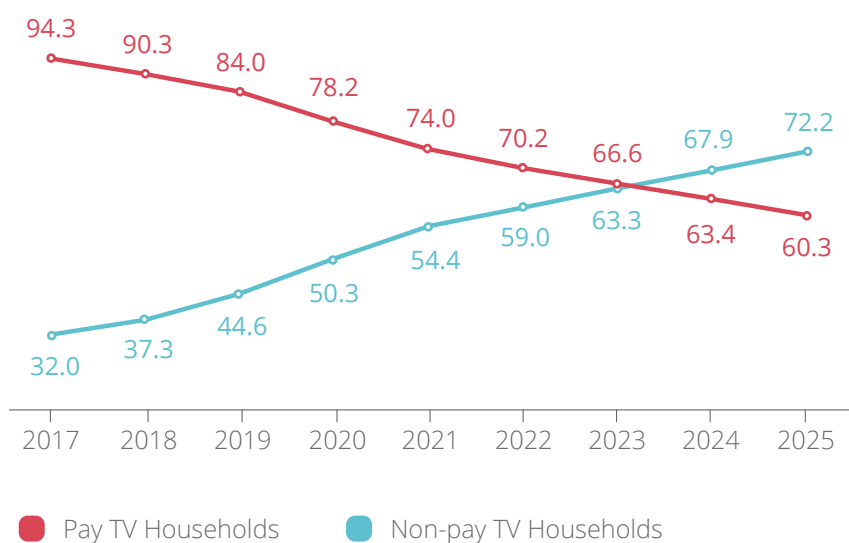


Conclusion

The OTT opportunity continues to grow for publishers and marketers alike. As the landscape shifts to a cord-free world, we are excited to support our partners in delivering relevant, positive viewer experiences to audiences around the world.

Pay TV vs. Non-Pay TV Households

US, 2017-2025 (Millions)



Source: eMarketer, September 2020

Smaato's holistic platform gives publishers control over building experiences for viewers, and better empowers their monetization opportunities. Publishers get more flexibility and control across all streaming devices, whether live or VOD, including desktop, mobile web, CTV, and in-app. We make it easy for marketers to deliver relevant ad creative to receptive audiences, regardless of device or screen format.

Questions?

Want to learn more? We're here to answer any questions you have, OTT or otherwise. [Get in touch.](#)

That's not all, folks. Stay tuned below to see how you can get started serving commercial breaks.

Appendix: Get Started Guides

Getting Started: Publishers

Three Simple Steps

We offer unparalleled controls for our publishers, so they can monetize with ease. Smaato's OTT solution makes it simple for publishers to start monetizing their OTT inventory. And, it's free to use.

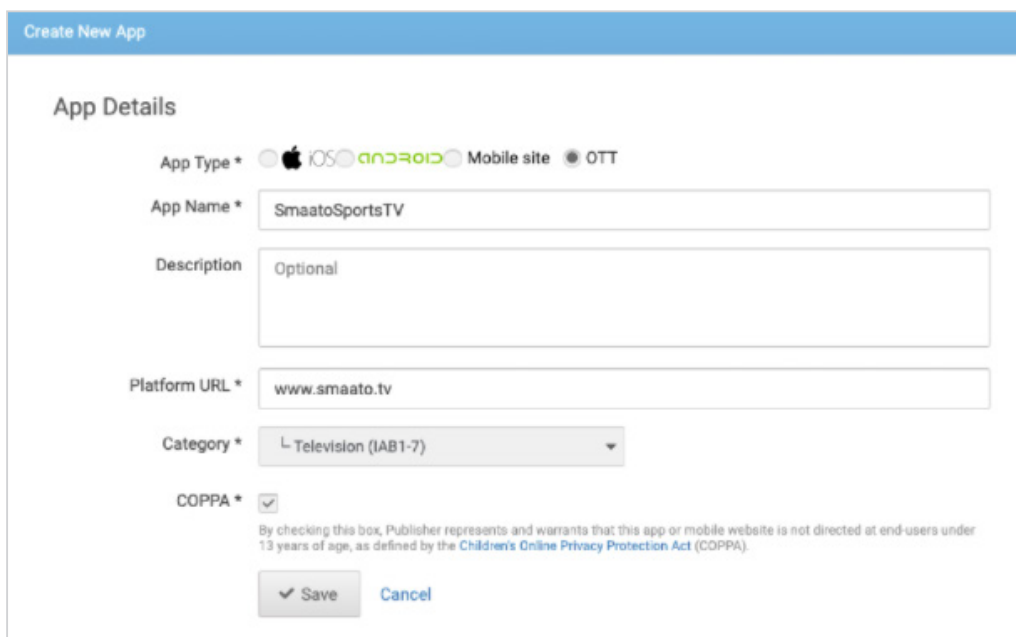
We give publishers the controls they need to create optimal viewer experiences. Whether you are a VOD or a Live publisher, we provide:

- A fully-integrated experience to manage and monetize in-stream inventory (both VOD and Live)
- Direct and programmatic bid support
- Granular reporting that delivers insights from channel to ad slot

Gain the advantage of having dynamic ad insertion, ad serving, and programmatic bidding all in one place. Ready to get started? It's simple. In just three steps, you can begin monetizing your OTT inventory.

Step One:

Sign-in & Register your app



The screenshot shows a 'Create New App' form with the following fields and options:

- App Type ***: Radio buttons for iOS, Android, Mobile site, and OTT. OTT is selected.
- App Name ***: Text input field containing 'SmaatoSportsTV'.
- Description**: Text input field containing 'Optional'.
- Platform URL ***: Text input field containing 'www.smaato.tv'.
- Category ***: Dropdown menu showing 'Television (IAB1-7)'.
- COPPA ***: Checked checkbox.
- By checking this box, Publisher represents and warrants that this app or mobile website is not directed at end-users under 13 years of age, as defined by the [Children's Online Privacy Protection Act \(COPPA\)](#).
- Save** and **Cancel** buttons.

Step Two: Create Channel

Create Channel

Channel Name * Smaato Football Live

Channel Type * his-live

Channel Source * https://cdn.smaato.tv/channel/smaato-football

Start Bumper URL https://cdn.smaato.tv/start-bumper.mp4

End Bumper URL https://cdn.smaato.tv/end-bumper.mp4

Personalization Threshold 10

The maximum duration of unfilled ad time allowed in an ad break before it is abandoned.

Ad Slate * Upload Video File External Video URL

No file chosen

* Mandatory Field

Step Three: Integrate and start sending requests

Below are some sample URLs that publishers give to video/audio players to play ads:

VAST Tag (Single Ads or Ad Pod, Client-side Ad Insertion):

```
https://api.ad.smaato.net/oapi/v6/ad?pub=[PUBLISHER_ID_HERE]&channelId=[CHANNEL_ID_HERE]&adBreakId=[AD_BREAK_ID_HERE]&response=XML&format=video&vastver=[3_4_OR_4.1_HERE]&videotype=[instream-pre_OR_instream-mid_OR_instream-post]&playbackSession=[PLAYBACK_SESSION_ID_HERE]&availDurationSec=[SECONDS_PASSED_BY_SCTE-35_MARKERS_IN_LIVE]&assetCategories=[COMMA_SEPARATED_CATEGORIES_HERE]&assetEpisode=[CONTENT_EPISODE_HERE]&assetGenre=[CONTENT_GENRE_HERE]&assetKeywords=[COMMA_SEPARATED_KEYWORDS_HERE]&assetLength=[CONTENT_LENGTH_HERE]&assetSeason=[CONTENT_SEASON_HERE]&assetSeries=[CONTENT_SERIES_HERE]&assetSourceType=[DIRECT/INDIRECT]&assetStudio=[CONTENT_PRODUCER_HERE]&assetTitle=[CONTENT_TITLE_HERE]&assetType=[movie/tv-show/short]&assetUrl=[CONTENT_URL_HERE]&channel=[CHANNEL_ID_HERE]&assetId=[CONTENT_ID_HERE]&inventoryPartner=[DOMAIN_OF_PARTY_MONETIZING_CONTENT_IF_PARTY_MONETIZING_CONTENT_AND_PARTY_OWNING_CONTENT_DIFFER]&inventoryType=[APP/WEB]&platform=[PLATFORM_SHOWING_THE_CONTENT]&productionQuality=[UNKNOWN/PROFESSIONAL_PRODUCED/PROSUMER/USER_GENERATED]&pub=[PUBLISHER_ID_HERE]&gdpr=0&coppa=0
```

VMAP Tag (Schedule Pre, Mid, or Post-Roll Ad Breaks, Client-side Ad Insertion):

```
https://ssai.smaato.net/vmap/[CHANNEL_ID_HERE]?playbackSession=[PLAYBACK_SESSION_ID]&availDurationMs=[SECONDS_PASSED_BY_SCTE-35_MARKERS_IN_LIVE]&device=[USER_AGENT]&devip=[IP_ADDRESS]&client=[CLIENT]&assetCategories=[COMMA_SEPARATED_CATEGORIES_HERE]&assetEpisode=[CONTENT_EPISODE_HERE]&assetGenre=[CONTENT_GENRE_HERE]&assetKeywords=[COMMA_SEPARATED_KEYWORDS_HERE]&assetLength=[CONTENT_LENGTH_HERE]&assetSeason=[CONTENT_SEASON_HERE]&assetSeries=[CONTENT_SERIES_HERE]&assetSourceType=[DIRECT/INDIRECT]&assetStudio=[CONTENT_PRODUCER_HERE]&assetTitle=[CONTENT_TITLE_HERE]&assetType=[movie/tv-show/short]&assetUrl=[CONTENT_URL_HERE]&channel=[CHANNEL_ID_HERE]&assetId=[CONTENT_ID_HERE]&inventoryPartner=[DOMAIN_OF_PARTY_MONETIZING_CONTENT_IF_PARTY_MONETIZING_CONTENT_AND_PARTY_OWNING_CONTENT_DIFFER]&inventoryType=[APP/WEB]&platform=[PLATFORM_SHOWING_THE_CONTENT]&productionQuality=[UNKNOWN/PROFESSIONAL_PRODUCED/PROSUMER/USER_GENERATED]&pub=[PUBLISHER_ID_HERE]&gdpr=0&coppa=0
```

SSAI Tag (Stream Tag):

[https://ssai.smaato.net/hls/\[CHANNEL_ID_HERE\]?assetCategories=\[COMMA_SEPARATED_CATEGORIES_HERE\]&assetEpisode=\[CONTENT_EPISODE_HERE\]&assetGenre=\[CONTENT_GENRE_HERE\]&assetKeywords=\[COMMA_SEPARATED_KEYWORDS_HERE\]&assetLength=\[CONTENT_LENGTH_HERE\]&assetSeason=\[CONTENT_SEASON_HERE\]&assetSeries=\[CONTENT_SERIES_HERE\]&assetSourceType=\[DIRECT/INDIRECT\]&assetStudio=\[CONTENT_PRODUCER_HERE\]&assetTitle=\[CONTENT_TITLE_HERE\]&assetType=\[movie/tv-show/short\]&assetUrl=\[CONTENT_URL_HERE\]&channel=\[CHANNEL_ID_HERE\]&assetId=\[CONTENT_ID_HERE\]&inventoryPartner=\[DOMAIN_OF_PARTY_MONETIZING_CONTENT_IF_PARTY_MONETIZING_CONTENT_AND_PARTY_OWNING_CONTENT_DIFFER\]&inventoryType=\[APP/WEB\]&platform=\[PLATFORM_SHOWING_THE_CONTENT\]&productionQuality=\[UNKNOWN/PROFESSIONAL_PRODUCED/PROSUMER/USER_GENERATED\]&pub=\[PUBLISHER_ID_HERE\]&gdpr=0&coppa=0](https://ssai.smaato.net/hls/[CHANNEL_ID_HERE]?assetCategories=[COMMA_SEPARATED_CATEGORIES_HERE]&assetEpisode=[CONTENT_EPISODE_HERE]&assetGenre=[CONTENT_GENRE_HERE]&assetKeywords=[COMMA_SEPARATED_KEYWORDS_HERE]&assetLength=[CONTENT_LENGTH_HERE]&assetSeason=[CONTENT_SEASON_HERE]&assetSeries=[CONTENT_SERIES_HERE]&assetSourceType=[DIRECT/INDIRECT]&assetStudio=[CONTENT_PRODUCER_HERE]&assetTitle=[CONTENT_TITLE_HERE]&assetType=[movie/tv-show/short]&assetUrl=[CONTENT_URL_HERE]&channel=[CHANNEL_ID_HERE]&assetId=[CONTENT_ID_HERE]&inventoryPartner=[DOMAIN_OF_PARTY_MONETIZING_CONTENT_IF_PARTY_MONETIZING_CONTENT_AND_PARTY_OWNING_CONTENT_DIFFER]&inventoryType=[APP/WEB]&platform=[PLATFORM_SHOWING_THE_CONTENT]&productionQuality=[UNKNOWN/PROFESSIONAL_PRODUCED/PROSUMER/USER_GENERATED]&pub=[PUBLISHER_ID_HERE]&gdpr=0&coppa=0)

That's it!

Getting Started: Marketers

Marketers enjoy contextual targeting opportunities and highly engaged audiences, plus frequency capping and competitor separation to ensure a positive brand reception.

Getting started is simple. The short answer? Simply begin bidding on OTT inventory, the way you would any other. To support per-slot bidding, no action is needed from marketers: you can simply respond to video bid requests.

We do recommend that you **support Ad Podding**. To accept per-pod bid requests when an entire ad pod is exposed, you need to support multiple impressions in the bid request. DSPs will need to adjust the bidding algorithm so it can read multiple impression objects.

You'll also want to ensure that your algorithm can read sequenced video objects within those impression objects, which represent slots in a pod. That way, you'll be able to know the order of where the slot falls within the pod, and understand the corresponding valuation based on placement.

Here's a sample podded bid request as an example:

```
{
  "id": "edfd3366-654d-47f7-afe2-5a0219bf3ce1",
  "imp": [
    {
      "id": "17347_1",
      "video": {
        "mimes": [
          "application/x-mpegURL",
          "video/mp4",
          "video/H264"
        ],
        "minduration": 6,
        "maxduration": 90,
        "protocols": [
          1,
          2,
          3,
          4,
          5,
          6,
          7,
          8
        ],
        "w": 1920,
        "h": 1080,
        "startdelay": 0,
        "placement": 1,
        "linearity": 1,
        "sequence": 1,
        "minbitrate": 240,
        "maxbitrate": 30000,
        "playbackmethod": [
          1
        ]
      }
    ]
  }
}
```

```

],
"delivery": [
  1,
  2
]
},
"tagid": "131177440",
"bidfloor": 9,
"secure": 1,
},
{
"id": "17347_1",
"video": {
  "mimes": [
    "application/x-mpegURL",
    "video/mp4",
    "video/H264"
  ],
  "minduration": 6,
  "maxduration": 90,
  "protocols": [
    1,
    2,
    3,
    4,
    5,
    6,
    7,
    8
  ],
  "w": 1920,
  "h": 1080,
  "startdelay": 0,
  "placement": 1,
  "linearity": 1,
  "sequence": 2,
  "minbitrate": 240,
  "maxbitrate": 30000,
  "playbackmethod": [
    1
  ],
  "delivery": [
    1,
    2
  ]
},
"tagid": "131177440",
"bidfloor": 9,
"secure": 1,
}
],
"app/site": {
  "id": "xxxxx",
  "name": "xxxxx",
  "bundle": "xxxxx",
  "domain": "xxxxx",
  "cat": [
    "IAB1-7"
  ],
  "pagecat": [
    "IAB1-7"
  ],
  "publisher": {
    "id": "1100047232"
  },
  "content": {
    "id": "xxxxx",

```

```

    "genre": "PV",
    "episode": 123,
    "title": "xxxxx",
    "series": "xxxxx",
    "season": "xxxxx",
    "producer": {
      "name": "xxxxx"
    },
    "prog": 1,
    "cat": [
      "IAB1-7"
    ],
    "livestream": 1,
    "sourcerelationship": 0,
    "len": 36500
  }
},
"device": {
  "ua": "Mozilla/5.0 (Linux; Android 10; SM-G975U Build/QP1A.190711.020; ww) AppleWebKit/537.36 (KHTML, like Gecko) Version/4.0 Mobile Safari/537.36",
  "geo": {
    "type": 2,
    "country": "USA",
    "region": "GA",
    "metro": "524",
    "city": "Smyrna",
    "zip": "30080"
  },
  "dnt": 0,
  "lmt": 0,
  "ip": "107.198.43.84",
  "devicetype": 4,
  "make": "Samsung",
  "model": "SM-G975U",
  "os": "Android",
  "osv": "10",
  "ifa": "0e9bdc1d-4bf8-4bd2-8bcf-cd2b4c179a04",
  "ext": {
    "ifa_type": "aaid"
  }
},
"user": {
  "ext": {
    "us_privacy": "1YNY"
  }
},
"at": 1,
"tmax": 850,
"source": {
  "tid": "48c23d35-df18-4ae7-a417-02811d71ffd8"
},
"regs": {
  "ext": {
    "gdpr": 0,
    "us_privacy": "1YNY"
  }
}
}

```


If you want to bid on more than one slot (whether in the per-pod or per-slot example), you will need to support multiple bids. That way, you can buy more than one ad slot in a single pod (as long as they are different pieces of creative and from differing IAB categories).

When the algorithm understands what the pod looks like based on the above two items, it can then decide to return 1-n bids (n being the number of slots in an ad pod).

With that in mind, here is an example of a bid response with one bid:

```
{
  "id": "{Bid Request id}",
  "seatbid": [
    {
      "bid": [
        {
          "id": "{Bid Request imp[0].id}",
          "impid": "{Bid Request imp[0].id}",
          "price": 25,
          "adm": "",
          "cid": "itfc3t2",
          "crid": "wucw2j9k",
          "adomain": [
            "buyer1"
          ],
          "dealid": null,
          "cat": [
            "IAB10",
            "IAB10-9"
          ]
        }
      ],
      "seat": "{some seat id}"
    }
  ],
  "cur": "USD"
}
```

And here's what it looks like with multiple bids:

```
{
  "id": "{Bid Request id}",
  "seatbid": [
    {
      "bid": [
        {
          "id": "{Bid Request imp[0].id}",
          "impid": "{Bid Request imp[0].id}",
          "price": 25,
          "adm": "",
          "cid": "itfc3t2",
          "crid": "wucw2j9k",
          "adomain": [
            "buyer1"
          ],
          "dealid": null,
          "cat": [
            "IAB10",
            "IAB10-9"
          ]
        }
      ],
    },
    {
      "id": "{Bid Request imp[1].id}",
    }
  ]
}
```

```

    "impid": "{Bid Request imp[1].id}",
    "price": 25,
    "adm": "",
    "cid": "itfc3t2",
    "crid": "wucw2j9k",
    "adomain": [
      "buyer2"
    ],
    "dealid": null,
    "cat": [
      "IAB10",
      "IAB10-9"
    ]
  },
  {
    "id": "{Bid Request imp[2].id}",
    "impid": "{Bid Request imp[2].id}",
    "price": 25,
    "adm": "",
    "cid": "itfc3t2",
    "crid": "wucw2j9k",
    "adomain": [
      "buyer1"
    ],
    "dealid": null,
    "cat": [
      "IAB10",
      "IAB10-9"
    ]
  }
],
"seat": "{some seat id}"
}
],
"cur": "USD"
}

```

smaato[®]

Smaato's digital ad tech platform is a completely omnichannel, self-serve monetization solution and ad server. Our controls make monetization simple. Publishers can bring their first-party data and manage all inventory in one place. Marketers get access to the highest-quality inventory so they can reach audiences around the world and on any device. Smaato is headquartered in San Francisco, with additional offices in Hamburg, New York, Beijing, and Singapore. Learn more at www.smaato.com.