

Programmatic Advertising

Real-Time User Targeting with OpenRTB

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CLASSIC vs PROGRAMMATIC ADVERTISING

Publishers make content.
Want to sell ad space.
Advertisers want to promote products.
Publishers sell direct to advertiser.

What happens if advertiser doesn't want to buy?
What happens if advertiser has stock left over?

Enter programmatic
advertising...

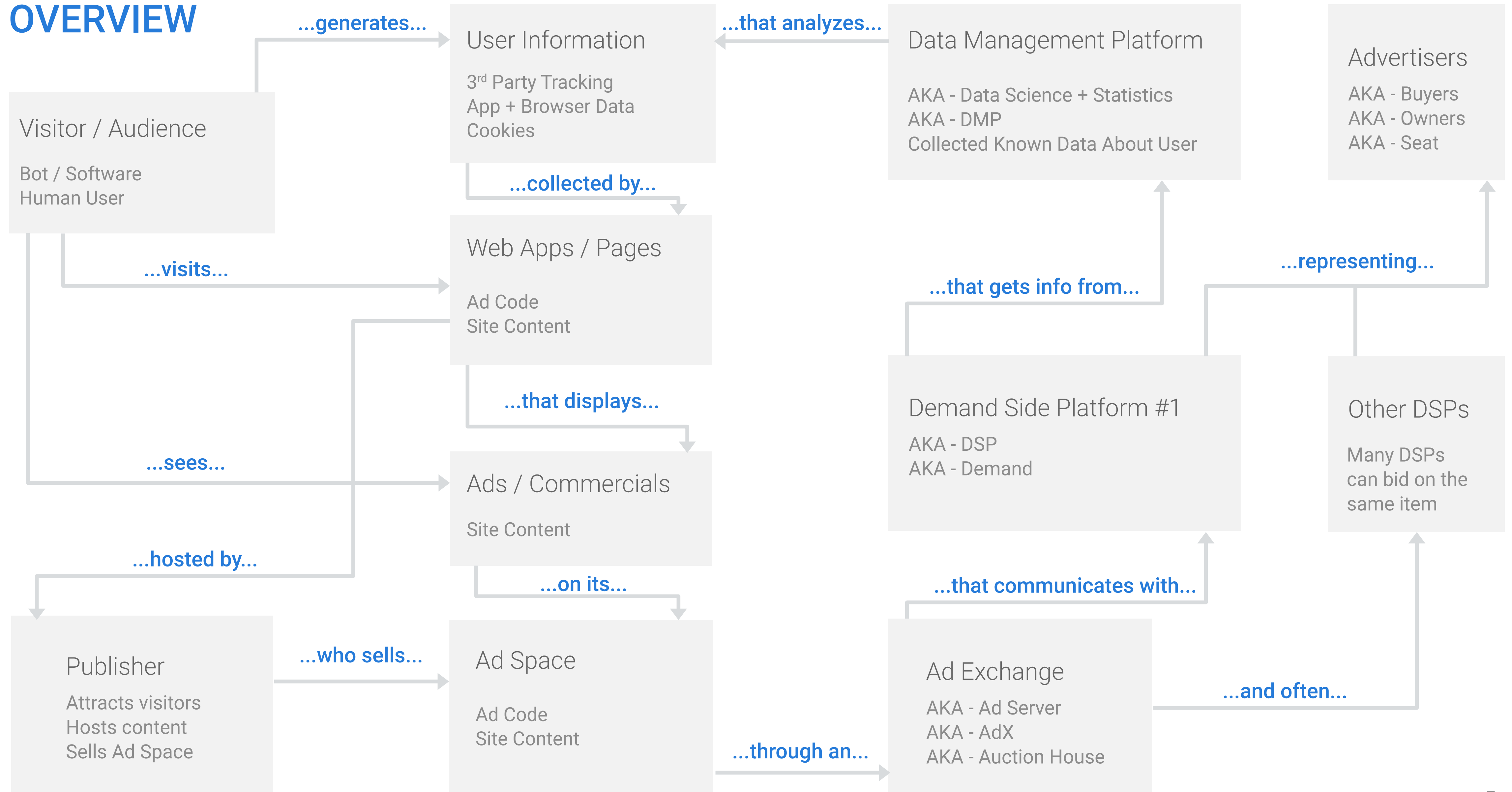
Publishers make content.
Want to sell ad space.
Advertisers want to promote products.
They use online service to automatically serve ads.

Each impression is sold as it appears.
Publishers sell all their inventory.
Each impression (i.e. page view) is auctioned.

Advertisers are able to target individual users.
Advertising is more accurate, and effective.

Users are served ads that are more relevant.

OVERVIEW



HOW ARE ADS SERVED TO A CLIENT?

A client is an entity that requests content from a web server.

A web server hosts content (e.g. HTML pages) that it serves to clients (requesting entities).

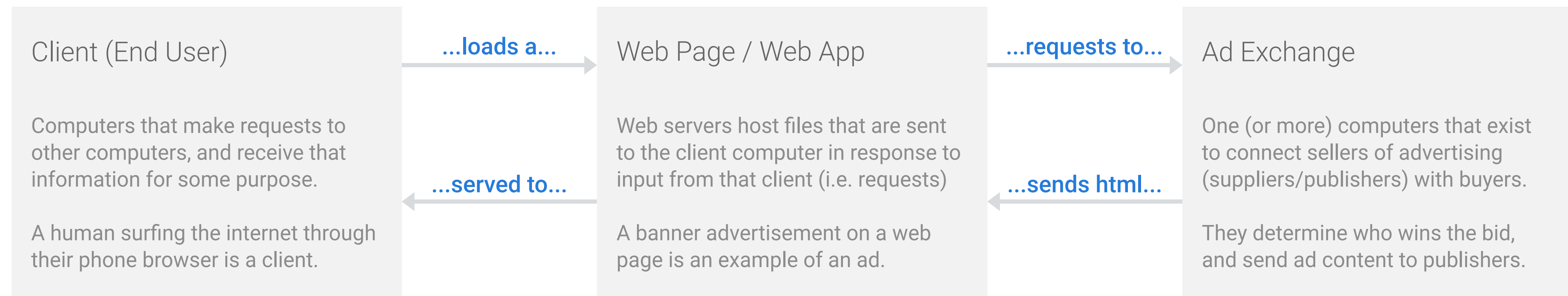
Ad-enabled web pages have areas dedicated to displaying ads.

These pages also contain scripts (i.e. Javascript files) that talk to ad servers.

The scripts request ads from an ad server (e.g. Ad Exchange, Supply-Side Platform, etc.)

The ad server (if successful) responds to the request with an advertisement.

The ad is shown on the page.



WHAT ADS DOES THE CLIENT SEE?

Clients leave footprints when they browse the internet.

Requests (e.g. From web browsers) contain lots of information about who made the request.

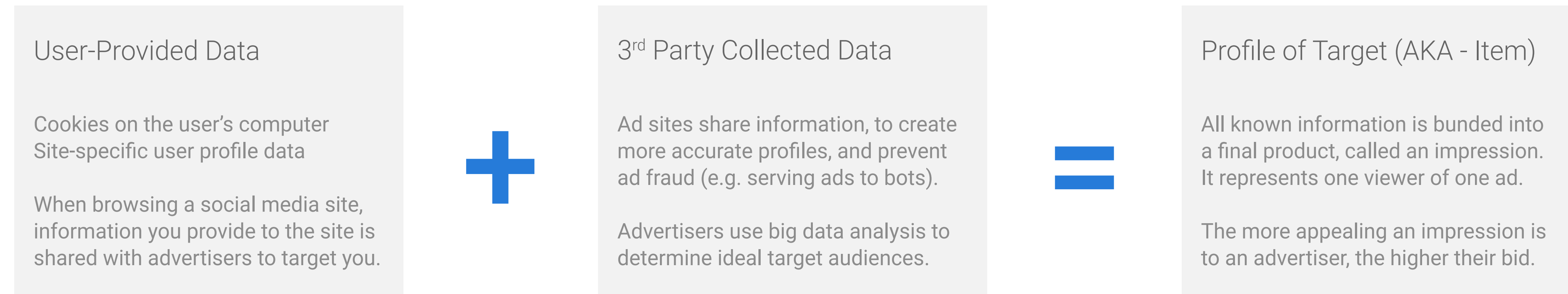
Some sites track this information about visitors (e.g. through cookies and scripts).

Some computer programs parse this information, and create user profiles from it.

User profiles give advertisers some idea of who is seeing the ad -- which adds value.

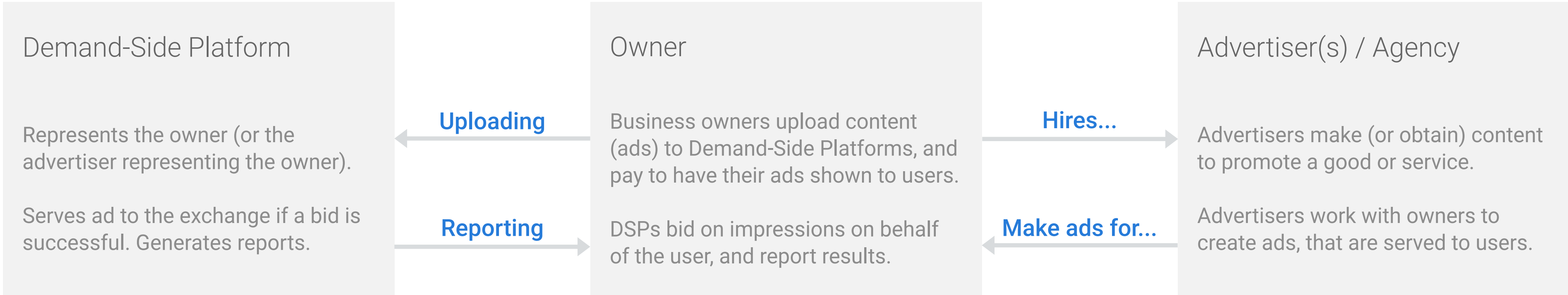
Ads targeting a specific user (or type of user) are more likely to succeed, and thus more valuable.

If the client profile matches known scammers, an advertiser/DMP may refuse to bid (reply false).



WHERE DO THESE ADS COME FROM?

Ads are made by advertisers.
Entities that buy or produce content to promote a good or service.
Ads are mini websites. Content can be anything from basic images to complex websites.
Ads can target mobile, desktop, and/or video platforms.
Ads are uploaded to Demand Side Platforms (or their details are entered).
When a bid is won, the ad is served from the ad server, and displayed on the end user page.



KEY PLAYERS

Ad Exchanges

AdBrite, AdECN, Advertising.com, ContextWeb, DoubleClick, IDG, OpenX, RightMedia, TheWeatherChannel

Ad Networks

AdOnion, Google, MicrosoftAdvertising, SpecificMedia, ValueClickMedia, Yahoo

AdTech Companies

AdMeld, AppNexus, ExtremeReach, Google, GroupM, Hearst Digital Media, Index Exchange, Integral Ad Science, LinkedIn, MediaMath, Microsoft, Moat, Pandora, PubMatic, Quantcast, Rubicon, Telaria, The Trade Desk

Agency Buying Desks

Accuen, B3, Cadreon, Vivaki

Data Partners

Acxiom, AlmondNet, BlueKai, Bizo, DataLogix, eBureau, Exelate, Experiar, RapLeaf, TargusInfo

Dynamic Creative Partners

Channel Intelligence, Dapper, TUMRI

Verification Partners

AdXpose, AdSafe, DoubleVerify

DEFINITIONS

Ad Exchanges

Use Real-Time Bidding to enable transactions between buyers and sellers of digital advertising. Do not take ownership of inventory (i.e. ad space). Auction house.

Ad Networks

Represents publishers, collecting and selling ad inventory directly to advertisers.

AdTech Companies

Some companies provide multiple services within the Real-Time Bidding ecosystem. The blanket term “Ad Tech Company” covers any combination of the following: DSPs, SSPs, Media Strategy & Investment, Data Science, Client Services.

Agency Buying Desks

Represent the owner/advertiser, making real-time bids on their behalf.

Data Partners

Make working with third-party data easier for buyers and sellers of media ads. Also known as Data Management Platforms (DMPs).

Dynamic Creative Partners

Review ad performance and make changes in real-time. Optimize ad campaigns.

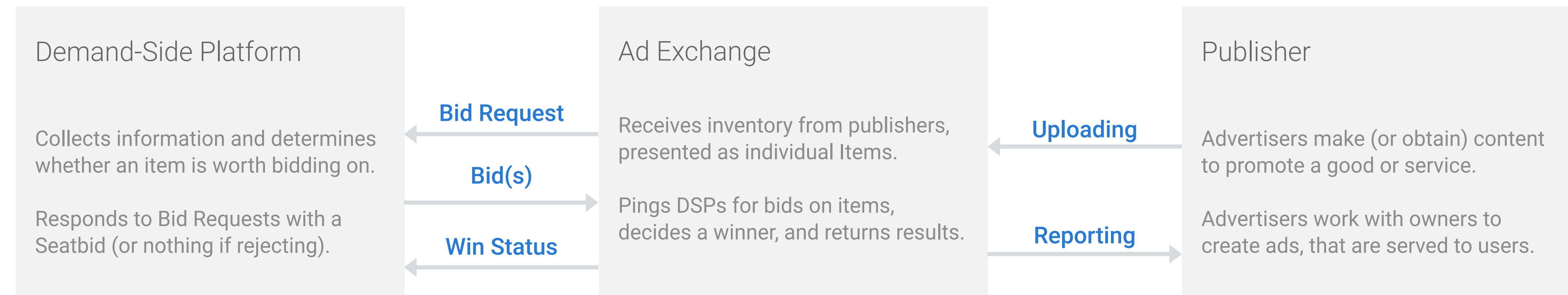
Verification Partners

Check if ads are shown to the intended target audience, in the intended way.

*Duplicates are OK. Just means the company does more than one thing.

WHAT IS OpenRTB?

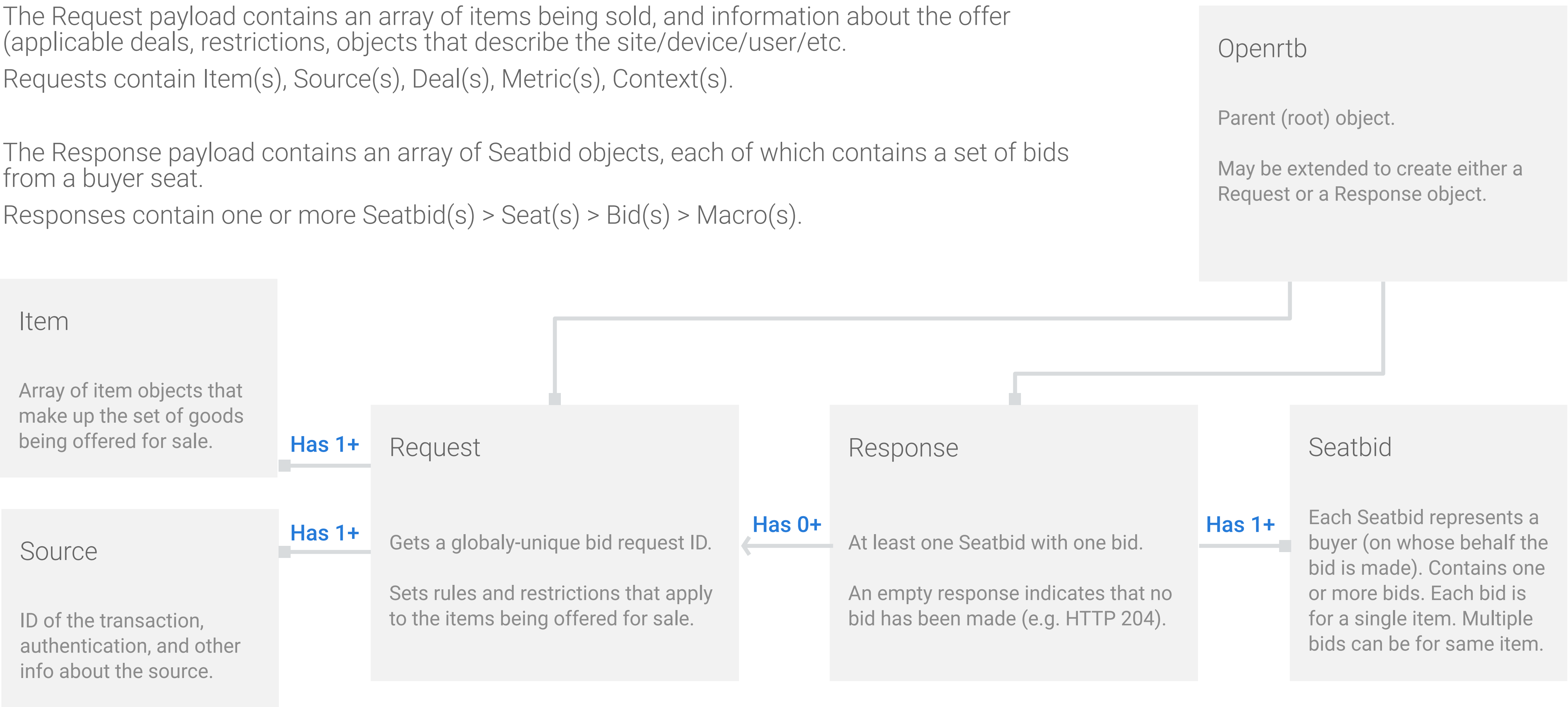
A set of rules (protocol) for communication between entities engaged in real-time bidding.
Used to run real-time auctions between sell-side exchanges and demand-side bidders.
Defines how an Application Programming Interface (API) should be written to work with OpenRTB



OpenRTB MAIN OBJECTS

The Request payload contains an array of items being sold, and information about the offer (applicable deals, restrictions, objects that describe the site/device/user/etc).
Requests contain Item(s), Source(s), Deal(s), Metric(s), Context(s).

The Response payload contains an array of Seatbid objects, each of which contains a set of bids from a buyer seat.
Responses contain one or more Seatbid(s) > Seat(s) > Bid(s) > Macro(s).



SUMMARY

Real-Time Bidding is the process of selling individual, targeted advertisers through online auctions. OpenRTB is a communication protocol, that aims to simplify communication between entities.

MOVIA COMPETITIVE ADVANTAGES

We can become competitive by excelling in one (or more) of these areas.

Accuracy - How closely can we determine the user's location? Can we determine look direction?

Effectiveness - Use better algorithms to match buyers and sellers, resulting in more Click-Thru Rates.

Experience - unique experience to the user. Maybe their app, the bus shelter, and all nearby ad spaces display the same ad at the same time, in perfect sync. Causes the person to do a double-take. Leaves a more lasting impression.

Peace of Mind - Implement high-quality UX and education resources to speed up decisionmaking, reduce uncertainty and increase user comfort. Better information leads to better decisions.

Persistence - Repeatedly target the same users in new and unique ways. Use better algorithms to determine what viewers are interested in, to maximize Click-Through Rates.

Saturation - Become the Amazon of DSPs. Focus on impression quantity over profit. Focus on lowering costs to consumer and increasing speed. Automate everything. Optimize to gain a dominant market share. Then affect the rules of the market in your favor.

Speed - Use the best tools to build the fastest bidding system. Win weak signal bids by default.