



# A Beginner's Guide to **Programmatic**

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# Introduction

Programmatic media buying continues to propel mobile advertising toward new efficiencies and enable better results for app marketers and developers alike.

In today's advertising industry, programmatic media is one of the main ways in which mobile inventory is traded. But while most marketers have heard about programmatic advertising, many are confused or unclear about what it is exactly, and how it works.

This white paper will help give you a clear understanding of the key programmatic components and how they interact with one another.



## #1 What is Programmatic Advertising?

Mobile programmatic advertising is an automated method of buying and selling mobile ad inventory with high efficiency.

Sounds simple enough, right? Let's examine further.





## #2 In a Nutshell, How Does Programmatic Advertising Work?

Before looking into the process, you need a clear understanding of the two players in the media buying and selling landscape:



### Advertiser

The advertiser is a brand or app developer that wishes to advertise their product or app. They seek to buy advertising space in the right places to get their ad seen by their target audience.



### Publisher

The publisher (who might also be an app developer) supplies the inventory (ad space) where advertisers can run their ads. In the case where the publisher is an app developer, the ad space will be within their mobile app.

Unlike traditional advertising, where the ad space is transacted manually between the publisher and the advertiser, programmatic advertising allows traffic to be sold on a per impression basis via a real-time exchange.

Here is how it works: The publishers sets rules or controls over their ad inventory, including:

- Minimum pricing thresholds
- Accepted advertisers or product categories
- Accepted ad types

Via the exchange, the publisher (seller) passes information about each individual ad impression available, including location, device type, and device identifiers. The buyers analyze this data (called the bid stream) and decide if they want to bid on a specific ad impression. The advertiser with the winning bid will get their ad served to that impression.

# #3 Three Types of Programmatic Advertising

Programmatic offers three main ways for mobile app advertisers to find the right media inventory for their ads.



## Open Marketplaces

On an open marketplace, inventory prices are decided in real-time through an auction. Any publisher or advertiser can participate which makes the marketplace dynamic and very competitive. Generally, publishers place their media inventory at a specific minimum cost per thousand (CPM) price and advertisers bid through real-time bidding (RTB) auctions against each other for the available media. We will talk about RTB in more detail later in this whitepaper.

## Private Marketplaces

A private marketplace (PMP) is an exclusive marketplace where premium publishers offer their media inventory to a select group of advertisers at a fixed premium price. Unlike open marketplaces, this private deal gives an exclusive group of advertisers priority to inventory before it becomes available in the open marketplace.



## Programmatic Direct

Programmatic direct is negotiated directly between the publisher and the advertiser. The inventory and pricing are guaranteed, and the campaign runs at the same priority as other direct deals in the ad server. Automation is the big advantage: negotiation and fulfillment can be completed through a platform instead of manually.

## #4 What Is Real-time Bidding (RTB)?

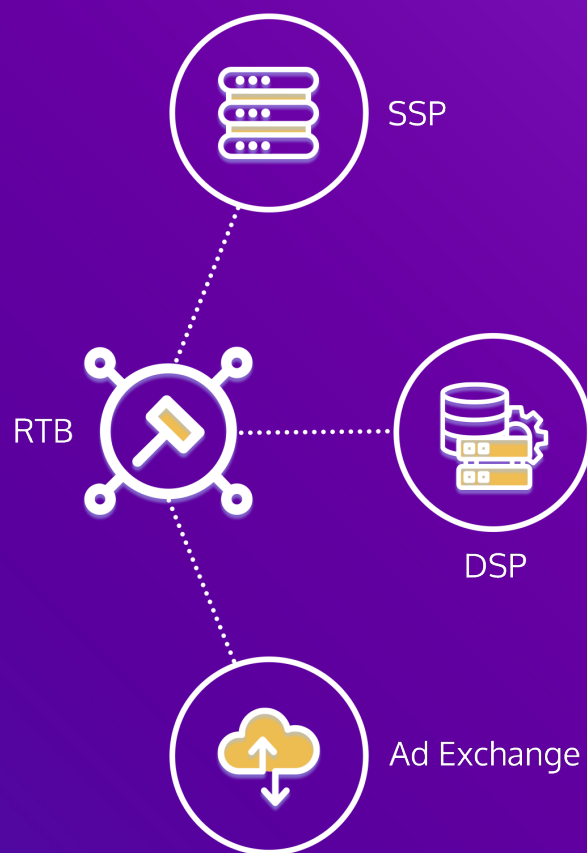
Real-time bidding is an auction setting where ad impressions are sold and bought in transactions that take milliseconds to execute.

Though the terms RTB and programmatic are often used interchangeably, they are not the same. Programmatic is the umbrella term: it's the technology to automate the decision-making process of media buying by targeting specific audiences and demographics. RTB is simply the means by which advertising inventory is bought and sold on a per-impression auction basis.

## #5 The Three Players of RTB

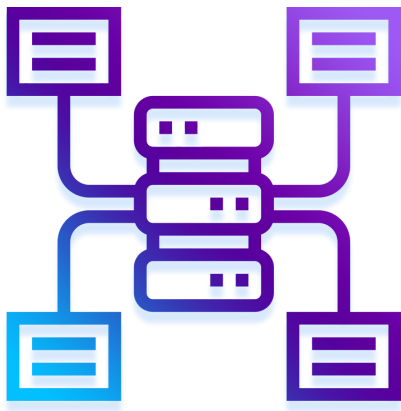
If you want to understand programmatic, you need to know this key terminology and where each component fits into the programmatic landscape:

- Supply-side platform (SSP)
- Demand-side platform (DSP)
- An Ad Exchange



## Supply-side platform (SSP)

A supply-side platform helps publishers monetize their apps. It enables publishers to add their advertising inventory to ad exchanges and sets controls to maximize revenue yield on impressions across all demand sources. This can include setting minimum pricing, rules for allowed advertisers/categories, ad types, and more.



## Demand-side platform (DSP)

A demand-side platform is the SSP's counterpart on the advertiser side. Brands/app developers - who are, in this discussion, the advertisers - who want to promote their apps can use DSPs to set up their campaigns and define the terms of maximum bids, budgets, target audience and campaign goals. DSPs differ by scale (number of partnerships) and by the technology (infrastructure, bidding and optimization models) used to execute the buy.

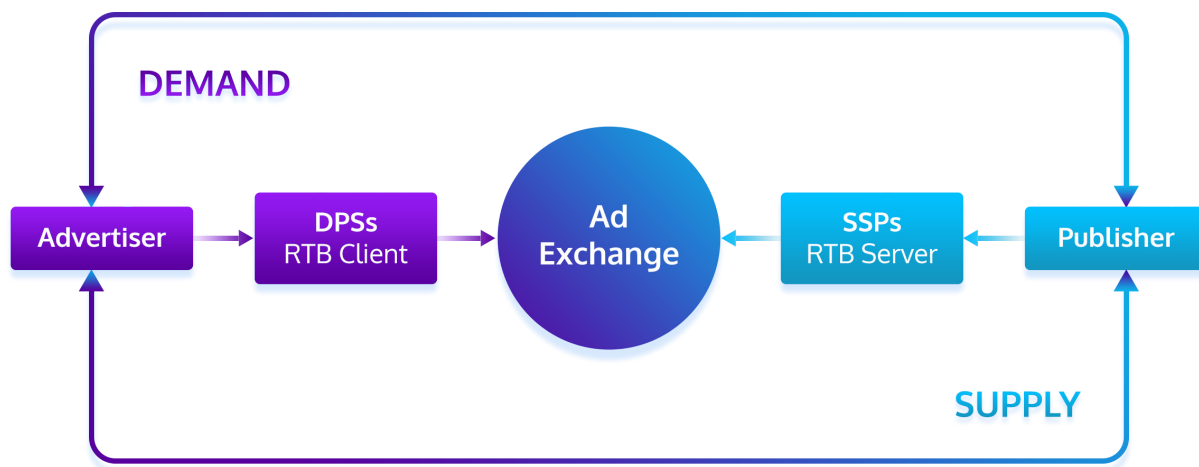


DSPs are used by marketers to buy ad impressions from exchanges as efficiently as possible; SSPs are designed by publishers to do the opposite - to maximize the yield for their inventory.



## Ad Exchange

The ad exchange is what allows these two sides of the coin (SSPs and DSPs) to connect with each other. It is a neutral, autonomous platform that enables the entire buying and selling process via real-time auctions.



This is a simple illustration of the RTB auction process. In reality, it is much more complex because of several reasons:

- The same app developer can be both a publisher and an advertiser
- A single publisher can be connected to multiple SSPs and an advertiser can be connected to multiple DSPs
- A single DSP or an SSP can be connected to multiple ad exchanges

## #6 How does RTB Work?

Now that you are familiar with the players, let us see how RTB works in detail.



1

When a user visits an app, a corresponding bid request is sent to an SSP that notifies it of an ad impression available for purchase. This bid request may contain user data such as demographics, location information, device ID, and more.

2

The SSP then puts a bid request out to the exchange

3

The ad exchange passes the bid requests along to its integrated DSPs

4

The DSP evaluates the bid request and compares it to the campaign targeting parameters of its connected advertisers. The algorithms determine a bid on the ad impression for every advertiser with a matching campaign.

5

The DSPs send back what is called a bid response to the ad exchange. The bid response contains all the information about each matching campaign: the advertiser, the ad unit, and their preferred price for that ad unit.

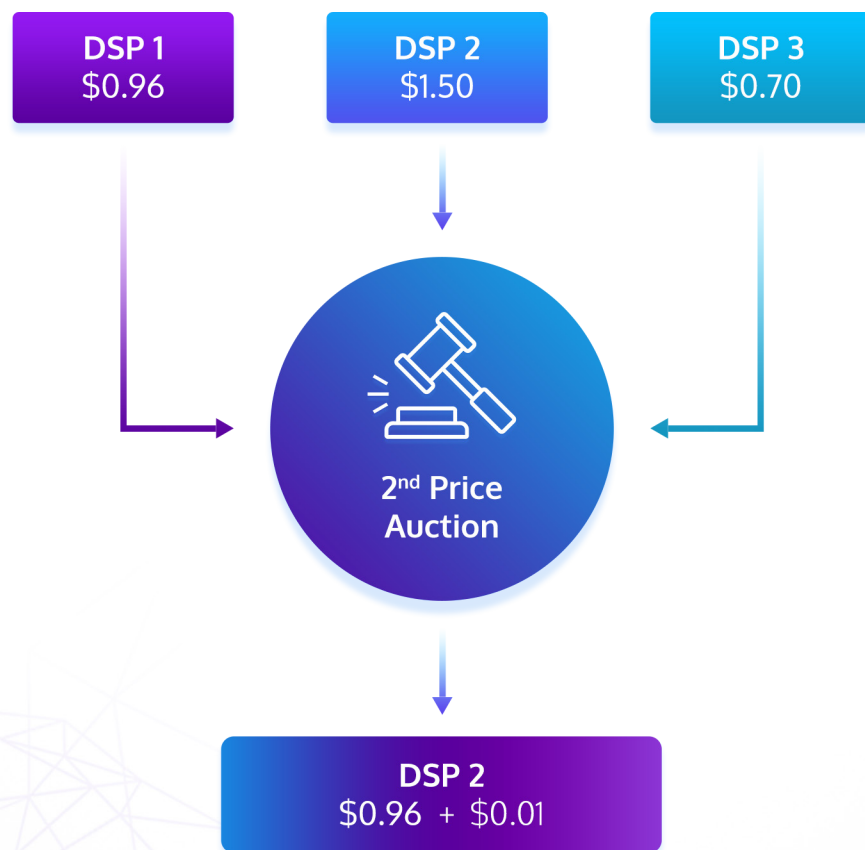
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The ad exchange runs the auction by comparing the bids sent by the DSP and other buyers against each other. The advertiser that wins the auction gets its ad served in the publisher's app.

This is the real-time bidding process in action. There are usually two ways to run a real-time auction: a first-price auction, or, a second-price auction.

## #7 What is a Second Price Auction?

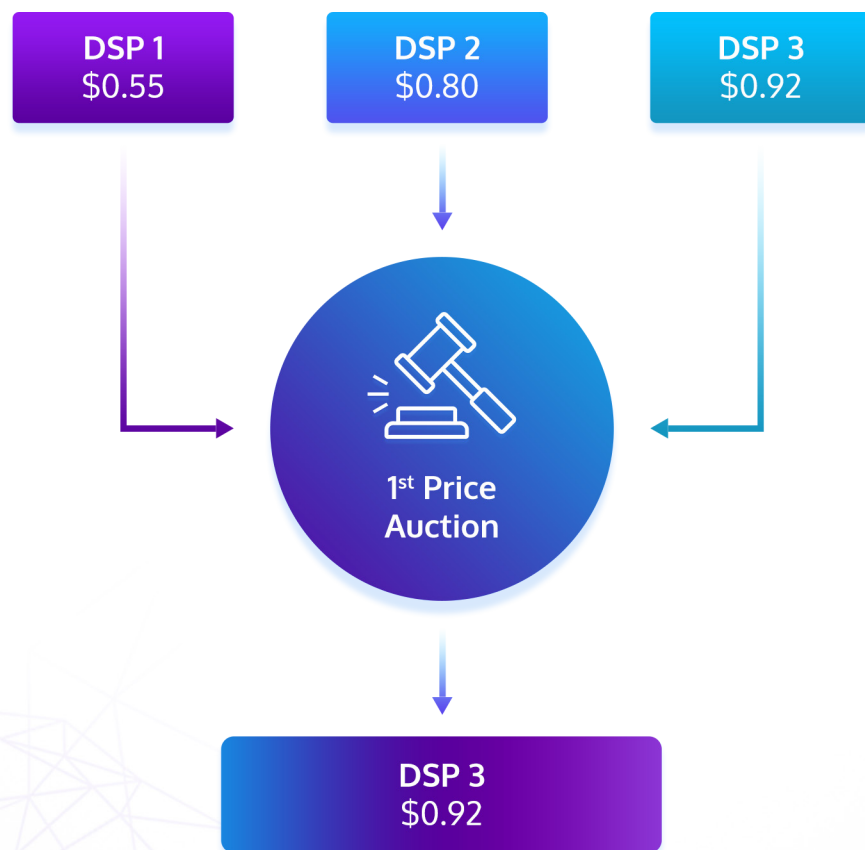
The second-price auction model has been the gold standard for auctioning inventory for years. Under this model, the buyer with the highest bid wins the auction but only pays slightly higher than the second-highest price (thus the second-price name). This often encourages aggressive bidding, given the likelihood that the successful advertiser will pay a lower price. While buyers often benefited from this strategy, publishers were not able to maximize the value of their inventory and sell it for its true value to advertisers.



## #8 What is a First Price Auction?

As the industry matures, more and more bidders like Aarki have begun to support the first-price auction model, which allows for a more simplified approach to auctions, although it requires more sophisticated bid models. Here the highest bid wins and the price is equal to the bid. change, i.e. the advertiser pays exactly what they bid in an auction.

In other words, the main difference between first-price and second-price auctions is in the way the bids are finalized.

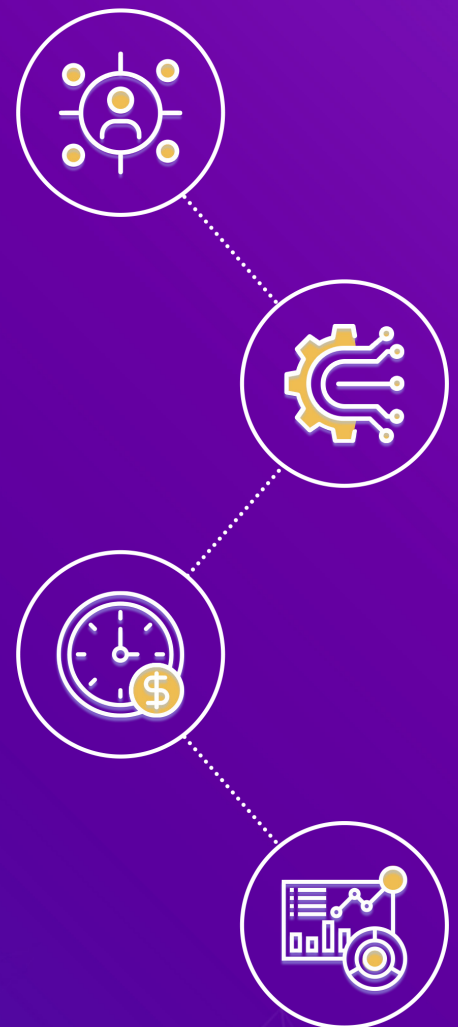




## #9 Advantages of Programmatic Advertising

Now that you have a full understanding of the programmatic basics, we can summarize the advantages that programmatic advertising offers:

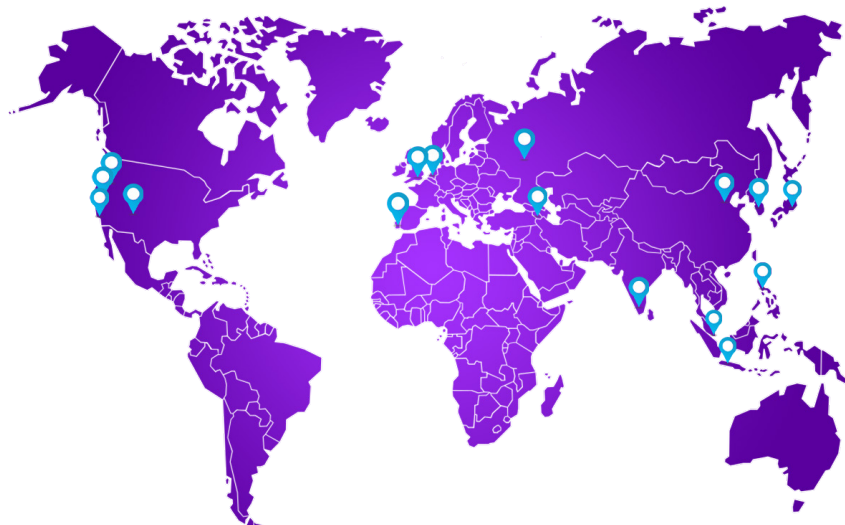
- **Advanced targeting capabilities** - The most revolutionary aspect of programmatic buying is that it allows advertisers to serve a specific ad to a specific audience. Advertisers can precisely determine which audience gets to see which ad and when.
- **Automation** - Digital ads are bought and sold in an automated manner in real-time and the process does not rely on manual insertion orders and manual trading.
- **Saving time and money** - Traditional deals require a manual campaign setup which makes the process slow and prone to human error. With programmatic advertising, the publisher does not have to set up any campaigns. Both parties also save time on negotiating prices - in programmatic, inventory prices are decided in real-time through an auction where various publishers and/or advertisers can participate.



## #10 Why Partner with Aarki for Your Next Programmatic Campaign

Aarki is a 100% real-time bidding (RTB) demand-side platform (DSP). It helps companies grow and re-engage their mobile users through our machine learning, big data, and large customer reach. We strive to deliver performance at scale across different marketing objectives to meet the our clients' return on investment goals. Our data offers deep insights into user intent and usage habits. To drive performance, we activate our data assets through proprietary machine learning algorithms and engage users in real-time with personalized creative.

Using our integrations with all the major global exchanges for RTB, we can access nearly all of the global mobile inventory from our five data center locations.



Aarki has been recognized by The American Business Awards, Red Herring 100, Internet Advertising Competition, Deloitte's Technology Fast 500, The Drum Advertising Awards US, Horizon Interactive Awards, Effective Mobile Marketing Awards, The Wires by Exchange Wire, and Artificial Intelligence Excellence Awards.

For more information, please visit [www.aarki.com](http://www.aarki.com) or follow us on Twitter: @aarkimobile.

