

# Programmatic Advertising Architecture

Traditionally programmatic advertising is also called as online advertising. Programmatic advertising includes real-time bidding as a part of its solution.

Programmatic architecture allows advertisers to deliver a personalized ad with the help of DMPs(Data Management Platforms) that store a user's information such as age, demographics, and location.

- Programmatic advertising is the automated buying and selling of online advertising
  - This automation makes transactions efficient and more effective, streamlining the process and consolidating your digital advertising efforts in one technology platform.
  - Targeting tactics are used to segment audiences using data so that advertisers only pay for ads delivered to the right people at the right time, and depend less on the "spray and pray" method of digital advertising

Gliffy

Note that **RTB = Real-Time Bidding**

You may often in confusion to distinguish SSP and DSP. Basically those two things are designed for advertising. We can simply think **DSP is for advertiser** and **SSP is for application/web site owner**.

## Supply Side Platform (SSP)

- SSP is for web/app owners
- A technology that enables web owners to manage their ad impressions inventory and maximize their income from digital media.
- SSP is used by web owners to maximize their revenue and offer ad impressions for sale to many ad exchanges and DSPs directly

## Demand Side Platform (DSP)

- DSP is for advertisers
- A platform that allows advertisers to buy multiple ad spaces from different publishers.
- DSPs helps online marketers and advertising agencies to access the best ad spaces. This is through audience targeting and sorting the web content through their parameters.
- DSP makes the searching and analyzing of the audience segments (location, gender, age, income level, etc.) fast and effective cheap thanks to automation, which boost ROI.

## External References

<https://www.iab.com/> - IAB(The Interactive Advertising Bureau) is one of the popular websites can get good information. Some people ignore / make a fool if you have no information about iab and its events as long as you work on advertising industry.

## Technical Elements for Programmatic Advertising

- **Android AADs, Apple IDFAs, Safari & Firefox IDs** — There are various type of Identifiers widely used in AD Tech or Audience Measurement Industry - IDFA, AAID, Hashed Device ID, Safari ID, Firefox ID and etc. Unfortunately these formats are not compatible each other except IDFA and AAID. The difference between IDFA and AAID is lowercase/uppercase in Latin characters.
- **ATD(Agency Trading Desk) Architecture** — ATD(Agency Trading Desk) is a kind of Advertiser solutions that uses DSP(Demand-Side Platform) as a tool. Trading desks are media buyers and re-sellers within an ad agency that help advertisers execute programmatic media buys.
- **DMP(Data Management Platform) Architecture** — DMP(Data Management Platform) is used by digital advertising buyers and publishers to store and manage audience data, often from multiple sources.
- **DSP(Demand-Side Platform) Architecture** — A Demand-Side Platform (DSP) is a real-time bidding system that connects media buyers with data exchanges and Supply-Side Platforms(SSPs) through a single interface.
- **False Positive Error** — A false positive error, or in short a false positive, commonly called a "false alarm", is a result that indicates a given condition exists, when it does not.
- **ITD(Independent Trading Desk) Architecture** — ITD(IndependentTrading Desk) is a kind of Advertiser solutions that uses DSP(Demand-Side Platform) as a tool.
- **SSP(Supply-Side Platform) Architecture** — SSP(Supply-Side Platform) is a kind of publisher solutions as a centralized platform to sell/manage inventory, access many advertisers, DSPs, etc.
- **VMAP for Video Ad Insertion** — Video Multiple Ad Playlists (VMAP) are used to return multiple video ads to be played during a video. It offers content owners control over the placement and timing of ads, especially when they lack control or ownership of the player.

