

# THE IAB EUROPE GUIDE TO SUPPLY PATH OPTIMISATION

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## The IAB Europe Guide to Supply Path Optimisation (SPO)

“Supply Path Optimisation (SPO) & Demand Path Optimisation (DPO) is a valuable skill worth investing in, for any organisation across the supply chain. It ensures efficiencies right across the chain, from cost, an improved win rate, and a better yield right through to greater reach across quality inventory or audience. The key to success is to understand and own your SPO or DPO strategy and to place your business interests at the heart of the strategy. This updated guide will take you through the requirements for, and the basics of, SPO & DPO, and will enable you to ask the right questions, to either start your SPO or DPO journey or help strengthen your current strategy.”

*Nick Welch, Head of Programmatic and Publisher Development, IAS and Chair of IAB Europe’s Programmatic Trading Committee.*

## Section 1 – Introduction & Background

Supply path optimisation, better known as SPO, may be considered another acronym used in the ad tech industry, but it is, in fact, one of the most effective ways to cut through the noise between media buyers and publishers. 87% of brands, agencies, and demand-side platforms (DSPs) actively implemented SPO, according to a 2019 [survey by PubMatic and Digiday](#). Brand safety, cost efficiency, reduced fraud, and improved KPIs were cited as the main benefits.

SPO is an umbrella term that can mean different things depending on the audience. The term SPO is originally attributed to Brian O’Kelley, AppNexus’ co-Founder and former CEO, who first introduced the term in 2016.

### 1.1 Definitions

While the term ‘SPO’ has been used to refer to different parts of the supply decisioning process, for the purposes of this Guide, we define SPO as ***‘a process in which multiple variables are assessed to drive buyers towards the most efficient buying path’***.

One could call SPO an attempt to unravel the complexities of the programmatic supply chain to enhance the transparency and trust that was previously offered by direct publisher relationships whilst maintaining the extensive benefits of programmatic trading.

A quick look at the history of digital advertising has seen it rapidly evolve from direct publisher relationships and IO based buying to the rise and fall of ad networks, before the more recent transition to programmatic real-time trading using supply-side platforms (SSPs)/exchanges and DSPs. While this shift has made digital trading more efficient and effective, it has also shifted the direct relationship advertisers and agencies historically had with publishers to intermediaries such as SSPs responsible for supporting the programmatic ecosystem.

In recent times further disruption has occurred. Where traditionally each SSP would have mainly exclusive publisher relationships, the advent of header bidding democratised inventory access and allowed publishers to cast a wide net, while working with numerous SSPs simultaneously on a level playing field. This, in turn, allowed them to increase their auction liquidity and open access to advertiser demand. While header bidding delivered many benefits for publishers and advertisers, it also delivered the unintended consequence of further moving them away from buyers, while adding more complexity to the ecosystem and the supply path.

Increased sophistication and complexity of the programmatic ecosystem have led to less transparency and more opacity for advertisers and agencies, specifically related to the fees charged by intermediaries. As early as 2017, CMOs started demanding to know how many media dollars flowed to publishers vs. the ad tech layer. As they dug deeper, savvy advertisers started to find undisclosed fees introduced by some SSPs, which were charging both publishers and advertisers, while inflating their profit margins. Under (legal) pressure SSPs quickly removed undisclosed buy-side fees in an effort to restore goodwill with both publishers and advertisers. This gave rise to calls for transparency. SPO was born, and an increased amount of scrutiny was levelled at the supply path.

One particular call to action was ISBA's publication of the ['Programmatic Supply Chain Transparency Study'](#) asking - in theory - simple questions about what a typical supply chain looks like and how value can be assessed. The key findings included just 51% of spent revenue typically ending up with a publisher, a 15% 'unknown delta' of spend disappearing out of the ecosystem and campaigns typically appearing on a whopping 40,000+ sites.

In order to really understand SPO and all of its different aspects, it is important to understand the history of auction dynamics and the changes that have led to the rise of this technique.

## 1.2 The Beginning

Given header bidding's popularity, it can sometimes be difficult to remember that it is still a relatively new technology. In fact, it was just a few short years ago that the monetisation technique was first introduced to help publishers allocate their inventory more efficiently. Header bidding was created to address a big pain point in programmatic advertising: publisher ad servers have historically been unable to efficiently evaluate bids from multiple demand partners at once. Instead, an ad server would offer an impression to the publisher's various demand partners one by one, awarding the impression to the first that met its decisioning criteria – usually based on a mix of factors like revenue, campaign targeting preferences, and how often or recently the user had seen the ad in question.

This worked fairly well when publishers were only running direct campaigns, as it was easy for them to prioritise campaigns based on the static CPMs they had agreed to in advance. But once publishers started adding programmatic partners that bid a different CPM for each impression, the ad server became woefully outdated. It had no way of price-prioritising these new demand partners without knowing in advance what CPM value they would bring. To make up for this shortcoming, publisher ad servers were built with decisioning logic commonly referred to as “waterfalling”, which was wholly inefficient in light of the sprawling new ecosystem.

## 1.3 The Evolution of Bidding: From Waterfall to Header Bidding

In a waterfall setup, publishers use historic performance to estimate the revenue per impression they'll get from each of their programmatic partners. That static value determines the order in which those partners are offered impressions. But since programmatic buyers produce a different bid for every impression, there's no way of knowing whether the first partner in the waterfall is actually the one prepared to offer the highest bid. In many instances, this has caused publishers to sell impressions at a lower price than what a partner further down the waterfall would have been willing to pay. Every time this happens, publishers lose revenue that could have been theirs and buyers miss out on potentially suitable impressions.

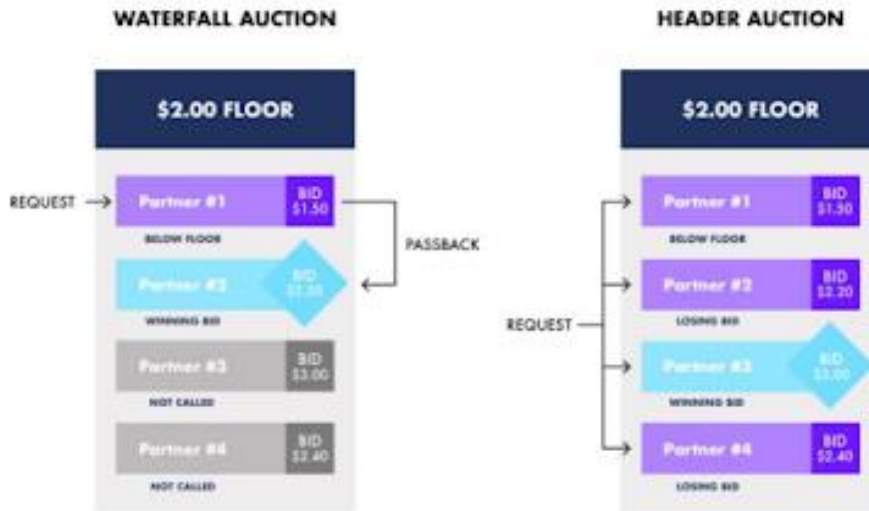
These problems were compounded by the fact that many publishers were using ad servers owned by companies that also ran programmatic exchanges. These companies favoured their own demand with last-look privileges and opaque auction logic, so publishers couldn't see for themselves if these vendors might have given their own exchanges an unfair advantage. This limited competition meant lower CPMs for publishers and even prompted some media buyers to stop participating in auctions altogether due to their low chances of winning, depressing CPMs even further.

It wasn't long before header bidding was introduced as a solution. Header bidding allowed publishers to ditch the waterfall and have all of their demand partners - both direct and programmatic - compete against one another on an even footing and in real-time. Furthermore, Publisher Ad server setups were becoming ever more complicated due to the increased use of passbacks - often with additional splits for mobile, Geo, Video, and other variables. Header bidding solved a lot of these challenges in one go by removing the need for these passbacks.

Header bidding is a monetisation solution that allows publishers to source bids from all of their demand sources at the same time by making ad calls to them simultaneously. This eliminates the inefficient hierarchy of the waterfall, ensures that every demand partner gets a chance to bid on every impression and increases yield for publishers by allowing greater competition. After those simultaneous ad calls, the header bidding process varies depending on what solution the publisher is using. Many header bidding solutions then hold a first-price auction in the header of the page and then send the winning bid to the publisher's ad server.

Other solutions, including pre-bid, don't hold an auction at all, but instead simply pass all bids through to the ad server. Regardless of where the auction takes place, the ad server then has to decide whether it should award the impression to the winning header bidder, to the ad server's programmatic demand, or fill it with creative from an existing direct campaign. Of course, for all that header bidding has brought to publishers and advertisers these past years, it wasn't quite perfect from the start.





*Diagram: Waterfall and Header bidder auction flows*

### 1.4 A New Challenge With Header Bidding: Many Requests, One Dsp

Header bidding, although a vast improvement over the traditional waterfalling method, has issues and inefficiencies of its own. Header bidding requests are sent by publishers to multiple SSPs, but the SSPs then may each forward those requests to the same DSPs – effectively multiplying the exact same ad request.

Buyers usually try to find the most efficient way to place their ad on the publisher's website, apps, and other owned properties. However, many different routes lead to the publisher inventory, often at different prices and with varying value adds, like transparent fees, performance and viewability measurement.

The below example highlights the complexities that arise through working with multiple, overlapping supply paths. A manufacturer of athletic footwear would like to target women who run marathons with their ads on a specific sport and fitness website. SSP number one only offers video inventory for the homepage in question.

SSP two has the searched domain available but through different resellers. SSPs three and four seem to have a direct relationship with the publisher and are able to fulfil the needs but have non-transparent fees. The right way is therefore unclear at first and the number of different channels through which bids can be placed on a particular inventory is large. In addition, an advertiser may bid on the same publisher's inventory through different SSPs. In this case, he is unknowingly bidding against himself, thus creating artificial competition that drives up the price.

### **1.5 Preventing Bad Behaviour in Header Bidding: SPO - Algorithms based**

SPO is a dynamic decisioning model to reduce path duplication, discrepancies, and integration quality, all to determine a buyer's optimal path to supply - pushing for full transparency. There are multiple variables taken into consideration when deciding whether a supply source should be 'SPO-ed'. Technology platforms use algorithms that cluster by inventory type (Web, App), media type (Video, Native, Display, Audio), domain and geography. This way, special components from publisher inventory can be identified. Additional metrics can be used to better understand the path and classify the inventory; such as impression requests, placement levels, eCPM, viewability measurements, discrepancies, and the winning rate of bids.

Taking these variables into account, SPO determines the path for the aforementioned athletic footwear brand that reaches its desired target group, with the best price and low fees.

SPO is an application area of machine learning, which relieves the trader of digital advertising micro-optimisations in campaign control. However, it is important that DSPs also provide buyers with manual SPO controls to override any algorithmic SPO decisioning so that their media buying behaviours across trading teams and business lines are enforced and followed for strategic alignment from top to bottom.

## 1.6 A more strategic approach to SPO

Recently we have seen buyers evolve their SPO strategy through consolidation efforts. Buyers are in a process of evaluating their SSP partners to consolidate incoming bids and deepen relationships with partners who bring more value, quality and transparency. Buyers are also seeking to understand and control the specific paths (combination of sellers, resellers, integration type) they are accessing certain inventory through in order to drive spend more efficiently through the paths that are delivering value.

With the intention to take back control of a diverse supply chain and drive results, buyers become closer to the sell-side, thus increasing collaboration and innovation across the industry. This new tactic favours the sell-side too, who benefit from exclusive partnerships and priorities to maximise the yield of their inventory and a less complex, more efficient ad-tech ecosystem.

Another new component of SPO is the development of supply-side control and optimisation from a delivery perspective, whereby agencies and clients are starting to utilise SSP platforms to build curated marketplaces to control their own supply chain from an activation, investment and management level, this includes levers for pacing and delivery.

While marketplaces themselves are not a new concept for digital advertising, curated marketplaces are - they allow buyers, sellers or third parties in the media space to implement their supply strategies and leverage their core assets within a broad ad exchange. This allows them to effectively build a private SSP and solve a host of core challenges for buyers by having closer relationships with publishers and a simpler, more transparent path to their inventory.

In addition, agencies and clients are now becoming interested in log-level data and the benefits of understanding their own auction mechanics and outcomes. These insights can inform future decisions on suitable strategies to help increase productivity and efficiencies across a client's programmatic spend. This is a new element to SPO; with the first stage about accountability and transparency and the second stage about insights, control and activation.

*Find out more about how SPO works in section 2 - SPO 101.*

## Industry Insight - SPO Progress

87% of brands, agencies and DSPs are actively implementing SPO, whilst 71% of are planning to consolidate the number of supply-side platforms they work with but are still forming their strategy (PubMatic State of the Industry Report, September 2019). The biggest challenge according to 76% of brands, agencies and DSPs, is that there is a lack of support internally and it is not a company priority.

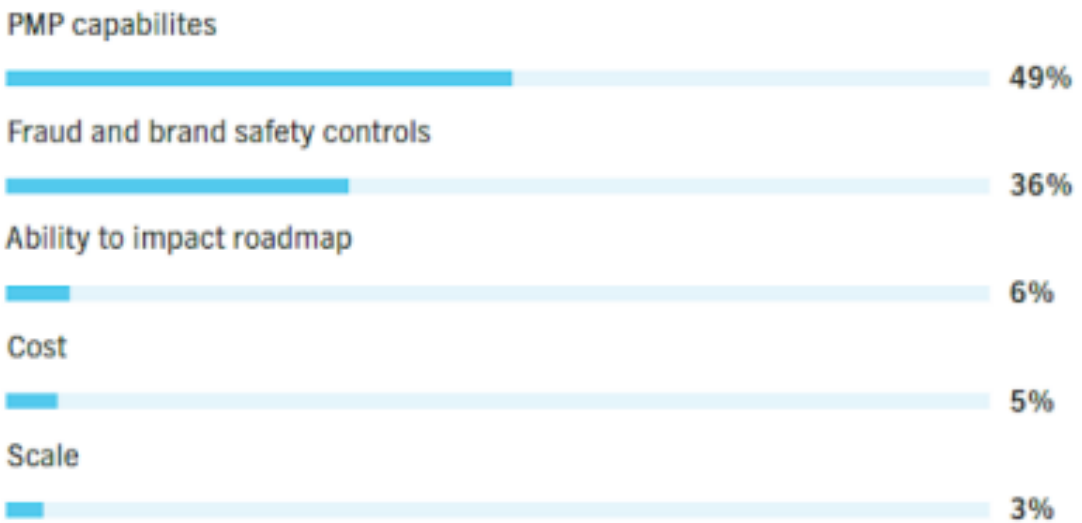
Private marketplace (PMP) capabilities (49%) with fraud and brand safety controls (36%) are the most important factors when selecting SSP partners for SPO purposes. And while relationships with SSPs are “about the same as before” for 46% of buyers, 54% indicated that they communicate more with SSP partners as a result of SPO.

### CHALLENGES TO IMPLEMENTING SPO



Q: What is your biggest challenge in implementing SPO?

### PRIVATE MARKETPLACES ARE AN IMPORTANT FACTOR FOR BUYERS WHEN SELECTING SSP PARTNERS FOR SPO



Q: What is the most important factor in selecting your SSP partners as you consolidate for SPO purposes?

## Section 2 - SPO 101

At its core, supply path optimisation (SPO) is a method for improving advertising outcomes by minimising the number of exchanges with whom a buyer or advertiser works to achieve the most efficient path to ad inventory. Such improvements fall into four, key categories: greater innovation, savings, increased trust and transparency, and an optimised user experience. It allows buyers to assess the effectiveness of their supply-side partners (SSP) and identify opportunities for more transparency and innovation in their bidding processes.

### 2.1 What SPO Enables

**Economic Control** – SPO can extend the impact of a buyer’s ad spend by ensuring addressability of their open market investments, providing transparency into the fees that various SSPs charge, the efficiency and effectiveness of the technology provider’s auction dynamics, the level of direct connections with publishers.

**Quality Control** – Buyers can significantly mitigate fraud as part of their SPO initiatives by using a combination of ‘allow’ lists, exchange filtering and the presence of an Ads.txt file. Many buyers have now reduced the number of exchanges they trade through by half as they look to work only with well-known parties, rather than listening to the bid stream of every exchange with which a DSP is integrated.

**Concentrated Innovation** – When each SSP integrates with over 100 DSPs, and each DSP, in turn, works with over 100 agencies, collaborative product innovation is difficult at best. By forging meaningful partnerships with independent SSPs, agencies can incentivise their ad tech partners to build custom technology.

**Buying Leverage** - Ad spend from a single buyer has historically been spread across many SSPs, making it difficult to leverage any real buying power to influence price negotiations with supply partners. Even if they could, the impact is only significant if larger portions of spend are attributed to those partners with preferred pricing. Buyers are consolidating ad spend to fewer SSPs in order to grow partnerships to a level where price negotiations can create value for both the buyer and sellers.

**Holistic Insights** – Understanding one programmatic SSP auction is difficult. Each additional SSP auction analysed adds exponential complexity to the point where gaining real insights across multiple auctions is not possible. By consolidating spend on fewer programmatic partners, buyers can obtain visibility and better leverage available insights to improve their business efforts.

**Control Over Behaviour** – Simplicity breeds accountability and simplicity is at the core of SPO. By rewarding supply partners that continually act in accordance with their interests, buyers can positively impact advertiser ROI.

**Responsible Media Investment** – greater control over the supply chain to focus spend on trusted media partners including publishers reaching diverse communities

SPO boils down to this: in a programmatic market with vendors selling the same impressions, savvy buyers know which sellers to pick and why because they have data on the best route to them and what a fair price is to pay for ads. It's a simple concept that's deceptively hard to execute.

Early attempts at SPO were neither sophisticated nor straightforward. In the past, the process was manual; buyers would have to go to extreme lengths like shutting off or opening up entire exchanges to find out who they bought from. It was a practice reserved only for the smartest programmatic buyers. It paved the way for a certain kind of SPO that let buyers buy impressions from a handful of trusted ad tech partners.

## 2.2 SPO Misconceptions

Below are some of the common misconceptions of supply path optimisation:

**Reduced access to supply** - A smart SPO strategy allows buyers to access all types of quality ad inventory. Buyers only risk limiting their access to supply if they cut off certain SSPs based on criteria such as fee negotiations or volume discounts. It is important to make more sophisticated considerations when negotiating with sellers such as brand safety and more efficient access to media.

**Missing out on a new format** - In order to ensure you are accessing the right formats, consider how different types of sellers aim to add value and which of those approaches are most consistent with your current and future campaign strategies. Ultimately SPO is a long-term strategy which needs to be constantly adjusted and optimised. The focus needs to be on making sure the right media at the best possible price is accessed to execute against advertisers' KPIs and satisfy specific format requirements.

**SPO is a manual process in a world of automation** - Analysing, tweaking, cutting and negotiating - SPO can be a manual process; this is true for early attempts of running an SPO strategy. However, we are now seeing more improvements in the industry via initiatives such as sellers.json and SupplyChain Object which allow a more informed approach to SPO. DSPs and buyers who can benefit from proprietary artificial intelligence technology are also focusing on building new tools and algorithmic methodologies to provide better buying control over their access to media.



## Section 3 - SPO for Advertisers and Buyers

### 3.1 An Overview

First and foremost, it is important to remember that, in programmatic, sometimes less is more — particularly when it comes to tech partners — and consolidation often leads to accelerated innovation. Ultimately, fewer pipes can economically push more value by taking less from the buyer or advertiser.

SPO is a powerful way for buyers to control their buying paths and strengthen their supply relationships. The goal of SPO is for buyers to access the inventory that matters most to them – consolidating around the buying paths that are low cost and transparent and ultimately increase their buying power.

Successful SPO begins and ends with optionality: understanding how brands and advertisers can achieve their desired business outcomes by working with the right partners, and the right pipes. Buyers want to maximise working media in relation to transaction fees. It's this type of thinking, this type of innovation, that is going to open buyers and advertisers up to better campaign outcomes and return on ad spend.

Further, in order to establish a more transparent, innovative digital environment, we have to start by clarifying and exposing the inner workings of the supply chain. Many buyers across the ecosystem are forging relationships with SSPs and exchanges for the first time ever. As a result, advertisers and buyers have begun to build a more trusting relationship with programmatic players on the sell-side. The capacity to build trust with selected partners, to differentiate between transparent and non-transparent participants, is one of many ways in which supply path optimisation can help boost trust and transparency (not simply for buyers, but for the ecosystem at large).

## **Audits & Adopters**

Not all exchanges are created equal, nor are they all designed to bring transparency and accountability to the market. Buyers, including agencies and advertisers, should be able to conduct audits on their partners at any time. They should choose partners that are willing participants and early adopters of initiatives focused on trust, such as log-level data, ads.txt and app-ads.txt, sellers.json.

Log-level data (including supply transparency data such as SupplyChain Object and Sellers.json data) is an extraordinarily powerful tool for assessing which partners are providing value. It refers to a programmatic-based method of accessing nonaggregated data for all events on a platform, providing a receipt for every transaction on a given exchange.

Advertisers and buyers across the ecosystem must ask their partners tough questions, ensure they know where every working dollar of media is going, and conduct audits evaluating seller data, cost and performance, with the ultimate goal of working exclusively with partners who support their values.

## **Better User Experiences**

It is also important to note that the most imperative component to building trust and supporting innovation is delivering a crisp, clean, and consent-driven experience to the end-user — a user who is craving more and more control over their data and digital interactions. SPO is traditionally positioned as a purely economic factor, but speed and time are also key currencies. If one path can move faster, it will ultimately make for a better user experience and earn more trust (and money) for the advertiser, buyer, or brand.

## **3.2 View from an Advertiser - Vodafone Italy**

For Vodafone, having partners who are able to analyse the media inventory buying data and make it usable in a simple way, allows us to have greater transparency of the supply chain by shortening the distances that we have with SSPs and individual publishers. Having more transparency and a full-fee view over what and how we are buying, reduces the number of times we unknowingly bid on the same impression and compete against ourselves.

With the same investment on a particular campaign, thanks to the SPO, we are able to make Vodafone's media buying more efficient by working to increase the win rate on the impressions that will achieve our campaign goals and increase our understanding of when it is more convenient, for us, to buy via header bidding or second-price auctions.

At Vodafone, in particular, we are working closely with PubMatic to start testing SPO by using a bid shading tool to make our media buying more efficient. To make SPO work, it is essential to rely on consolidated and qualified partners in analysing and interpreting data as one of the biggest risks, for an advertiser, is precisely that of not being able to read the amount of data from the log level data and find the relevant insights.

## **3.3 SPO Step-by-Step Guide For Buyers**

Getting started with SPO can, at times, feel challenging for buyers. However, success with SPO involves making important choices such as which exchanges to keep and which to cut.

It is therefore recommended to break the process down into bite-sized pieces and tackle it in phases like the five-step plan below:

### **1. Plan**

An effective SPO plan will be closely aligned with a buyer's existing supply strategy and will fit with the modern programmatic supply dynamics. The foundation of a strong plan is built upon creating relevant criteria; and a tangible adoption plan for your team.

## **2. Internal Assessment**

Undertake an internal audit to understand how things are currently working so you can establish your SPO goals. Questions should include: Are you able to allocate all of your spend? Is that important to you? Who are your trusted partners whom 80- 90% of your spend should go to? Does the SSP that you're looking to do SPO with have solid coverage across your preferred publishers? What is your strategy around open market vs. private marketplace? Are you planning to buy specific inventory through specific SSPs? If so, why? Tip: Be as specific as possible. The insights gained here are important as they will be the early identifiers of your eventual SPO goals.

## **3. SSP Evaluation**

Once the internal audit is complete, it's time to look at the SSPs and exchanges that you're planning to work with. Evaluating your supply partners is an important step – it allows you to understand their differences, measure their willingness to share data and quantify any special or unique values that set them apart.

It is important to work with the supply partners that can provide the demand tools for you to buy with confidence and manage high-quality ad campaigns at scale across ad formats and channels. These tools are essential to buyers' deal health intelligence and can help to make smarter, faster decisions that increase campaign performance and help you build the bridge between the publisher's inventory and demand.

Look into partners that can offer self-service options and private marketplaces as these will give you more flexibility across your media campaigns management. Ask your partners if they can identify and provide solutions to futureproof your business, especially in a post third-party cookie world. Tip: Measure equally. This will ensure you arrive at any unique selling points fairly.

#### **4. SSP Consolidation**

The data and insights gained at this stage can be used to inform your consolidation strategy. Consolidation is what will ensure greater efficiency as you will be green lighting and only working with the SSPs and exchanges that you have identified as having the potential to be long-term partners.

By leveraging the SPO criteria created in steps 1 and 2, buyers can make these consolidation decisions systematically, with due diligence. Each step along the way, buyers should validate delivery and performance goals until buying is fully migrated to their chosen partners. Ensuring internal adoption of the new supply approach going forward will be critical before moving to the final step.

*Tip: Relationships are key.* As a buyer, you want to be able to inform your DSP which supply partners you want to work with and why. The strength of your relationship and knowledge of your decision will ensure greater collaboration across all the participants in the supply chain.

#### **5. Ongoing Optimisation**

This is a constantly evolving industry so it's perfectly normal for your SPO strategy to evolve. Learning as the process evolves is essential to ensure that your chosen SPO path continues to deliver against your goals. This is why it's important to choose supply partners that will work in partnership to meet your changing requirements.

*Tip: Remain flexible.* Continue to monitor your progress and also your performance against key metrics. While building and maintaining relationships with your chosen supply partners is likely first priority, don't forget to consistently appraise your SPO over the long term.

SPO is set to be central to how ads are bought in online auctions moving forward. Done well, SPO can create real differentiated value for a business and potentially save real money. Brands should be prepared to dig into the weeds, ask questions, demand data and challenge assumptions about optimal supply sourcing, even their own. Ultimately, a successful SPO strategy should achieve the same or better KPIs but allow brands to transact at lower prices.

### 3.3 Step by Step Guide Overview - Consolidate to Reduce Complexity and Partner to Gain Control



Graphic: Magnite

## Section 4 - SPO for Intermediaries

### 4.1 Supply Side Platforms (SSPs)

There is a commercial benefit for SSPs becoming more involved in media planning and activation. SPO enables SSPs and their clients (the publisher) to showcase the value of their technology and the benefit it brings to the ecosystem.

These stronger partnerships with agencies and clients will benefit all parties and help shed light on companies that strive to bring visibility, transparency and accountability to the supply side. This will ensure agencies and their clients can choose to work with supply platform partners that not only meet their own requirements but also their publishers'.

DPO (demand path optimisation) is becoming a much more prevalent topic as SPO matures (see section 5 for more information on DPO). SSPs play an essential role in enabling media owners to maximise the monetisation of their ad inventory and ensure limited wastage, and latency, and even help control and detect ad fraud. It is imperative the demand-side understands this value chain and uses SPO as a force for good and not only for commercial gain.

The digital advertising chain can seem complex but is in fact, quite simple; a DSP is used by agencies and clients to manage and execute advertising campaigns, and an SSP is used by publishers to manage their advertising inventory. The two platforms work harmoniously together.

Now to the future and the next stage of evolution in the programmatic advertising industry. The development of supply-side marketplaces will be significant when agencies and clients utilise an SSP to have full control over their supply management from a delivery and commercial aspect. This could be in a self-serve user interface (UI) or a managed service solution.

Transacting this way will enable consolidation and efficiency around media buying and activation but also enable greater control and insights for planning and buying purposes.

## 4.2 Demand Side Platforms (DSPs)

A DSPs approach to SPO is to ensure that advertisers can find the most efficient paths to high-quality, high-value inventory that meets their goals. Good SPO allows for a DSP to listen to more supply at the same time as providing clients with transparency and controls over their buying path. Where DSPs are connected to a large number of SSPs, ongoing analysis has shown that four to six paths for the same inventory is more than sufficient to ensure top performance for advertisers and allows for sufficient domain duplication.

SPO can also help DSPs to manage their queries per second (QPS) allocations and minimise the path between the advertiser and the publisher. Done in collaboration with SSPs and as an iterative process, SPO helps DSPs to focus on uncovering more high-performing inventory opportunities and increase efficiencies.

A DSP should not however be conducting SPO within a Blackbox. The challenge would be that it would only make decisions based on the information available. Supply pricing and accessibility are constantly shifting buyers' external intelligence and the technology of programmatic transactions can in itself lead to technical hurdles. None of which can be fully taken account of in silo.

Whilst SPO does provide DSPs with benefits it is primarily there to be harnessed by buyers to help meet their goals and provide more value for the media they are buying.

The transparency of the supply paths available via a DSP is critical for buyers to be able to make appropriate decisions, as well as auction type and industry standards i.e. ads.txt. . DSP bid shading can additionally provide automated efficiencies. The transparency provided by a DSP should allow for domains to be selected alongside multiple dimensions and provide the necessary controls to act upon these insights. By providing this deep level of transparency, a DSP has an opportunity to provide the buyer with the means to use data-driven decisions to scale activity whilst minimising wastage.



Where DSPs are focused on meeting advertiser goals and SSPs are focused on increasing publisher yield, there is definitely a path for DSPs and SSPs to collaborate more on data sharing to help with SPO decisioning. This requires ongoing management to ensure that all parties in the supply chain are held accountable for SPO decisions and an acknowledgement that the “best supply path” is dynamic.

## Section 5 - DPO for Publishers

DPO enables publishers to better understand and exercise more control over their supply chain and follow a longer-term strategy focused on key KPIs such as revenue, yield, ad quality and control of the sale of their inventory. Publishers have historically adopted a 'plug and play' approach to ad tech and should work to understand the benefits each partner brings to the table against set objectives. The huge growth in the ad-tech ecosystem and 'Header Bidding' have enabled many more routes to market, loss of control, lack of transparency, and complexity.

The 'rule of thumb' was that more ad tech partners equal more revenue. However, the ecosystem has evolved and a more strategic approach is needed to maximise effectiveness.

### 5.1 When & How Should you Implement DPO?

When publishers have the choice between simplicity or adding additional revenue opportunities, they have traditionally chosen the latter. As time passes, the more complex supply chain leads to inefficiencies within the tech partner matrix, reporting, and user experience. DPO allows publishers to make use of organised data and insight to simplify operations and walk back those decisions that are not providing desired results and focus on a given set of KPIs.

These optimisations also improve site performance and user experience in ways that lead to increased ad performance and yield. The bloat that tends to come with programmatic inventory introduces page load concerns which teams have to manage on a daily basis to ensure it doesn't impact user experience. Part of DPO involves understanding and removing the complexities that cause those concerns.

Publishers have tried to improve monetisation performance by changes in their setups, new technologies and bringing in incremental demand sources. Demand partners also have many of their own preferences, just as publishers have preferences for SSPs or exchanges, such as the quality of the inventory, efficiency of the purchasing process and many other factors.

Finding a starting point for DPO is often the trickiest part - what do I unravel first? This often follows the path of the famous adapted quote “I know half of my ad tech works, the problem is, I don’t know which half”.

Publishers should have a long-term focus on a given set of KPIs by the supplier in which to steer the direction of their DPO efforts. A weighted scoring matrix of each partner ensures an objective focus on these KPIs.

Understanding the SPO market tends to be a good starting point. Which agencies have SPO agreements with SSPs? Based on this information you can then start to make some basic evaluations.

### **Starting with the agency, publishers can consider:**

- Does this agency’s client base match my audience and content profile?
- How uniquely positioned are we to deliver these audiences?
- How many of my key programmatic clients buy via this agency?
- Do we have a strong existing trading relationship?
- Is there growth potential among the agency clients?

### **Looking at the SSP partners, publishers can consider:**

- What historical results have they brought us and how does this compare to other partners?
- Have we signed the transparency rider so if we partner we understand the full supply chain?
- What upside are they offering us to extend our relationship?
- Are their fees agreeable and comparable to the other SSPs?
- What level of transparency do they offer?
- What unique demand can they bring?
- What level of customer service do they offer?
- What is the likelihood of bringing low-quality ads?
- What controls do we have over the demand they bring?

## **Other key considerations for publishers include:**

- Are there any unique buyers within each exchange/demand partner?
- Have I engaged directly with these buyers to understand their needs including price, formats, volume, budget etc?
- How can I strengthen the ongoing buyer relationship and customer satisfaction?
- How can I preserve my user experience?
- How can I protect my rate card?
- Am I leveraging new tools such as live monetisation?
- How can I reduce latency?
- How will this partner present my inventory to the buy-side?
- What steps are taken to reduce conflict with my direct sales team?
- What is the tech roadmap of the partner? Does it align with my own?

## **Single, Automated View of Data**

Multiple supply partners mean an equivalent number of reporting sources that need to be understood in the aggregate to offer a comprehensive picture of their demand performance and work to set KPIs. Manually pulling these into a single viewpoint is cumbersome and time-consuming. Furthermore, partners often have different reporting standards (i.e. an 'impression' may have a different meaning between partners).

By investing time and effort into a single tool that will pull all of this together, on a daily basis, in a consistent format in an automated fashion and then create visualisations - the publisher will be able to more easily generate insight in order to drive forward demand optimisation efforts.

## **Scorecard for Objective Decision Making**

Making choices about which Supply Partners to work with can be done on an arbitrary basis or by over-emphasising certain factors such as personal relationships, length of partnership or an outsized ad tech 'brand'. Use of a scorecard - creating an agreed list of criteria and objectively scoring each partner against these on a 1-10 scale - gives a much more balanced, comprehensive and objective viewpoint to drive decisions. Also enables partners' progress and performance to be tracked over a given time period.

## 5.2 SPO Use Cases

### **Discover non-incremental SSP partners**

Many partners can lead to multiple challenges including supply chain complexity, increased page load time (poor user experience), reporting challenges, many integrations, replication of supply paths etc. Simply identifying and cutting out these non-incremental partners can have a positive effect on your operations and bottom line. By eliminating redundant relationships, you can also scale better with partners that offer the most efficient returns on your inventory.

### **Ensure real-time bidding variables are passed correctly**

When publishers utilise DPO they can make sure that they're not losing revenue due to incorrectly passed RTB variables. As an example, as a result of The General Data Protection Regulation (GDPR), real-time bid requests from advertisers involve two variables to be passed in the form of User.ext.gdpr and User.ext.consent. Both of these variables are simple to use, but in some cases can be passed incorrectly by your SSP and onto their DSP and agency partners.

If these variables aren't present or are incorrectly formatted, buyers may default to not bidding. DPO is a clear way to ensure you're receiving maximum revenue from the highest available bids while also following GDPR guidelines.

### **Optimise placements that utilise media quality metrics**

Publishers benefit when they efficiently deliver the right inventory to the right advertisers. As more advertisers and agencies rely on media quality measurement, publishers can find revenue by optimising their inventory delivery and placements. Early adoption of media quality data in your DPO strategy will prevent wasted impressions as buyers continue to base their decisions on these metrics.

## **Identify improved revenue-sharing opportunities**

DPO gives publishers the opportunity to truly understand their relationships with SSPs relative to each other. It may make sense for publishers to ask for a better revenue share if the DPO process highlights a value disparity. Through this practice, publishers could gain valuable footholds in negotiating better terms with buy-side platforms.

For example, if an SSP is presenting identical or very similar demand-side components to a publisher (same DSP partner sets, agencies, etc.) as other SSP partners, a publisher can argue for a more mutually beneficial relationship if there's an adjustment to the revenue share. This will increase the final bid presented in the PreBid or wrapper to increase the overall win rate and drive more revenue for both parties. SSPs may be blind to the similarity of their demand sources (and subject to the limitation of their demand team).

## **Ad Quality Control**

Having many partners allows more demand sources onto a publisher's website and increases the possibility of poor quality or fraudulent ads. By removing partners that are most frequently the conduit for these publishers can maintain higher overall ad quality and improve the experience for their users.

## **5.3 Benefits of DPO**

DPO is an optimisation-driven process with multiple benefits for both sides of the digital advertising ecosystem. Buyers want to be sure that their sell-side partners are doing their best to make it as convenient as possible to access and buy their inventory in an efficient and profitable way. Publishers, on the other hand, can increase revenue by making the buying process easier and more transparent and improving the user experience and their inventory quality, with limitation of latency, advertising clutter and technical issues usually associated with the overcomplicated demand paths.

The optimisation process can help publishers understand which partners are bringing the real incremental value and helping them to establish more direct connections with buyers. It also provides more trust and transparency across the buying process. Ads.txt has gone a long way to addressing some of these issues, but as an industry we must do more and publishers have the opportunity to take more control over the ad tech ecosystem. DPO / SPO gives us this opportunity. DPO should not be seen as a tool for the buy-side to be able to access inventory at a lower eCPM but as a tool to ensure the whole programmatic ecosystem works more efficiently.

When it comes to video inventory, this practice is even more important. Given the added tech complexity and emphasis on user experience and load times, DPO helps sell-side teams streamline the transaction process so the entire ad lifecycle is simpler. In some cases, publishers see that some ads fail to deliver, and this is often caused by high amounts of demand-side complexity. When analysed and simplified correctly, ad performance will improve and buyers will feel safer purchasing your inventory. This leads to more premium connected TV (CTV) and over-the-top (OTT) inventory that demands higher prices in the marketplace.

Whether analysing real-time bidding variables, media quality measurement, video delivery, or anything else, DPO can help publishers to reduce reporting complexity. The benefits of reporting are diminished when teams are in some cases receiving dozens of reports daily, forcing them to commit resources to sift through what they're seeing.

If publishers can simplify how their inventory is purchased, they will also see a simplification in their reporting. Empowering them to make quicker and more informed decisions.

## **5.4 Challenges of DPO**

Publishers with the biggest supply chains will find the greatest challenges - but also benefits - with a DPO approach. The more SSPs are involved, the harder it becomes to identify addressable issues. Add to that the fact that SSPs often engage in some form of DPO, there are many variables to consider.

**Data complexity and organisation** - Even among publishers that strive for simplicity, the nature of the programmatic industry has introduced an abundance of demand-side data. The opportunities that come along with this data are endless, but only if the ad operations team can effectively collect and normalise it. Between verification companies, SSPs and other ad tech vendors, in-house ad ops teams have a lot of data that needs to be organised to derive insight.

**Data transparency and costs** - Publishers have long yearned for increased data transparency, and until they begin to get it, the ROI of demand path optimisation will be limited. Compared to the more commonly adopted tradition of SPO, optimising the demand-side of your operations requires publishers to access new forms of data, often at the log level. Some of this data is locked behind closed ecosystems, or comes with additional costs from SSPs and other partners. How difficult it is to obtain the necessary data needs to be considered when deciding how to conduct DPO plans and which partners you should work with.



## Summary

Dramatic changes in supply dynamics are forcing buyers to reassess their supply strategy. While the rapid rise of header bidding has, on one hand, greatly expanded buyer access to inventory, on the other hand, it has created an explosion in duplicative buying paths that often erode buying power. Header bidding has increased traffic load (QPS) and led to a steep increase in complexity with the number of intermediaries and resellers in the supply chain growing. This in turn has led to increasing challenges around transparency and ad fraud.

Buyers have started to demand seller transparency and adoption of industry initiatives such as IAB Tech Lab's ads.txt / app.ads.txt, Sellers.json and Supply Chain Object, providing a way to tackle fraudulent practices and reduce the number of resellers or "hops" in the supply chain. Thus, the importance for buyers to work closely with trusted partners to leverage their advanced tools and technologies in order to capitalise on these new supply dynamics has increased.

This is where SPO offers critical help – enabling buyers to optimise both their buying paths and supply partnerships. SPO allows them to hone in on the buying paths that are low cost, transparent, and high quality. Done well, SPO can create real differentiated value for a business and potentially save real money.

This guide is designed to educate all stakeholders on the importance of a good SPO strategy and implementation. It encourages all stakeholders to dig into the weeds, ask questions, demand data and challenge assumptions.

Ultimately, to continue to drive trust and investment in programmatic advertising, it's important for all stakeholders to be transparent and collaborative. We hope this guide enables you to start and maintain that journey.

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