Understanding Ad Exchanges

Ad exchanges are the platforms that power programmatic advertising, the most popular method for buying and selling digital advertising. Here’s a look at how ad exchanges work, how they differ from ad networks, and the advancements they help drive for advertisers and publishers alike.
Introduction

Ad exchanges function as digital marketplaces. Advertisers, agencies, and ad networks use ad exchanges to buy ads from publishers, often via an automated bidding process called real-time bidding (RTB). In 2016, display advertisers in the U.S. spent two-thirds of their total budget, more than $22 billion, on programmatic advertising, which is the automated approach of buying and selling ads. Programmatic uses technology like RTB as well as data to improve efficiency and effectiveness for the entire digital advertising ecosystem. Ad exchanges are where “the magic happens.” They are the platforms that facilitate the actual buying and selling of publisher inventory.

An Origin Story: The Birth of Ad Exchanges

You can think of ad exchanges as the next generation of ad networks. Ad networks aggregate inventory from a variety of digital publishers, allowing buyers to access it all from one place. (For more information, see our article “Understanding Ad Networks.”) They helped drive major efficiencies in digital advertising, but ad networks can have their shortcomings. Even after the emergence of ad networks, many publishers still had unsold ad space, and many also worried that they weren’t getting the best price for their inventory. In addition, ad networks often operate as black boxes: both publishers and advertisers lack transparency into who is buying what inventory, and at what price.

Ad exchanges evolved to address these problems. Because ads on exchanges are bought and sold via real-time bidding, in which every impression goes to an auction where the market determines its value, publishers can sell more of their inventory at a higher price. Advertisers, agencies, and even ad networks can bid on ad space. In addition, exchanges provide transparency allowing publishers to better understand the value of their inventory, and advertisers to understand where each ad has appeared. Ad exchanges also allow advertisers to leverage advanced behavioral targeting capabilities to more precisely find their customers and prospects.

All players benefit from increased transparency, as advertisers know where their ads will run and how they perform, and publishers understand much buyers are willing to pay for their inventory.
# The Differences Between Ad Networks and Ad Exchanges

<table>
<thead>
<tr>
<th>Ad Networks</th>
<th>Ad Exchanges</th>
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<tbody>
<tr>
<td>Impressions purchased in bulk in advance</td>
<td>Impressions purchased via real-time bidding</td>
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<tr>
<td>Price determined by human negotiations</td>
<td>Price determined on a per-impression level in the auction</td>
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<tr>
<td>Buyers usually have to be approved to buy inventory from ad networks. With some ad networks, this is a pretty easy process. Others are more “exclusive.”</td>
<td>Virtually anyone can partake in open exchanges (private exchanges are by invitation-only)</td>
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<tr>
<td>As the industry has advanced, so has ad networks’ targeting capabilities. Options include contextual targeting, i.e. automotive content, geography, device, audience demographics, and more.</td>
<td>Because ad exchanges have more scale, and because every single impression can be evaluated (as opposed to bulk buys), they offer advanced targeting capabilities. Targeting includes behavioral, location, demographics, device, and more.</td>
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<td>Not transparent: Advertisers usually don’t know exactly where their ads will run; publishers usually don’t know who bought their ads or for what price</td>
<td>More transparent: Advertisers know where their ads will run; publishers know who bought their ads and how much they received for each impression.</td>
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<td>No real-time optimization.</td>
<td>Real-time optimization allows advertisers to automatically optimize campaign performance towards a specific objective.</td>
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Benefits of Ad Exchanges

The benefits of ad exchanges to publishers and advertisers include:

**Efficiency**
Thanks to RTB, advertisers can evaluate available inventory at once instead of having to look at each source one-by-one. Publishers get access to available potential buyers at the same time. (You’d need a giant sales team to individually reach out to all of the advertisers that ad exchanges give you access to).

**Transparency**
Advertisers can see where each impression runs. They also get insights into its performance and the audience it reached. Publishers know how much advertisers are willing to pay for their inventory, which can inform future monetization strategies. They also know which buyers pull the trigger so they can ensure ad quality for their users.

**Advanced Targeting**
Data allows marketers to target with unprecedented precision. Software helps them serve their creative to the right audience, at the right time, across a variety of devices, including mobile, one of programmatic’s fastest growing segments.

**Fair Prices and Optimizations**
Because buyers bid at the impression level, publishers can be more certain they are getting a competitive price for their inventory. Advertisers waste less spend since they are only paying for impressions they want. Because they can see how their ads are performing with specific publishers, they can also optimize their spend to drive performance and cost-savings.

The Future of Ad Exchanges

Since programmatic adoption is expected to see continued global growth, ad exchanges will play an increasingly large and important role in advertising. A greater number of brand marketers will likely leverage ad exchanges and programmatic -- a trend that is already in full-swing. In fact, 62% of marketers already use programmatic advertising for branding campaigns². This growth will help fuel further advancements in targeting, usability and flexibility.

Programmatic isn’t the future of digital advertising--it’s the here and now. Ad exchanges sit at the center of this revolutionary advertising approach and power this tremendous market growth.
